

**Representative Joel Ferry** proposes the following substitute bill:

**STATE CONSTRUCTION CODE AMENDMENTS**

2022 GENERAL SESSION

STATE OF UTAH

**Chief Sponsor: Joel Ferry**

Senate Sponsor: Curtis S. Bramble

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**LONG TITLE**

**General Description:**

This bill modifies Title 15A, State Construction and Fire Codes Act, and creates an exemption from licensure in the Professional Engineers and Professional Land Surveyors Licensing Act.

**Highlighted Provisions:**

This bill:

- ▶ amends provisions of Title 15A, State Construction and Fire Codes Act, by amending the:
  - Statewide Amendments to the International Residential Code;
  - Statewide Amendments to the International Plumbing Code;
  - Statewide Amendments to the International Mechanical Code; and
  - the State Fire Code;
- ▶ creates a licensing exemption for a person certified by the National Institute for Certification in Engineering Technologies at level III or IV in Water-Based System Layout or Fire Alarm Systems; and
- ▶ makes technical and conforming changes.

**Money Appropriated in this Bill:**

None



26 **Other Special Clauses:**

27 This bill provides a special effective date.

28 **Utah Code Sections Affected:**

29 AMENDS:

30 **15A-3-202**, as last amended by Laws of Utah 2021, Chapters 102 and 199

31 **15A-3-203**, as last amended by Laws of Utah 2019, Chapter 20

32 **15A-3-205**, as last amended by Laws of Utah 2019, Chapter 20

33 **15A-3-206**, as last amended by Laws of Utah 2021, Chapters 102 and 199

34 **15A-3-306**, as last amended by Laws of Utah 2019, Chapter 20

35 **15A-3-402**, as last amended by Laws of Utah 2020, Chapter 441

36 **15A-5-202**, as last amended by Laws of Utah 2019, Chapter 103

37 **15A-5-302**, as last amended by Laws of Utah 2019, Chapter 103

38 **58-22-305**, as last amended by Laws of Utah 2020, Chapter 339

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

41 Section 1. Section **15A-3-202** is amended to read:

42 **15A-3-202. Amendments to Chapters 1 through 5 of IRC.**

43 (1) In IRC, Section R102, a new Section R102.7.2 is added as follows: "R102.7.2

44 Physical change for bedroom window egress. A structure whose egress window in an existing  
45 bedroom is smaller than required by this code, and that complied with the construction code in  
46 effect at the time that the bedroom was finished, is not required to undergo a physical change to  
47 conform to this code if the change would compromise the structural integrity of the structure or  
48 could not be completed in accordance with other applicable requirements of this code,  
49 including setback and window well requirements."

50 (2) In IRC, Section R108.3, the following sentence is added at the end of the section:

51 "The building official shall not request proprietary information."

52 (3) In IRC, Section 109:

53 (a) A new IRC, Section 109.1.5, is added as follows: "R109.1.5 Weather-resistant  
54 exterior wall envelope inspections. An inspection shall be made of the weather-resistant  
55 exterior wall envelope as required by Section R703.1 and flashings as required by Section  
56 R703.8 to prevent water from entering the weather-resistive barrier."

57 (b) The remaining sections are renumbered as follows: R109.1.6 Other inspections;  
58 R109.1.6.1 Fire- and smoke-resistance-rated construction inspection; R109.1.6.2 Reinforced  
59 masonry, insulating concrete form (ICF) and conventionally formed concrete wall inspection;  
60 and R109.1.7 Final inspection.

61 (4) IRC, Section R114.1, is deleted and replaced with the following: "R114.1 Notice to  
62 owner. Upon notice from the building official that work on any building or structure is being  
63 prosecuted contrary to the provisions of this code or other pertinent laws or ordinances or in an  
64 unsafe and dangerous manner, such work shall be immediately stopped. The stop work order  
65 shall be in writing and shall be given to the owner of the property involved, or to the owner's  
66 agent or to the person doing the work; and shall state the conditions under which work will be  
67 permitted to resume."

68 (5) In IRC, Section R202, the following definition is added: "ACCESSORY  
69 DWELLING UNIT: A habitable living unit created within the existing footprint of a primary  
70 owner-occupied single-family dwelling."

71 (6) In IRC, Section R202, the following definition is added: "CERTIFIED  
72 BACKFLOW PREVENTER ASSEMBLY TESTER: A person who has shown competence to  
73 test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction  
74 under Utah Code, Subsection [19-4-104\(4\)](#)."

75 (7) In IRC, Section R202, the definition of "Cross Connection" is deleted and replaced  
76 with the following: "CROSS CONNECTION. Any physical connection or potential  
77 connection or arrangement between two otherwise separate piping systems, one of which  
78 contains potable water and the other either water of unknown or questionable safety or steam,  
79 gas, or chemical, whereby there exists the possibility for flow from one system to the other,  
80 with the direction of flow depending on the pressure differential between the two systems (see  
81 "Backflow, Water Distribution")."

82 (8) In IRC, Section 202, the following definition is added: "ENERGY STORAGE  
83 SYSTEM (ESS). One or more devices, assembled together, that are capable of storing energy  
84 for supplying electrical energy at a future time."

85 (9) In IRC, Section 202, in the definition for gray water a comma is inserted after the  
86 word "washers"; the word "and" is deleted; and the following is added to the end: "and clear  
87 water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without

88 objectionable odors; non-highly pigmented; and will not interfere with the operation of the  
 89 sewer treatment facility."

90 (10) In IRC, Section R202, the definition of "Potable Water" is deleted and replaced  
 91 with the following: "POTABLE WATER. Water free from impurities present in amounts  
 92 sufficient to cause disease or harmful physiological effects and conforming to the Utah Code,  
 93 Title 19, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and  
 94 the regulations of the public health authority having jurisdiction."

95 (11) IRC, Figure R301.2(5), is deleted and replaced with R301.2(5) as follows:

| "TABLE R301.2(5)                                 |           |  |                |
|--|-----------|--|----------------|
| GROUND SNOW LOADS FOR SELECTED LOCATIONS IN UTAH |           |  |                |
| City/Town  | County    | Ground Snow Load (lb/ft <sup>2</sup> ) | Elevation (ft) |
| Beaver   | Beaver    | 35                                     | 5886           |
| Brigham City                                     | Box Elder | 42                                     | 4423           |
| Castle Dale                                      | Emery     | 32                                     | 5669           |
| Coalville  | Summit    | 57                                     | 5581           |
| Duchesne   | Duchesne  | 39                                     | 5508           |
| Farmington                                       | Davis     | 35                                     | 4318           |
| Fillmore   | Millard   | 30                                     | 5138           |
| Heber City                                       | Wasatch   | 60                                     | 5604           |
| Junction   | Piute     | 27                                     | 6030           |
| Kanab  | Kane      | 25                                     | 4964           |
| Loa  | Wayne     | 37                                     | 7060           |
| Logan  | Cache     | 43                                     | 4531           |
| Manila   | Daggett   | 26                                     | 6368           |
| Manti  | Sanpete   | 37                                     | 5620           |
| Moab   | Grand     | 21                                     | 4029           |
| Monticello                                       | San Juan  | 67                                     | 7064           |
| Morgan   | Morgan    | 52                                     | 5062           |
| Nephi  | Juab      | 39                                     | 5131           |

|     |                |            |    |      |
|-----|----------------|------------|----|------|
| 117 | Ogden          | Weber      | 37 | 4334 |
| 118 | Panguitch      | Garfield   | 41 | 6630 |
| 119 | Parowan        | Iron       | 32 | 6007 |
| 120 | Price          | Carbon     | 31 | 5558 |
| 121 | Provo          | Utah       | 31 | 4541 |
| 122 | Randolph       | Rich       | 50 | 6286 |
| 123 | Richfield      | Sevier     | 27 | 5338 |
| 124 | St. George     | Washington | 21 | 2585 |
| 125 | Salt Lake City | Salt Lake  | 28 | 4239 |
| 126 | Tooele         | Tooele     | 35 | 5029 |
| 127 | Vernal         | Uintah     | 39 | 5384 |

Note: To convert lb/ft<sup>2</sup> to kN/m<sup>2</sup>, multiply by 0.0479. To convert feet to meters, multiply by 0.3048.

1. Statutory requirements of the Authority Having Jurisdiction are not included in this state ground snow load table.

128 2. For locations where there is substantial change in altitude over the city/town, the load applies at and below the cited elevation, with a tolerance of 100 ft (30 m).

3. For other locations in Utah, see Bean, B., Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental Engineering Faculty Publications, Paper 3589, <http://utahsnowload.usu.edu/>, for ground snow load values.

129 (12) IRC, Section R301.6, is deleted and replaced with the following: "R301.6 Utah  
 130 Snow Loads. The snow loads specified in Table R301.2(5b) shall be used for the jurisdictions  
 131 identified in that table. Otherwise, for other locations in Utah, see Bean, B., Maguire, M., Sun,  
 132 Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental  
 133 Engineering Faculty Publications, Paper 3589, <http://utahsnowload.usu.edu/>, for ground snow  
 134 load values."

135 (13) In IRC, Section R302.2, the following sentence is added after the second sentence:  
 136 "When an access/maintenance agreement or easement is in place, plumbing, mechanical  
 137 ducting, schedule 40 steel gas pipe, and electric service conductors including feeders, are  
 138 permitted to penetrate the common wall at grade, above grade, or below grade."

