

1 STATE CONSTRUCTION CODE AMENDMENTS

2 2022 GENERAL SESSION

3 STATE OF UTAH

4 Chief Sponsor: Joel Ferry

5 Senate Sponsor: Curtis S. Bramble

6

7 LONG TITLE

8 Committee Note:

9 The Business and Labor Interim Committee recommended this bill.

10 Legislative Vote: 16 voting for 0 voting against 5 absent

11 General Description:

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

15 Highlighted Provisions:

16 This bill:

17 ▶ amends provisions of Title 15A, State Construction and Fire Codes Act, by
18 amending the:

- 19 • Statewide Amendments to the International Residential Code;
- 20 • Statewide Amendments to the International Plumbing Code;
- 21 • Statewide Amendments to the International Mechanical Code; and
- 22 • the State Fire Code;

23 ▶ creates a licensing exemption for a person certified by the National Institute for
24 Certification in Engineering Technologies at level III or IV in Water-Based System
25 Layout or Fire Alarm Systems; and

26 ▶ makes technical and conforming changes.

27 Money Appropriated in this Bill:



28 None

29 **Other Special Clauses:**

30 None

31 **Utah Code Sections Affected:**

32 AMENDS:

33 **15A-3-202**, as last amended by Laws of Utah 2021, Chapters 102 and 199

34 **15A-3-203**, as last amended by Laws of Utah 2019, Chapter 20

35 **15A-3-205**, as last amended by Laws of Utah 2019, Chapter 20

36 **15A-3-206**, as last amended by Laws of Utah 2021, Chapters 102 and 199

37 **15A-3-306**, as last amended by Laws of Utah 2019, Chapter 20

38 **15A-3-402**, as last amended by Laws of Utah 2020, Chapter 441

39 **15A-5-202**, as last amended by Laws of Utah 2019, Chapter 103

40 **15A-5-302**, as last amended by Laws of Utah 2019, Chapter 103

41 **58-22-305**, as last amended by Laws of Utah 2020, Chapter 339



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

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

45 **15A-3-202. Amendments to Chapters 1 through 5 of IRC.**

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

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

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

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

55 (3) In IRC, Section 109:

56 (a) A new IRC, Section 109.1.5, is added as follows: "R109.1.5 Weather-resistant
57 exterior wall envelope inspections. An inspection shall be made of the weather-resistant
58 exterior wall envelope as required by Section R703.1 and flashings as required by Section

59 R703.8 to prevent water from entering the weather-resistive barrier."

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

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

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

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

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

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

88 (9) In IRC, Section 202, in the definition for gray water a comma is inserted after the
89 word "washers"; the word "and" is deleted; and the following is added to the end: "and clear

90 water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without
 91 objectionable odors; non-highly pigmented; and will not interfere with the operation of the
 92 sewer treatment facility."

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

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

99

"TABLE R301.2(5)			
GROUND SNOW LOADS FOR SELECTED LOCATIONS IN UTAH			
City/Town	County	Ground Snow Load (lb/ft ²)	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

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119	Nephi	Juab	39	5131
120	Ogden	Weber	37	4334
121	Panguitch	Garfield	41	6630
122	Parowan	Iron	32	6007
123	Price	Carbon	31	5558
124	Provo	Utah	31	4541
125	Randolph	Rich	50	6286
126	Richfield	Sevier	27	5338
127	St. George	Washington	21	2585
128	Salt Lake City	Salt Lake	28	4239
129	Tooele	Tooele	35	5029
130	Vernal	Uintah	39	5384

Note: To convert lb/ft² to kN/m², 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.

131 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.

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

138 (13) In IRC, Section R302.2, the following sentence is added after the second sentence:
 139 "When an access/maintenance agreement or easement is in place, plumbing, mechanical
 140 ducting, schedule 40 steel gas pipe, and electric service conductors including feeders, are

141 permitted to penetrate the common wall at grade, above grade, or below grade."

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

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

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

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

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

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

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

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

172 edge of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open
173 risers are permitted, provided that the opening between treads does not permit the passage of a
174 4-inch diameter (102 mm) sphere.

175 Exceptions.

176 1. A nosing is not required where the tread depth is a minimum of 10 inches (254 mm).

177 2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches
178 (762 mm) or less."

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

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

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

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

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

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

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

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

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

201 Exception: Interconnection of carbon monoxide alarms in existing areas shall not be required
202 where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing

203 the structure, unless there is an attic, crawl space or basement available which could provide
204 access for interconnection without the removal of interior finishes."

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

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

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

211 "327.1 General. Energy storage systems (ESS) shall comply with the provisions of this
212 section.

213 Exceptions:

214 1. ESS listed and labeled in accordance with UL 9540 and marked "For use in residential
215 dwelling units", where installed in accordance with the manufacturer's instruction and NFPA
216 70.

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

219 327.2 Equipment listings. ESS shall be listed and labeled in accordance with UL 9540.