139 (14) In IRC, Section R302.3, a new exception 3 is added as follows: "3. Accessory  
140 dwelling units separated by walls or floor assemblies protected by not less than 1/2-inch (12.7  
141 mm) gypsum board or equivalent on each side of the wall or bottom of the floor assembly are  
142 exempt from the requirements of this section."

143 (15) In IRC, Section R302.5.1, the words "self-closing device" are deleted and replaced  
144 with "self-latching hardware."

145 (16) IRC, Section R302.13, is deleted.

146 (17) In IRC, Section R303.4, the number "5" is changed to "3" in the first sentence.

147 (18) In IRC, Section R310.6, in the exception, the words "or accessory dwelling units"  
148 are added after the words "sleeping rooms".

149 (19) IRC, Sections R311.7.4 through R311.7.5.3, are deleted and replaced with the  
150 following: "R311.7.4 Stair treads and risers. R311.7.5.1 Riser height. The maximum riser  
151 height shall be 8 inches (203 mm). The riser shall be measured vertically between leading  
152 edges of the adjacent treads. The greatest riser height within any flight of stairs shall not  
153 exceed the smallest by more than 3/8 inch (9.5 mm).

154 R311.7.5.2 Tread depth. The minimum tread depth shall be 9 inches (228 mm). The tread  
155 depth shall be measured horizontally between the vertical planes of the foremost projection of  
156 adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within  
157 any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Winder  
158 treads shall have a minimum tread depth of 10 inches (254 mm) measured as above at a point  
159 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a  
160 minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the  
161 greatest winder tread depth at the 12-inch (305 mm) walk line shall not exceed the smallest by  
162 more than 3/8 inch (9.5 mm).

163 R311.7.5.3 Profile. The radius of curvature at the leading edge of the tread shall be no greater  
164 than 9/16 inch (14.3 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4  
165 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection  
166 shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) between two  
167 stories, including the nosing at the level of floors and landings. Beveling of nosing shall not  
168 exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped from the underside of the leading  
169 edge of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open

170 risers are permitted, provided that the opening between treads does not permit the passage of a  
171 4-inch diameter (102 mm) sphere.

172 Exceptions.

- 173 1. A nosing is not required where the tread depth is a minimum of 10 inches (254 mm).  
174 2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches  
175 (762 mm) or less."

176 (20) IRC, Section R312.2, is deleted.

177 (21) IRC, Sections R313.1 through R313.2.1, are deleted and replaced with the  
178 following: "R313.1 Design and installation. When installed, automatic residential fire  
179 sprinkler systems for townhouses or one- and two-family dwellings shall be designed and  
180 installed in accordance with Section P2904 or NFPA 13D."

181 (22) In IRC, Section R314.2.2, the words "or accessory dwelling units" are added after  
182 the words "sleeping rooms".

183 (23) In IRC, Section R315.2.2, the words "or accessory dwelling units" are added after  
184 the words "sleeping rooms".

185 (24) In IRC, Section 315.3, the following words are added to the first sentence after the  
186 word "installed": "on each level of the dwelling unit and."

187 (25) In IRC, Section R315.5, a new exception, 3, is added as follows:

188 "3. Hard wiring of carbon monoxide alarms in existing areas shall not be required where the  
189 alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing  
190 the structure, unless there is an attic, crawl space or basement available which could provide  
191 access for hard wiring, without the removal of interior finishes."

192 (26) A new IRC, Section R315.7, is added as follows: " R315.7 Interconnection.

193 Where more than one carbon monoxide alarm is required to be installed within an individual  
194 dwelling unit in accordance with Section R315.1, the alarm devices shall be interconnected in  
195 such a manner that the actuation of one alarm will activate all of the alarms in the individual  
196 unit. Physical interconnection of smoke alarms shall not be required where listed wireless  
197 alarms are installed and all alarms sound upon activation of one alarm.

198 Exception: Interconnection of carbon monoxide alarms in existing areas shall not be required  
199 where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing  
200 the structure, unless there is an attic, crawl space or basement available which could provide

201 access for interconnection without the removal of interior finishes."

202 (27) In IRC, Section R317.1.5, the period is deleted and the following language is  
203 added to the end of the paragraph: "or treated with a moisture resistant coating."

204 (28) In IRC, Section 326.1, the words "residential provisions of the" are added after the  
205 words "pools and spas shall comply with".

206 (29) [~~In IRC, Section R327.1 is deleted and replaced with the following:~~] A new IRC,  
207 Section 327, Stationary Storage Battery Systems, is added as follows:

208 "327.1 General. Energy storage systems (ESS) shall comply with the provisions of this  
209 section.

210 Exceptions:

211 1. ESS listed and labeled in accordance with UL 9540 and marked "For use in residential  
212 dwelling units", where installed in accordance with the manufacturer's instruction and NFPA  
213 70.

214 2. ESS less than 1kWh (3.6 megajoules). [~~"(30) In IRC, Section R327.2 is deleted and  
215 replaced with the following: "~~]

216 327.2 Equipment listings. ESS shall be listed and labeled in accordance with UL 9540.  
217 Exception: Where approved, repurposed unlisted battery systems from electric vehicle are  
218 allowed to be installed outdoors or in detached sheds located not less than 5 feet (1524 mm)  
219 from exterior walls, property lines and public ways. [~~"(31) In IRC, Section R327.3 is deleted  
220 and replaced with the following: "~~]

221 327.3 Installation. ESS shall be installed in accordance with the manufacturer's  
222 instructions and their listing. [~~"(32) In IRC, Section R327, a new section 327.3.1 is added as  
223 follows: "~~]

224 327.3.1 Spacing. Individual units shall be separate from each other by not less than  
225 three feet (914 mm) except where smaller separation distances are documented to be adequate  
226 based on large-scale fire testing complying with Section 1206.2.3 of the adopted International  
227 Fire Code. [~~"(33) In IRC, Section 327.4 is deleted and replaced with the following: "~~]

228 327.4 Locations. ESS shall be installed only in the following locations:

229 1. Detached garages and detached accessory structures.

230 2. Attached garages separated from the dwelling unit living space in accordance with  
231 Section R302.6.



232 3. Outdoors or on the exterior side of exterior walls located not less than 3 feet (914  
233 mm) from doors and windows directly entering the dwelling unit.

234 4. Enclosed utility closets, basements, storage or utility spaces within dwelling units  
235 with finished or noncombustible walls and ceilings. Walls and ceilings of unfinished  
236 wood-framed construction shall be provided with not less than 5/8-inch (15.9 mm) Type X  
237 gypsum wallboard.

238 ESS shall not be installed in sleeping rooms, or closets or spaces opening directly into  
239 sleeping rooms.["(34) In IRC, Section 327.5 is deleted and replaced with the following: "]

240 327.5 Energy ratings. Individual ESS units shall have a maximum rating of 20 kWh.  
241 The aggregate rating of the ESS shall not exceed:

- 242 1. 40 kWh within utility closets, basements, and storage or utility spaces.
- 243 2. 80 kWh in attached or detached garages and detached accessory structures.
- 244 3. 80 kWh on exterior walls.
- 245 4. 80 kWh outdoors on the ground.

246 ESS installations exceeding the permitted individual or aggregate ratings shall be  
247 installed in accordance with Sections 1206.2.1 through 1206.2.12 of the adopted International  
248 Fire Code.["(35) In IRC, Section 327.6 is deleted and replaced with the following: "]

249 327.6 Electrical installation. ESS shall be installed in accordance with NFPA 70.  
250 Inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL  
251 9540 listing. Systems connected to the utility grid shall use inverters listed for utility  
252 interaction.["(36) In IRC, Section 327, a new section 327.7 is added as follows: "]

253 327.7 Fire detection. Rooms and areas within dwelling units, basements, and attached  
254 garages in which ESS are installed shall be protected by smoke alarms in accordance with  
255 Section R314. A heat detector, listed and interconnected to the smoke alarms, shall be installed  
256 in locations within dwelling units and attached garages where smoke alarms cannot be installed  
257 based on their listing.["(37) In IRC, Section 327, a new section 327.8 is added as follows: "]

258 327.8 Protection from impact. ESS installed in a location subject to vehicle damage  
259 shall be protected by approved barriers.["(38) In IRC, Section 327, a new section 327.9 is  
260 added as follows: "]

261 327.9 Ventilation. Indoor installations of ESS that include batteries that produce  
262 hydrogen or other flammable gasses during charging shall be provided with mechanical

263 ventilation in accordance with Section M1307.4.["(39) In IRC, Section 327, a new section  
264 327.10 is added as follows:"]

265 327.10 Electric vehicle use. The temporary use of an owner or occupant's  
266 electric-powered vehicle to power a dwelling unit while parked in an attached or detached  
267 garage or outdoors shall comply with the vehicle manufacturer's instructions and NFPA 70.["  
268 (40) In IRC, Section 327, a new section 327.11 is added as follows:"]

269 327.11 Signage. A sign located on the exterior of the dwelling shall be installed at a  
270 location approved by the authority having jurisdiction which identifies the battery chemistry  
271 included in the ESS. This sign shall be of sufficient durability to withstand the environment  
272 involved and shall not be handwritten."

273 [(41)] (30) In IRC, Section R403.1.6, a new Exception 3 is added as follows: "3.  
274 When anchor bolt spacing does not exceed 32 inches (813 mm) apart, anchor bolts may be  
275 placed with a minimum of two bolts per plate section located not less than 4 inches (102 mm)  
276 from each end of each plate section at interior bearing walls, interior braced wall lines, and at  
277 all exterior walls."

278 [(42)] (31) In IRC, Section R403.1.6.1, a new exception is added at the end of Item 2  
279 and Item 3 as follows: "Exception: When anchor bolt spacing does not exceed 32 inches (816  
280 mm) apart, anchor bolts may be placed with a minimum of two bolts per plate section located  
281 not less than 4 inches (102 mm) from each end of each plate section at interior bearing walls,  
282 interior braced wall lines, and at all exterior walls."

283 [(43)] (32) In IRC, Section R404.1, a new exception is added as follows: "Exception:  
284 As an alternative to complying with Sections R404.1 through R404.1.5.3, concrete and  
285 masonry foundation walls may be designed in accordance with IBC Sections 1807.1.5 and  
286 1807.1.6 as amended in Section 1807.1.6.4 and Table 1807.1.6.4 under these rules."

287 [(44)] (33) In IRC, Section R405.1, a new exception is added as follows: "Exception:  
288 When a geotechnical report has been provided for the property, a drainage system is not  
289 required unless the drainage system is required as a condition of the geotechnical report. The  
290 geological report shall make a recommendation regarding a drainage system."

291 Section 2. Section **15A-3-203** is amended to read:

292 **15A-3-203. Amendments to Chapters 6 through 15 of IRC.**

293 (1) In IRC, Section N1101.5 (R103.2), all words after the words "herein governed." are

294 deleted and replaced with the following: "Construction documents include all documentation  
295 required to be submitted in order to issue a building permit."

296 (2) In IRC, Section N1101.12 (R303.3), all wording after the first sentence is deleted.

297 (3) In IRC, Section N1101.13 (R401.2), add Exception as follows:

298 "Exception: A project complies if the project demonstrates compliance, using the  
299 software RESCheck 2012 Utah Energy Conservation Code, of:

300 (a) on or after January 1, 2017, and before January 1, 2019, "3 percent better than  
301 code";

302 (b) on or after January 1, 2019, and before January 1, 2021, "4 percent better than  
303 code"; and

304 (c) after January 1, 2021, "5 percent better than code.""

305 (4) In IRC, Table N1102.2 (R402.1.2), in the column titled MASS WALL R-VALUE,  
306 a new footnote j is added as follows:

307 "j. Log walls complying with ICC400 and with a minimum average wall thickness of 5 inches  
308 or greater shall be permitted in Zones 5 through 8 when overall window glazing has a .31  
309 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil),  
310 and all other component requirements are met."

311 (5) In IRC, Section N1102.4.1 (R402.4.1), in the first sentence, the word "and" is  
312 deleted and replaced with the word "or."

313 (6) In IRC, Section N1102.4.1.1 (R402.4.1.1), the last sentence is deleted and replaced  
314 with the following: "Where allowed by the code official, the builder may certify compliance to  
315 components criteria for items which may not be inspected during regularly scheduled  
316 inspections."

317 (7) In IRC, Section N1102.4.1.2 (R402.4.1.2), the following changes are made:

318 (a) In the first sentence:

319 (i) "The building or dwelling unit" is deleted and replaced with "A single-family  
320 dwelling";

321 (ii) after January 1, 2019, replace the word "five" with "3.5"; and

322 (iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate  
323 Zones 3 through 8" are deleted.

324 (b) The following sentence is inserted after the first sentence: "A multi-family dwelling

325 and townhouse shall be tested and verified as having an air leakage rate of not exceeding five  
326 air changes per hour."

327 (c) In the third sentence, the word "third" is deleted.

328 (d) The following sentence is inserted after the third sentence: "The following parties  
329 shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed  
330 contractors who have completed training provided by Blower Door Test equipment  
331 manufacturers or other comparable training."

332 (8) In IRC, Section N1103.3.3 (R403.3.3):

333 (a) the exception for duct air leakage testing is deleted; and

334 (b) the exception for duct air leakage is replaced:

335 (i) on or after January 1, 2017, and before January 1, 2019, with the following:

336 "Exception: The duct air leakage test is not required for systems with all air handlers and at  
337 least 65% of all ducts (measured by length) located entirely within the building thermal  
338 envelope.";

339 (ii) on or after January 1, 2019, and before January 1, 2021, with the following:

340 "Exception: The duct air leakage test is not required for systems with all air handlers and at  
341 least 75% of all ducts (measured by length) located entirely within the building thermal  
342 envelope."; and

343 (iii) on or after January 1, 2021, with the following: "Exception: The duct air leakage  
344 test is not required for systems with all air handlers and at least 80% of all ducts (measured by  
345 length) located entirely within the building thermal envelope."

346 (9) In IRC, Section N1103.3.3 (R403.3.3), the following is added after the exception:

347 "The following parties shall be approved to conduct testing: Parties certified by BPI or  
348 RESNET, or licensed contractors who have completed either training provided by Duct Test  
349 equipment manufacturers or other comparable training."

350 (10) In IRC, Section N1103.3.4 (R403.3.4):

351 (a) in Subsection 1, the number 4 is changed to 8, the number 113.3 is changed to 170,  
352 the number 3 is changed to 6, the number 85 is changed to 114.6; and

353 (b) in Subsection 2:

354 (i) on or after January 1, 2017, and before January 1, 2019, the number 4 is changed to  
355 8 and the number 113.3 is changed to 226.5;

356 (ii) on or after January 1, 2019, and before January 1, 2021, the number 4 is changed to  
 357 7 and the number 113.3 is changed to 198.2; and

358 (iii) on or after January 1, 2021, the number 4 is changed to 6 and the number 113.3 is  
 359 changed to 169.9.

360 (11) In IRC, Section N1103.3.5 (R403.3.5), the words "or plenums" are deleted.

361 (12) In IRC, Section N1103.5.3 (R403.5.3), Subsection 5 is deleted and Subsections 6  
 362 and 7 are renumbered.

363 (13) IRC, Section N1103.6.1 (R403.6.1), is deleted and replaced with the following:

364 "N1103.6.1 (R403.6.1) Whole-house mechanical ventilation system fan efficacy. Fans used to  
 365 provide whole-house mechanical ventilation shall meet the efficacy requirements of Table  
 366 N1103.6.1 (R403.6.1).

367 Exception: Where an air handler that is integral to tested and listed HVAC equipment is  
 368 used to provide whole-house mechanical ventilation, the air handler shall be powered by an  
 369 electronically commutated motor."

370 (14) In IRC, Section N1103.6.1 (R403.6.1), the table is deleted and replaced with the  
 371 following:

372 TABLE N1103.6.1 (R403.6.1)

373 MECHANICAL VENTILATION SYSTEM FAN EFFICACY

| FAN LOCATION           | AIR FLOW RATE<br>MINIMUM (CFM) | MINIMUM<br>EFFICACY<br>(CFM/WATT) | AIR FLOW RATE<br>MAXIMUM (CFM) |
|------------------------|--------------------------------|-----------------------------------|--------------------------------|
| HRV or ERV             | Any                            | 1.2 cfm/watt                      | Any                            |
| Range hoods            | Any                            | 2.8 cfm/watt                      | Any                            |
| In-line fan            | Any                            | 2.8 cfm/watt                      | Any                            |
| Bathroom, utility room | 10                             | 1.4 cfm/watt                      | <90                            |
| Bathroom, utility room | 90                             | 2.8 cfm/watt                      | Any                            |

380 (15) In IRC, Section N1106.4 (R406.4), the table is deleted and replaced with the  
 381 following:

382 TABLE N1106.4 (R406.4)

383 MAXIMUM ENERGY RATING INDEX

|     |              |                     |
|-----|--------------|---------------------|
| 384 | CLIMATE ZONE | ENERGY RATING INDEX |
| 385 | 3            | 65                  |
| 386 | 5            | 69                  |
| 387 | 6            | 68                  |

388 (16) In IRC, Section N1103.7 the word "approved" is deleted in the first sentence and  
 389 the following is added after the word methodologies ", complying with N1103.7.1".

390 (17) A new IRC, Section N1103.7.1 is added as follows: "N1103.7.1 Qualifications.  
 391 An individual performing load calculations shall be qualified by completing HVAC load  
 392 calculation training from one of the following:

- 393 1. HVAC load calculation education from ACCA;
- 394 2. A recognized educational institution;
- 395 3. HVAC equipment manufacturer's training; or
- 396 4. Other recognized industry certification."

397 ~~[(16)]~~ (18) In IRC, Section M1307.2, the words "In Seismic Design Categories D0, D1,  
 398 and D2, and in townhouses in Seismic Design Category C", are deleted, and in Subparagraph 1,  
 399 the last sentence is deleted.

400 (19) In IRC, Section M1401.3 the word "approved" is deleted in the first sentence and  
 401 the following is added after the word methodologies ", complying with M1401.3.1".

402 (20) A new IRC, Section M1401.3.1, is added as follows: "M1401.3.1 Qualifications.  
 403 An individual performing load calculations shall be qualified by completing HVAC load  
 404 calculation training from one of the following:

- 405 1. HVAC load calculation education from ACCA;
- 406 2. A recognized educational institution;
- 407 3. HVAC equipment manufacturer's training; or
- 408 4. Other recognized industry certification."

409 (21) In IRC, Section M1402.1, the following is added at the end of the second  
 410 sentence: "or UL/CSA [60335-2-40](#)."

411 (22) In IRC, Section M1403.1, the characters "/ANCE" are deleted.

412 ~~[(17)]~~ (23) IRC, Section M1411.8, is deleted.

413 (24) In IRC, Section M1412.1, the characters "/ANCE" are deleted.

414 (25) In IRC, Section M1413.1, the characters "/ANCE" are deleted.

415 Section 3. Section **15A-3-205** is amended to read:

416 **15A-3-205. Amendments to Chapters 26 through 35 of IRC.**

417 (1) A new IRC, Section P2602.3, is added as follows: "P2602.3 Individual water  
418 supply. Where a potable public water supply is not available, individual sources of potable  
419 water supply shall be utilized, provided that the source has been developed in accordance with  
420 Utah Code, Sections [73-3-1](#) and [73-3-25](#), as administered by the Department of Natural  
421 Resources, Division of Water Rights. In addition, the quality of the water shall be approved by  
422 the local health department having jurisdiction."

423 (2) A new IRC, Section P2602.4, is added as follows: "P2602.4 Sewer required. Every  
424 building in which plumbing fixtures are installed and all premises having drainage piping shall  
425 be connected to a public sewer where the sewer is accessible and is within 300 feet of the  
426 property line in accordance with Utah Code, Section [10-8-38](#); or an approved private sewage  
427 disposal system in accordance with Utah Administrative Code, Chapter 4, Rule R317, as  
428 administered by the Department of Environmental Quality, Division of Water Quality."

429 (3) In IRC, Section P2705, Item 5, the words "lavatory" and "lavatories" are deleted.

430 (4) In IRC, Section P2705, a new Item 6 is added as follows: "6. Lavatories. A lavatory  
431 shall not be set closer than 12 inches from its center to any side wall or partition. A lavatory  
432 shall be provided with a clearance of 24 inches in width and 21 inches in depth in front of the  
433 lavatory to any side wall, partition, or obstruction." Remaining item numbers are renumbered  
434 accordingly.

435 (5) In IRC, Section P2801.8, all words in the first sentence up to the word "water" are  
436 deleted.

437 (6) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly  
438 testing. The premise owner or the premise owner's designee shall have backflow prevention  
439 assemblies operation tested in accordance with administrative rules made by the Drinking  
440 Water Board at the time of installation, repair, and relocation and at least on an annual basis  
441 thereafter, or more frequently as required by the authority having jurisdiction. Testing shall be  
442 performed by a Certified Backflow Preventer Assembly Tester. The assemblies that are subject  
443 to this paragraph are the Spill Resistant Vacuum Breaker, the Pressure Vacuum Breaker  
444 Assembly, the Double Check Backflow Prevention Assembly, the Double Check Detector

445 Assembly Backflow Preventer, the Reduced Pressure Principle Backflow Preventer, and  
446 Reduced Pressure Detector Assembly. Third-party certification for backflow prevention  
447 assemblies will consist of any combination of two certifications, laboratory or field.  
448 Acceptable third-party laboratory certifying agencies are ASSE, IAPMO, and USC-FCCCHR.  
449 USC-FCCCHR currently provides the only field testing of backflow protection assemblies.  
450 Also see [www.drinkingwater.utah.gov](http://www.drinkingwater.utah.gov) and rules made by the Drinking Water Board."

451 (7) In IRC, Section P2902.1, the following subsections are added as follows:

452 "P2902.1.1 General Installation Criteria.

453 Assemblies shall not be installed more than five feet above the floor unless a permanent  
454 platform is installed. The assembly owner, where necessary, shall provide devices or structures  
455 to facilitate testing, repair, and maintenance, and to insure the safety of the backflow  
456 technician.

457 P2902.1.2 Specific Installation Criteria.

458 P2902.1.2.1 Reduced Pressure Principle [~~Backflow~~] Backflow Prevention Assembly.

459 The reduced pressure principle backflow prevention assembly shall be installed as  
460 follows:

- 461 a. The assembly may not be installed in a pit.
- 462 b. The relief valve of the assembly shall not be directly connected to a waste disposal line,  
463 including a sanitary sewer, a storm drain, or a vent.
- 464 c. The assembly shall be installed in a horizontal position only, unless listed or approved for  
465 vertical installation in accordance with Section 303.4.
- 466 d. The bottom of the assembly shall be installed a minimum of 12 inches above the floor or  
467 ground.
- 468 e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or  
469 obstacle, and shall be readily accessible for testing, repair, and maintenance.

470 P2902.1.2.2 Double Check Valve Backflow Prevention Assembly.

471 A double check valve backflow prevention assembly shall be installed as follows:

- 472 a. The assembly shall be installed in a horizontal position only, unless listed or approved for  
473 vertical installation.
- 474 b. The bottom of the assembly shall be a minimum of 12 inches above the ground or floor.
- 475 c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or



476 obstacle, and shall be readily accessible for testing, repair, and maintenance.

477 d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance  
478 between all sides of the vault, including the floor and roof or ceiling, with adequate room for  
479 testing and maintenance.

480 P2902.1.2.3 Pressure Vacuum Break Assembly and Spill Resistant Pressure Vacuum Breaker  
481 Assembly.

482 A pressure vacuum break assembly or a spill resistant pressure vacuum breaker assembly shall  
483 be installed as follows:

484 a. The assembly shall not be installed in an area that could be subject to backpressure or back  
485 drainage conditions.

486 b. The assembly shall be installed a minimum of 12 inches above all downstream piping and  
487 the highest point of use.

488 c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall  
489 be readily accessible for testing, repair, and maintenance.

490 d. The assembly shall not be installed below ground, in a vault, or in a pit.

491 e. The assembly shall be installed in a vertical position."

492 (8) In IRC, Table 2903.2, the following changes are made in the column titled  
493 "MAXIMUM FLOW RATE OR QUANTITY":

494 (a) In the row titled "Lavatory faucet" the text is deleted and replaced with "1.5 gpm at  
495 60 psi".

496 (b) In the row titled "Shower head" the text is deleted and replaced with "2 gpm at 80  
497 psi".

498 (c) In the row titled "Water closet" the text is deleted and replaced with "1.28 gallons  
499 per flushing cycle".

500 [~~8~~] (9) In IRC, Section 2903.5, at the beginning of the second sentence, insert "If  
501 installed,".

502 [~~9~~] (10) In IRC, Section P2903.9.3, the first sentence is deleted and replaced with the  
503 following: "Unless the plumbing appliance or plumbing fixture has a wall-mount valve, shutoff  
504 valves shall be required on each fixture supply pipe to each plumbing appliance and to each  
505 plumbing fixture other than bathtubs and showers."

506 [~~10~~] (11) IRC, Section P2910.5, is deleted and replaced with the following:

507 "P2910.5 Potable water connections.

508 When a potable water system is connected to a nonpotable water system, the potable water  
509 system shall be protected against backflow by a reduced pressure backflow prevention  
510 assembly or an air gap installed in accordance with Section 2901."

511 [~~(11)~~] (12) IRC, Section P2910.9.5, is deleted and replaced with the following:

512 "P2910.9.5 Makeup water.

513 Where an uninterrupted nonpotable water supply is required for the intended application,  
514 potable or reclaimed water shall be provided as a source of makeup water for the storage tank.

515 The makeup water supply shall be protected against backflow by means of an air gap not less  
516 than 4 inches (102 millimeters) above the overflow or by a reduced pressure backflow  
517 prevention assembly installed in accordance with Section 2902."

518 [~~(12)~~] (13) In IRC, Section P2911.12.4, the following words are deleted: "and  
519 backwater valves."

520 [~~(13)~~] (14) In IRC, Section P2912.15.6, the following words are deleted: "and  
521 backwater valves."

522 [~~(14) In IRC, Section P2913.4.2, the following words are deleted: "and backwater  
523 valves."~~]

524 (15) IRC, Section P3009, is deleted and replaced with the following:

525 "P3009 Connected to nonpotable water from on-site water reuse systems.

526 Nonpotable systems utilized for subsurface irrigation for single-family residences shall comply  
527 with the requirements of R317-401, UAC, Graywater Systems."

528 (16) In IRC, Section P3103.6, the following sentence is added at the end of the  
529 paragraph: "Vents extending through the wall shall terminate not less than 12 inches from the  
530 wall with an elbow pointing downward."

531 (17) In IRC, Section P3104.4, the following sentence is added at the end of the  
532 paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain  
533 and floor sink installations when installed below grade in accordance with Chapter 30, and  
534 Sections P3104.2 and P3104.3. A wall cleanout shall be provided in the vertical vent."

535 Section 4. Section **15A-3-206** is amended to read:

536 **15A-3-206. Amendments to Chapters 37, 39, and 44 and Appendix F of IRC.**

537 (1) In IRC, Section E3601.6.2, a new exception is added as follows: "Exception: An

538 occupant of an accessory dwelling unit is not required to have access to the disconnect serving  
539 the dwelling unit in which they reside."

540 (2) In IRC, Section E3705.4.5, the following words are added after the word  
541 "assemblies": "with ungrounded conductors 10 AWG and smaller".

542 (3) In IRC, Section E3901.4.5, the last sentence in the exception is deleted and  
543 replaced with the following: "Receptacles mounted below the countertop in accordance with  
544 this exception shall not be located more than 14 inches from the bottom leading edge of the  
545 countertop."

546 (4) In IRC, Section E3901.9, the following exception is added:  
547 "Exception: Receptacles or other outlets adjacent to the exterior walls of the garage, outlets  
548 adjacent to an exterior wall of the garage, or outlets in a storage room with entry from the  
549 garage may be connected to the garage branch circuit."

550 (5) IRC, Section E3902.16 is deleted.

551 (6) In Section E3902.17:

552 (a) following the word "Exception" the number "1." is added; and

553 (b) at the end of the section, the following sentences are added:

554 "2. This section does not apply for a simple move or an extension of a branch circuit or an  
555 outlet which does not significantly increase the existing electrical load. This exception does  
556 not include changes involving remodeling or additions to a residence."

557 (7) IRC, Chapter 44, is amended by deleting the standard for "ANCE."

558 (8) In IRC, Chapter 44, the standard for ASHRAE is amended by changing "34-2013"  
559 to "34-2019."

560 (9) In IRC, Chapter 44, the standard for CSA, is amended by changing the:

561 (a) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA  
562 60335-2-40-2019"; and

563 (b) title "Standard for Household and Similar Electrical Appliances, Part 2: Particular  
564 Requirements for Motor-Compressors" to "Standard for Household and Similar Electrical  
565 Appliances, Part 2-40, Requirements for Electric Heat Pumps, Air Conditioners and  
566 Dehumidifiers-3rd Edition."

567 (10) In IRC, Chapter 44, the standard for UL, is amended by changing the:

568 (a) standard reference number "1995-2011" to "1995-2015";

569 (b) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA  
 570 60335-2-40-2019"; and

571 (c) title "Standard for Household and Similar Electrical Appliances, Part 2: Particular  
 572 Requirements for Motor-Compressors" to "Standard for Household and Similar Electrical  
 573 Appliances, Part 2-40, Requirements for Electric Heat Pumps, Air Conditioners and  
 574 Dehumidifiers-3rd Edition."

575 [~~7~~] (11) IRC, Chapter 44, is amended by adding the following reference standard:

| "Standard reference number                                 | Title  | Referenced in code section number |
|--|--|-----------------------------------|
| USC-FCCCHR 10th Edition Manual of Cross Connection Control | Foundation for Cross-Connection Control and Hydraulic Research University of Southern California Kaprielian Hall 300 Los Angeles CA 90089-2531 | Table P2902.3"                    |

578 [~~8~~] (12) In IRC, Chapter 44, is amended by adding the following reference standard:  
 579 "UL 9540-20: Energy Storage Systems and Equipment; R327.1, R327.2 and R327.6."

580 [~~9~~] (13) (a) When passive radon controls or portions thereof are voluntarily installed,  
 581 the voluntary installation shall comply with Appendix F of the IRC.

582 (b) An additional inspection of a voluntary installation described in Subsection (9)(a) is  
 583 not required.

584 Section 5. Section **15A-3-306** is amended to read:

585 **15A-3-306. Amendments to Chapter 6 of IPC.**

586 (1) IPC, Section 602.3, is deleted and replaced with the following: "602.3 Individual  
 587 water supply. Where a potable public water supply is not available, individual sources of  
 588 potable water supply shall be utilized provided that the source has been developed in  
 589 accordance with Utah Code, Sections [73-3-1](#), [73-3-3](#), and [73-3-25](#), as administered by the  
 590 Department of Natural Resources, Division of Water Rights. In addition, the quality of the  
 591 water shall be approved by the local health department having jurisdiction. The source shall  
 592 supply sufficient quantity of water to comply with the requirements of this chapter."

593 (2) IPC, Sections 602.3.1, 602.3.2, 602.3.3, 602.3.4, 602.3.5, and 602.3.5.1, are  
 594 deleted.

595 (3) In IPC, Table 604.4, the following changes are made in the column titled

596 "MAXIMUM FLOW RATE OR QUANTITY":

597 (a) In the row titled "Lavatory, private" the text is deleted and replaced with "1.5 gpm  
598 at 60 psi".

599 (b) In the row titled "Shower head" the text is deleted and replaced with "2 gpm at 80  
600 psi".

601 (c) In the row titled "Urinal" the text is deleted and replaced with "0.5 gallon per  
602 flushing cycle".

603 (d) In the row titled "Water closet" the text is deleted and replaced with "1.28 gallons  
604 per flushing cycle".

605 [~~(3)~~] (4) A new IPC, Section 604.4.1, is added as follows: "604.4.1 Manually operated  
606 metering faucets for food service establishments. Self closing or manually operated metering  
607 faucets shall provide a flow of water for at least 15 seconds without the need to reactivate the  
608 faucet."

609 [~~(4)~~] (5) IPC, Section 606.5, is deleted and replaced with the following: "606.5 Water  
610 pressure booster systems. Water pressure booster systems shall be provided as required by  
611 Section 606.5.1 through 606.5.11."

612 [~~(5)~~] (6) A new IPC, Section 606.5.11, is added as follows: "606.5.11 Prohibited  
613 installation. In no case shall a booster pump be allowed that will lower the pressure in the  
614 public main to less than the minimum water pressure specified in Utah Administrative Code  
615 R309-105-9."

616 [~~(6)~~] (7) In IPC, Section 608.1, the words "and pollution" are added after the word  
617 "contamination."

618 [~~(7)~~] (8) In IPC, Section 608.1, the following subsections are added as follows:  
619 "608.1.1 General Installation Criteria.

620 An assembly shall not be installed more than five feet above the floor unless a permanent  
621 platform is installed. The assembly owner, where necessary, shall provide devices or structures  
622 to facilitate testing, repair, and maintenance and to insure the safety of the backflow technician.

623 608.1.2 Specific Installation Criteria.

624 608.1.2.1 Reduced Pressure Principle [~~Backflow~~] Backflow Prevention Assembly.

625 A reduced pressure principle backflow prevention assembly shall be installed as follows:

626 a. The assembly shall not be installed in a pit or below grade where the relief port could be

- 627 submerged in water or where fumes could be present at the relief port discharge.
- 628 b. The relief valve of the assembly shall not be directly connected to a waste disposal line,  
629 including a sanitary sewer, storm drain, or vent.
- 630 c. The assembly shall be installed in a horizontal position, unless the assembly is listed or  
631 approved for vertical installation in accordance with Section 303.4.
- 632 d. The bottom of each assembly shall be installed a minimum of 12 inches above the ground or  
633 the floor.
- 634 e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or  
635 obstacle, and shall be readily accessible for testing, repair, and maintenance.
- 636 608.1.2.2 Double Check Valve Backflow Prevention Assembly.
- 637 A double check valve backflow prevention assembly shall be installed as follows:
- 638 a. The assembly shall be installed in a horizontal position unless the assembly is listed or  
639 approved for vertical installation.
- 640 b. The bottom of the assembly shall be a minimum of 12 inches above the ground or the floor.
- 641 c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or  
642 obstacle, and shall be readily accessible for testing, repair, and maintenance.
- 643 d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance  
644 around all sides of the vault, including the floor and roof or ceiling, with adequate room for  
645 testing and maintenance.
- 646 608.1.2.3 Pressure Vacuum Breaker Assembly and Spill Resistant Pressure Vacuum Breaker  
647 Assembly.
- 648 A pressure vacuum breaker assembly and spill resistant pressure vacuum breaker assembly  
649 shall be installed as follows:
- 650 a. The assembly shall not be installed in an area that could be subject to backpressure or back  
651 drainage conditions.
- 652 b. The assembly shall be installed a minimum of 12 inches above all downstream piping and  
653 the highest point of use.
- 654 c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall  
655 be readily accessible for testing, repair, and maintenance.
- 656 d. The assembly shall not be installed below ground or in a vault or pit.
- 657 e. The assembly shall be installed in a vertical position."

658           ~~[(8)]~~ (9) In IPC, Section 608.3, the word "and" before the word "contamination" is  
659 deleted and replaced with a comma and the words " or pollution" are added after the word  
660 "contamination" in the first sentence.

661           ~~[(9)]~~ (10) In IPC, Section 608.6, the words "with the potential to create a condition of  
662 either contamination or pollution or" are added after the word "substances."

663           ~~[(10)]~~ (11) In IPC, Section 608.7, the following sentence is added at the end of the  
664 paragraph: "Any connection between potable water piping and sewer-connected waste shall be  
665 protected by an air gap in accordance with Section 608.14.1."

666           ~~[(11)]~~ (12) IPC, Section 608.8, is deleted and replaced with the following: " 608.8 Stop  
667 and Waste Valves installed below grade. Combination stop-and-waste valves shall be  
668 permitted to be installed underground or below grade. Freeze proof yard hydrants that drain  
669 the riser into the ground are considered to be stop-and-waste valves and shall be permitted. A  
670 stop-and-waste valve shall be installed in accordance with a manufacturer's recommended  
671 installation instructions."

672           ~~[(12)]~~ (13) IPC, Section 608.14.3, is deleted and replaced with the following: "  
673 608.14.3 Backflow preventer with intermediate atmospheric vent. Backflow preventers with  
674 intermediate atmospheric vents shall conform to ASSE 1012 or CSA CAN/CSA-B64.3. These  
675 devices shall be permitted to be installed on residential boilers, without chemical treatment,  
676 where subject to continuous pressure conditions, and humidifiers in accordance with Section  
677 608.17.10. The relief opening shall discharge by air gap and shall be prevented from being  
678 submerged."

679           ~~[(13)]~~ (14) IPC, Section 608.14.4, is deleted.

680           ~~[(14)]~~ (15) IPC, Section 608.16.3, is deleted and replaced with the following: "  
681 608.16.3 Protection by a backflow preventer with intermediate atmospheric vent. Connections  
682 to residential boilers only, without chemical treatment, and humidifiers shall be protected by a  
683 backflow preventer with an intermediate atmospheric vent."

684           ~~[(15)]~~ (16) IPC, Section 608.16.4, is deleted and replaced with the following: "  
685 608.16.4 Protection by a vacuum breaker. Openings and outlets shall be protected by  
686 atmospheric-type or pressure-type vacuum breakers. Vacuum breakers shall not be installed  
687 under exhaust hoods or similar locations that will contain toxic fumes or vapors. Fill valves  
688 shall be set in accordance with Section 425.3.1. Atmospheric Vacuum Breakers - The critical

689 level of the atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above  
690 the flood level rim of the fixture or device. Pipe-applied vacuum breakers shall be installed not  
691 less than 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served.  
692 No valves shall be installed downstream of the atmospheric vacuum breaker. The atmospheric  
693 vacuum breaker shall not be installed where it may be subjected to continuous pressure for  
694 more than 12 consecutive hours at any time. Pressure Vacuum Breaker - The critical level of  
695 the pressure vacuum breaker shall be set a minimum of 12 inches (304 mm) above the flood  
696 level of the fixture or device."

697 [~~(16)~~] (17) In IPC, Section 608.16.4.2, the following is added after the first sentence:  
698 "Add-on-backflow prevention devices shall be non-removable. In climates where freezing  
699 temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow  
700 preventer shall be used."

701 [~~(17)~~] (18) In IPC, Section 608.17.1.2, the words "or ASSE 1024" are deleted.

702 [~~(18)~~] (19) IPC, Section 608.17.2, is deleted and replaced as follows: " 608.17.2  
703 Connections to boilers. The potable supply to a boiler shall be protected by an air gap or a  
704 reduced pressure principle backflow preventer, complying with ASSE 1013, CSA B64.4 or  
705 AWWA C511.

706 Exception: The potable supply to a residential boiler without chemical treatment may be  
707 equipped with a backflow preventer with an intermediate atmospheric vent complying with  
708 ASSE 1012 or CSA CAN/CSA-B64.3."

709 [~~(19)~~] (20) In IPC, Section 608.17.4.1, a new exception is added as follows:  
710 "Exception: All class 1 and 2 systems containing chemical additives consisting of strictly  
711 glycerine (C.P. or U.S.P. 96.5 percent grade) or propylene glycol shall be protected against  
712 backflow with a double check valve assembly. Such systems shall include written certification  
713 of the chemical additives at the time of original installation and service or maintenance."

714 [~~(20)~~] (21) IPC, Section 608.17.7, is deleted and replaced with the following: "  
715 608.17.7 Chemical dispensers. Where chemical dispensers connect to the water distribution  
716 system, the water supply system shall be protected against backflow in accordance with Section  
717 608.14.1, Section 608.14.2, Section 608.14.5, Section 608.14.6 or Section 608.14.8.  
718 Installation shall be in accordance with Section 608.1.2. Chemical dispensers shall connect to a  
719 separate dedicated water supply line, and not a sink faucet."



720           ~~[(21)]~~ (22) IPC, Section 608.17.8, is deleted and replaced with the following: "  
721 608.17.8 Portable cleaning equipment. Where the portable cleaning equipment connects to the  
722 water distribution system, the water supply system shall be protected against backflow in  
723 accordance with Section 608.14.1 or Section 608.14.2."

724           ~~[(22)]~~ (23) A new IPC, Section 608.17.11, is added as follows: " 608.17.11 Automatic  
725 and coin operated car washes. The water supply to an automatic or coin operated car wash  
726 shall be protected in accordance with Section 608.14.1 or Section 608.14.2."

727           ~~[(23)]~~ (24) IPC, Section 608.18, is deleted and replaced with the following: " 608.18  
728 Protection of individual water supplies. See Section 602.3 for requirements."

729           Section 6. Section **15A-3-402** is amended to read:

730           **15A-3-402. Amendments to Chapters 1 through 5 of IMC.**

731           (1) In IMC, Table 403.3.1.1, note h is deleted and replaced with the following:

732           "h. 1. A nail salon shall provide each manicure station where a nail technician files or  
733 shapes an acrylic nail, as defined by rule by the Division of Occupational and Professional  
734 Licensing, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act,  
735 with:

736           a. a source capture system equipped with, at minimum, a MERV 8 particulate filter and  
737 an activated carbon filter that is capable of filtering and recirculating air to inside space at a  
738 rate not less than 50 cfm per station; or

739           b. a source capture system capable of exhausting not less than 50 cfm per station.

740           c. A nail salon that complies with Note h. 1a or h. 1b is not required to comply with the  
741 labeling, listing, or testing requirements described in International Mechanical Code sections  
742 301.7 or 301.8.

743           2. For a source capture system described in paragraph 1, the source capture system  
744 inlets for exhausting or recirculating air shall be located in accordance with Section 502.20.

745           3. Where one or more exhausting source capture systems described in paragraph 1  
746 operate continuously during occupancy, the source capture system exhaust rate shall be  
747 permitted to be applied to the exhaust flow rate required by Table 403.3.1.1 for the nail salon.

748           4. The requirements of this note apply to:

749           a. an existing nail salon that remodels the nail salon after July 1, 2017;

750           b. a new nail salon that begins construction after July 1, 2017; and

751 c. all nail salons beginning on July 1, 2020."

752 (2) In IMC, Section 502.20 is deleted and rewritten as follows:

753 "502.20 Manicure stations. A nail salon that files or shapes an acrylic nail shall provide  
754 each manicure station with a source capture system in accordance with Table 403.3.1.1, note h.  
755 For a manicure table that does not have factory-installed source capture system inlets for  
756 recirculating or exhausting air, a nail salon shall provide the manicure table with inlets for  
757 recirculating or exhausting air located not more than 12 inches (305 mm) horizontally and  
758 vertically from the point of any acrylic chemical application.

759 Exception: Section 502.20 applies to a manicure station in:

- 760 a. an existing nail salon that remodels the nail salon after July 1, 2017;
- 761 b. a new nail salon that begins construction after July 1, 2017; and
- 762 c. all nail salons beginning on July 1, 2020."

763 (3) In IMC, Section 908.1, the following words are added at the end of the last  
764 sentence: "or UL/CSA 60335-2-40."

765 (4) In IMC, Section 918.1, the following words are added after "1995": "or UL/CSA  
766 60335-2-40."

767 (5) In IMC, Section 918.2, the following words are added at the end of the sentence:  
768 "or UL/CSA 60335-2-40."

769 (6) In IMC, Section 1101.2, the words "471 or 1995" are deleted and replaced with  
770 "471, 1995, or UL/CSA 60335-2-40."

771 (7) In IMC, Section 1101.6, the following sentence is added at the end of the  
772 paragraph: "High probability systems utilizing A2L refrigerants shall comply with ASHRAE  
773 15."

774 (8) In IMC, Chapter 15, the standard for ASHRAE, is amended by changing the:

- 775 (a) standard reference number "15-2016" to "15-2019"; and
- 776 (b) standard reference number "34-2016" to "34-2019";

777 (9) In IMC, Chapter 15 is amended by adding the following referenced standard to  
778 CSA:

| <u>"Standard reference number</u> | <u>Title</u> | <u>Referenced in code section number</u> |
|-----------------------------------|--------------|--|
| 779                               |              |  |

780

|   |  |   |
|---|--|---|
| <p><u>CSA: CSA C22.2</u><br/><u>60335-2-40-2019</u></p> | <p><u>Standard for Household and Similar</u><br/><u>Electrical Appliances, Part 2-40:</u><br/><u>Particular Requirements for Electrical</u><br/><u>Heat Pumps, Air-Conditioners and</u><br/><u>Dehumidifiers – 3rd Edition</u></p> | <p><u>M1403.1, M1412.1,</u><br/><u>M1413.1"</u></p> |
|---|--|---|

781

(10) In IMC, Chapter 15 is amended by adding the following referenced standard to

782

UL:

783

| <u>"Standard reference number</u> | <u>Title</u>   | <u>Referenced in code section number</u>            |
|-----------------------------------|--|---|
| <p><u>UL: 60335-2-40-2019</u></p> | <p><u>Standard for Household and Similar</u><br/><u>Electrical Appliances, Part 2-40:</u><br/><u>Particular Requirements for Electrical</u><br/><u>Heat Pumps, Air-Conditioners and</u><br/><u>Dehumidifiers – 3rd Edition</u></p> | <p><u>M1403.1, M1412.1,</u><br/><u>M1413.1"</u></p> |

784

785

Section 7. Section **15A-5-202** is amended to read:

786

**15A-5-202. Amendments and additions to IFC related to administration, permits,**

787

**definitions, and general and emergency planning.**

788

(1) For IFC, Chapter 1, Scope and Administration:

789

(a) IFC, Chapter 1, Section 102.5, is deleted and rewritten as follows:

790

"102.5 Application of residential code.

791

If a structure is designed and constructed in accordance with the International

792

Residential Code, the provisions of this code apply only as follows:

793

1. The construction and design provisions of this code apply only to premises

794

identification, fire apparatus access, fire hydrants and water supplies, and construction permits

795

required by Section 105.7.

796

2. This code does not supercede the land use, subdivision, or development standards

797

established by a local jurisdiction.

798

3. The administrative, operational, and maintenance provisions of this code apply."

799

(b) IFC, Chapter 1, Section 102.9, is deleted and rewritten as follows:

800 "102.9 Matters not provided for.

801 Requirements that are essential for the public safety of an existing or proposed activity,  
802 building or structure, or for the safety of the occupants thereof, which are not specifically  
803 provided for by this code, shall be determined by the fire code official on an emergency basis  
804 if:

805 (a) the facts known to the fire code official show that an immediate and significant  
806 danger to the public health, safety, or welfare exists; and

807 (b) the threat requires immediate action by the fire code official.

808 102.9.1 Limitation of emergency order.

809 In issuing its emergency order, the fire code official shall:

810 (a) limit the order to require only the action necessary to prevent or avoid the danger to  
811 the public health, safety, or welfare; and

812 (b) give immediate notice to the persons who are required to comply with the order,  
813 that includes a brief statement of the reasons for the fire code official's order.

814 101.9.2 Right to appeal emergency order.

815 If the emergency order issued under this section will result in the continued  
816 infringement or impairment of any legal right or interest of any party, the party shall have a  
817 right to appeal the fire code official's order in accordance with IFC, Chapter 1, Section 109."

818 (c) IFC, Chapter 1, Section 105.4.1, Submittals, is amended to add the following after  
819 the last sentence:

820 "Fire sprinkler system layout may be prepared and submitted by a person certified by  
821 the National Institute for Certification in Engineering Technologies at level III or IV in  
822 Water-Based System Layout. Fire alarm system layout may be prepared and submitted by a  
823 person certified by the National Institute for Certification in Engineering Technologies at level  
824 III or IV in Fire Alarm Systems."

825 [~~(c)~~] (d) IFC, Chapter 1, Section 105.6.16, Flammable and combustible liquids, is  
826 amended to add the following section: "12. The owner of an underground tank that is out of  
827 service for longer than one year shall receive a Temporary Closure Notice from the Department  
828 of Environmental Quality and a copy shall be given to the AHJ."

829 [~~(d)~~] (e) A new IFC, Chapter 1, Section 109.1.1, Application of residential code, is  
830 added as follows:

831 "109.1.1 Application of residential code.

832 For development regulated by a local jurisdiction's land use authority, the fire code  
833 official's interpretation of this code is subject to the advisory opinion process described in Utah  
834 Code, Section 13-43-205, and to a land use appeal authority appointed under Utah Code,  
835 Section 10-9a-701 or 17-27a-701."

836 ~~(e)~~ (f) In IFC, Chapter 1, Section 109, a new Section 109.4, Notice of right to appeal,  
837 is added as follows: "At the time a fire code official makes an order, decision, or determination  
838 that relates to the application or interpretation of this chapter, the fire code official shall inform  
839 the person affected by the order, decision, or determination of the person's right to appeal under  
840 this section. Upon request, the fire code official shall provide a person affected by an order,  
841 decision, or determination that relates to the application or interpretation of this chapter a  
842 written notice that describes the person's right to appeal under this section."

843 ~~(f)~~ (g) IFC, Chapter 1, Section 110.3, Notice of violation, is deleted and rewritten as  
844 follows:

845 "110.3 Notice of violation.

846 If the fire code official determines that a building, premises, vehicle, storage facility, or  
847 outdoor area is in violation of this code or other pertinent laws or ordinances, the fire code  
848 official is authorized to prepare a written notice of violation that describes the conditions  
849 deemed unsafe and, absent immediate compliance, specifies a time for reinspection."

850 (2) For IFC, Chapter 2, Definitions:

851 (a) IFC, Chapter 2, Section 202, General Definitions, the following definition is added  
852 for Ambulatory Surgical Center: "AMBULATORY SURGICAL CENTER. A building or  
853 portion of a building licensed by the Department of Health where procedures are performed  
854 that may render patients incapable of self preservation where care is less than 24 hours. See  
855 Utah Administrative Code, R432-13, Freestanding Ambulatory Surgical Center Construction  
856 Rule."

857 (b) IFC, Chapter 2, Section 202, General Definitions, the following definition is added  
858 for Assisted Living Facility. "ASSISTED LIVING FACILITY. See Residential  
859 Treatment/Support Assisted Living Facility, Type I Assisted Living Facility, and Type II  
860 Assisted Living Facility."

861 (c) IFC, Chapter 2, Section 202, General Definitions, FOSTER CARE FACILITIES is

862 amended as follows: The word "Foster" is changed to the word "Child."

863 (d) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY

864 CLASSIFICATION, Educational Group E, Group E, day care facilities, is amended as follows:

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

866 (ii) On line four after the word "supervision" add the words "child care centers."

867 (e) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY

868 CLASSIFICATION, Educational Group E, Five or fewer children, is amended as follows: The  
869 word "five" is deleted and replaced with the word "four" in both places.

870 (f) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY

871 CLASSIFICATION, Educational Group E, Five or fewer children in a dwelling unit, is  
872 amended as follows: The word "five" is deleted and replaced with the word "four" in both  
873 places.

874 (g) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY

875 CLASSIFICATION, Educational Group E, a new section is added as follows: "Child day care  
876 -- residential child care certificate or a license. Areas used for child day care purposes with a  
877 residential child care certificate, as described in Utah Administrative Code, R430-50,  
878 Residential Certificate Child Care, or a residential child care license, as described in Utah  
879 Administrative Code, R430-90, Licensed Family Child Care, may be located in a Group R-2 or  
880 R-3 occupancy as provided in Residential Group R-3, or shall comply with the International  
881 Residential Code in accordance with Section R101.2."

882 (h) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY

883 CLASSIFICATION, Educational Group E, a new section is added as follows: "Child care  
884 centers. Each of the following areas may be classified as accessory occupancies:

885 1. Hourly child care centers, as described in Utah Administrative Code, R381-60,  
886 Hourly Child Care Centers;

887 2. Child care centers, as described in Utah Administrative Code, R381-100, Child Care  
888 Centers; and

889 3. Out-of-school-time programs, as described in Utah Administrative Code, R381-70,  
890 Out of School Time Child Care Programs."

891 (i) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY

892 CLASSIFICATION, Institutional Group I-1, is amended as follows: Insert "Type I" in front of

893 the words "Assisted living facilities".

894 (j) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
895 CLASSIFICATION, Institutional Group I-1, Five or fewer persons receiving custodial care is  
896 amended as follows: On line four after "International Residential Code" the rest of the section  
897 is deleted.

898 (k) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
899 CLASSIFICATION, Institutional Group I-2, is amended as follows:

- 900 (i) On line three delete the word "five" and insert the word "three";
- 901 (ii) On line six the word "foster" is deleted and replaced with the word "child"; and
- 902 (iii) On line 10, after the words "Psychiatric hospitals", add the following to the list:  
903 "both intermediate nursing care and skilled nursing care facilities, ambulatory surgical centers  
904 with five or more operating rooms, and Type II assisted living facilities. Type II assisted living  
905 facilities with five or fewer persons shall be classified as a Group R-4. Type II assisted living  
906 facilities with at least six and not more than 16 residents shall be classified as a Group I-1  
907 facility".

908 (l) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
909 CLASSIFICATION, Institutional Group I-4, day care facilities, Classification as Group E, is  
910 amended as follows:

- 911 (i) On line two delete the word "five" and replace it with the word "four"; and
- 912 (ii) On line three delete the words "2 1/2 years or less of age" and replace with the  
913 words "under the age of two".

914 (m) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
915 CLASSIFICATION, Institutional Group I-4, day care facilities, Five or fewer occupants  
916 receiving care in a dwelling unit, is amended as follows: On lines one and three the word "five"  
917 is deleted and replaced with the word "four".

918 (n) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
919 CLASSIFICATION, Residential Group R-3, the words "and single family dwellings complying  
920 with the IRC" are added after the word "Residential Group R-3 occupancies".

921 (o) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
922 CLASSIFICATION, Residential Group R-3, Care facilities within a dwelling, is amended as  
923 follows: On line three after the word "dwelling" insert "other than child care".

924 (p) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
925 CLASSIFICATION, Residential Group R-3, a new section is added as follows: "Child Care.  
926 Areas used for child care purposes may be located in a residential dwelling unit when all of the  
927 following conditions are met:

928 1. Compliance with Utah Administrative Code, R710-8, Day Care Rules, as enacted  
929 under the authority of the Utah Fire Prevention Board;

930 2. Use is approved by the Department of Health under the authority of Utah Code, Title  
931 26, Chapter 39, Utah Child Care Licensing Act, and in any of the following categories:

932 1.1. Utah Administrative Code, R430-50, Residential Certificate Child Care; or

933 1.2. Utah Administrative Code, R430-90, Licensed Family Child Care; and

934 1.3 Compliance with all zoning regulations of the local regulator."

935 (q) IFC, Chapter 2, Section 202, General Definitions, RECORD DRAWINGS, is  
936 amended as follows: Delete the words "a fire alarm system" and replace them with "any fire  
937 protection system".

938 (r) IFC, Chapter 2, Section 202, General Definitions, the following definition is added  
939 for Residential Treatment/Support Assisted Living Facility. "RESIDENTIAL  
940 TREATMENT/SUPPORT ASSISTED LIVING FACILITY. A residential facility that provides  
941 a group living environment for four or more residents licensed by the Department of Human  
942 Services, and provides a protected living arrangement for ambulatory, non-restrained persons  
943 who are capable of achieving mobility sufficient to exit the facility without the physical  
944 assistance of another person."

945 (s) IFC, Chapter 2, Section 202, General Definitions, the following definition is added  
946 for Type I Assisted Living Facility. "TYPE I ASSISTED LIVING FACILITY. A residential  
947 facility licensed by the Department of Health that provides a protected living arrangement,  
948 assistance with activities of daily living and social care to two or more ambulatory,  
949 non-restrained persons who are capable of mobility sufficient to exit the facility without the  
950 assistance of another person. Subcategories are:

951 Limited Capacity: two to five residents;

952 Small: six to sixteen residents; and

953 Large: over sixteen residents."

954 (t) IFC, Chapter 2, Section 202, General Definitions, the following definition is added



955 for Type II Assisted Living Facility. "TYPE II ASSISTED LIVING FACILITY. A residential  
956 facility licensed by the Department of Health that provides an array of coordinated supportive  
957 personal and health care services to two or more residents who are:

958 A. Physically disabled but able to direct his or her own care; or

959 B. Cognitively impaired or physically disabled but able to evacuate from the facility, or  
960 to a zone or area of safety, with the physical assistance of one person. Subcategories are:

961 Limited Capacity: two to five residents;

962 Small: six to sixteen residents; and

963 Large: over sixteen residents."

964 Section 8. Section **15A-5-302** is amended to read:

965 **15A-5-302. Amendments and additions to NFPA related to National Fire Alarm**  
966 **and Signaling Code.**

967 For NFPA 72, National Fire Alarm and Signaling Code, 2016 edition:

968 (1) NFPA 72, Chapter 2, Section 2.2, NFPA Publications, is amended to add the  
969 following NFPA standard: "NFPA 20, Standard for the Installation of Stationary Pumps for  
970 Fire Protection, 2016 edition."

971 (2) NFPA 72, Chapter 10, Section 10.5.1, System Designer, Subsection 10.5.1.3(2), is  
972 deleted and rewritten as follows: [~~"National Institute of Certification in Engineering~~  
973 ~~Technologies (NICET) fire alarm level II certified personnel."~~] "Certification by the National  
974 Institute for Certification in Engineering Technologies at level III or IV in Fire Alarm  
975 Systems."

976 (3) NFPA 72, Chapter 10, Section 10.5.2, System Installer, Subsection 10.5.2.3(2), is  
977 deleted and rewritten as follows: [~~"National Institute of Certification in Engineering~~  
978 ~~Technologies (NICET) fire alarm level II certified personnel."~~] "Certification by the National  
979 Institute for Certification in Engineering Technologies at level III or IV in Fire Alarm  
980 Systems."

981 (4) NFPA 72, Chapter 10, Section 10.5.3, Inspection, Testing, and Maintenance  
982 Personnel, Subsection 10.5.3.1, is deleted and rewritten as follows:

983 "Service personnel shall be qualified and experienced in the inspection, testing, and  
984 maintenance of fire alarm systems. Qualified personnel shall meet the certification  
985 requirements stated in rule made by the State Fire Prevention Board in accordance with Title

986 63G, Chapter 3, Utah Administrative Rulemaking Act."

987 (5) NFPA 72, Chapter 10, Section 10.12, Fire Alarm Signal Deactivation, Subsection  
988 10.13.2, is amended to add the following sentence: "When approved by the AHJ, the audible  
989 notification appliances may be deactivated during the investigation mode to prevent  
990 unauthorized reentry into the building."

991 (6) In NFPA 72, Chapter 23, Section 23.8.5.9, Signal Initiation -- Fire Pump,  
992 Subsection 23.8.5.9.3 is added as follows: "Automatic fire pumps shall be supervised in  
993 accordance with NFPA 20, Standard for the Installation of Stationary Pumps for Fire  
994 Protection, and the AHJ."

995 (7) NFPA 72, Chapter 26, Section 26.3.4, Indication of Central Station Service,  
996 Subsection 26.3.4.7 is amended as follows: On line two, after the word "notified", insert the  
997 words "without delay" and delete the words, "within 30 calendar days".

998 Section 9. Section **58-22-305** is amended to read:

999 **58-22-305. Exemption from licensure.**

1000 (1) In addition to the exemptions from licensure in Section **58-1-307**, the following  
1001 may engage in the following acts or practices without being licensed under this chapter:

1002 (a) a person offering to render professional engineering, professional structural  
1003 engineering, or professional land surveying services in this state when not licensed under this  
1004 chapter if the person:

1005 (i) holds a current and valid professional engineer, professional structural engineer, or  
1006 professional land surveyor license issued by a licensing authority recognized by rule by the  
1007 division in collaboration with the board;

1008 (ii) discloses in writing to the potential client the fact that the professional engineer,  
1009 professional structural engineer, or professional land surveyor:

1010 (A) is not licensed in the state;

1011 (B) may not provide professional engineering, professional structural engineering, or  
1012 professional land surveying services in the state until licensed in the state; and

1013 (C) that such condition may cause a delay in the ability of the professional engineer,  
1014 professional structural engineer, or professional land surveyor to provide licensed services in  
1015 the state;

1016 (iii) notifies the division in writing of the person's intent to offer to render professional

1017 engineering, professional structural engineering, or professional land surveying services in the  
1018 state; and

1019 (iv) does not provide professional engineering, professional structural engineering, or  
1020 professional land surveying services, or engage in the practice of professional engineering,  
1021 professional structural engineering, or professional land surveying in this state until licensed to  
1022 do so;

1023 (b) a person preparing a plan and specification for a one or two-family residence not  
1024 exceeding two stories in height;

1025 (c) a person licensed to practice architecture under Title 58, Chapter 3a, Architects  
1026 Licensing Act, performing architecture acts or incidental engineering or structural engineering  
1027 practices that do not exceed the scope of the education and training of the person performing  
1028 engineering or structural engineering;

1029 (d) unlicensed employees, subordinates, associates, or drafters of a person licensed  
1030 under this chapter while preparing plans, maps, sketches, drawings, documents, specifications,  
1031 plats, and reports under the supervision of a professional engineer, professional structural  
1032 engineer, or professional land surveyor;

1033 (e) a person preparing a plan or specification for, or supervising the alteration of or  
1034 repair to, an existing building affecting an area not exceeding 3,000 square feet when structural  
1035 elements of a building are not changed, such as foundations, beams, columns, and structural  
1036 slabs, joists, bearing walls, and trusses;

1037 (f) an employee of a communications, utility, railroad, mining, petroleum, or  
1038 manufacturing company, or an affiliate of such a company, if the professional engineering or  
1039 professional structural engineering work is performed solely in connection with the products or  
1040 systems of the company and is not offered directly to the public;

1041 (g) an organization engaged in the practice of professional engineering, structural  
1042 engineering, or professional land surveying, provided that:

1043 (i) the organization employs a principal; and

1044 (ii) all individuals employed by the organization, who are engaged in the practice of  
1045 professional engineering, structural engineering, or land surveying, are licensed or exempt from  
1046 licensure under this chapter; ~~and~~

1047 (h) a person licensed as a professional engineer, a professional structural engineer, or a

1048 professional land surveyor in a state other than Utah serving as an expert witness, provided the  
1049 expert testimony meets one of the following:

1050 (i) oral testimony as an expert witness in an administrative, civil, or criminal  
1051 proceeding; or

1052 (ii) written documentation included as part of the testimony in a proceeding, including  
1053 designs, studies, plans, specifications, or similar documentation, provided that the purpose of  
1054 the written documentation is not to establish specifications, plans, designs, processes, or  
1055 standards to be used in the future in an industrial process, system, construction, design, or  
1056 repair[-];

1057 (i) a person certified by the National Institute for Certification in Engineering  
1058 Technologies at level III or IV in Water-Based System Layout, who submits a fire sprinkler  
1059 system to the authority having jurisdiction, the fire code official, or the building official for  
1060 approval;

1061 (j) a person certified by the National Institute for Certification in Engineering  
1062 Technologies at level III or IV in Fire Alarm Systems, who submits a fire alarm system layout  
1063 to the authority having jurisdiction, the fire code official, or the building official for approval;

1064 (k) a fire code or building official reviewing construction documents for code  
1065 compliance; and

1066 (l) a fire code or building official conducting an inspection for code compliance.

1067 (2) Nothing in this section shall be construed to restrict a person from preparing plans  
1068 for a client under the ~~[exemption]~~ exemptions provided in ~~[Subsection (1)(b)]~~ Subsections  
1069 (1)(b), (1)(i), or (1)(j), or taking those plans to a professional engineer for the engineer's  
1070 review, approval, and subsequent fixing of the engineer's seal to that set of plans.

1071 Section 10. **Effective date.**

1072 This bill takes effect on July 1, 2022.