220 Exception: Where approved, repurposed unlisted battery systems from electric vehicle are
221 allowed to be installed outdoors or in detached sheds located not less than 5 feet (1524 mm)
222 from exterior walls, property lines and public ways.[~~"(31) In IRC, Section R327.3 is deleted
223 and replaced with the following: "~~]

224 327.3 Installation. ESS shall be installed in accordance with the manufacturer's
225 instructions and their listing.[~~"(32) In IRC, Section R327, a new section 327.3.1 is added as
226 follows: "~~]

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

231 327.4 Locations. ESS shall be installed only in the following locations:

- 232 1. Detached garages and detached accessory structures.
- 233 2. Attached garages separated from the dwelling unit living space in accordance with

234 Section R302.6.

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

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

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

243 327.5 Energy ratings. Individual ESS units shall have a maximum rating of 20 kWh.
244 The aggregate rating of the ESS shall not exceed:

- 245 1. 40 kWh within utility closets, basements, and storage or utility spaces.
- 246 2. 80 kWh in attached or detached garages and detached accessory structures.
- 247 3. 80 kWh on exterior walls.
- 248 4. 80 kWh outdoors on the ground.

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

252 327.6 Electrical installation. ESS shall be installed in accordance with NFPA 70.
253 Inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL
254 9540 listing. Systems connected to the utility grid shall use inverters listed for utility
255 interaction.~~["(36) In IRC, Section 327, a new section 327.7 is added as follows:"]~~

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

261 327.8 Protection from impact. ESS installed in a location subject to vehicle damage
262 shall be protected by approved barriers.~~["(38) In IRC, Section 327, a new section 327.9 is
263 added as follows:"]~~

264 327.9 Ventilation. Indoor installations of ESS that include batteries that produce

265 hydrogen or other flammable gasses during charging shall be provided with mechanical
266 ventilation in accordance with Section M1307.4.["(39) In IRC, Section 327, a new section
267 327.10 is added as follows:"]

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

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

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

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

286 [(43)] (32) In IRC, Section R404.1, a new exception is added as follows: "Exception:
287 As an alternative to complying with Sections R404.1 through R404.1.5.3, concrete and
288 masonry foundation walls may be designed in accordance with IBC Sections 1807.1.5 and
289 1807.1.6 as amended in Section 1807.1.6.4 and Table 1807.1.6.4 under these rules."

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

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

295 15A-3-203. Amendments to Chapters 6 through 15 of IRC.

296 (1) In IRC, Section N1101.5 (R103.2), all words after the words "herein governed." are
297 deleted and replaced with the following: "Construction documents include all documentation
298 required to be submitted in order to issue a building permit."

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

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

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

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

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

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

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

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

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

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

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

321 (a) In the first sentence:

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

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

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

327 (b) The following sentence is inserted after the first sentence: "A multi-family dwelling
328 and townhouse shall be tested and verified as having an air leakage rate of not exceeding five
329 air changes per hour."

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

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

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

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

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

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

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

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

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

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

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

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

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

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

356 (b) in Subsection 2:

357 (i) on or after January 1, 2017, and before January 1, 2019, the number 4 is changed to

358 8 and the number 113.3 is changed to 226.5;

359 (ii) on or after January 1, 2019, and before January 1, 2021, the number 4 is changed to
 360 7 and the number 113.3 is changed to 198.2; and

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

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

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

366 (13) IRC, Section N1103.6.1 (R403.6.1), is deleted and replaced with the following:
 367 "N1103.6.1 (R403.6.1) Whole-house mechanical ventilation system fan efficacy. Fans used to
 368 provide whole-house mechanical ventilation shall meet the efficacy requirements of Table
 369 N1103.6.1 (R403.6.1).

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

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

375 TABLE N1103.6.1 (R403.6.1)

376 MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE 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

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

385 TABLE N1106.4 (R406.4)

386 MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	65
5	69
6	68

391 (16) In IRC, Section M1307.2, the words "In Seismic Design Categories D0, D1, and
392 D2, and in townhouses in Seismic Design Category C", are deleted, and in Subparagraph 1, the
393 last sentence is deleted.

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

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

397 ~~[(17)]~~ (19) IRC, Section M1411.8, is deleted.

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

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

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

401 **15A-3-205. Amendments to Chapters 26 through 35 of IRC.**

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

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

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

415 (4) In IRC, Section P2705, a new Item 6 is added as follows: "6. Lavatories. A lavatory

416 shall not be set closer than 12 inches from its center to any side wall or partition. A lavatory
417 shall be provided with a clearance of 24 inches in width and 21 inches in depth in front of the
418 lavatory to any side wall, partition, or obstruction." Remaining item numbers are renumbered
419 accordingly.

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

422 (6) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly
423 testing. The premise owner or the premise owner's designee shall have backflow prevention
424 assemblies operation tested in accordance with administrative rules made by the Drinking
425 Water Board at the time of installation, repair, and relocation and at least on an annual basis
426 thereafter, or more frequently as required by the authority having jurisdiction. Testing shall be
427 performed by a Certified Backflow Preventer Assembly Tester. The assemblies that are subject
428 to this paragraph are the Spill Resistant Vacuum Breaker, the Pressure Vacuum Breaker
429 Assembly, the Double Check Backflow Prevention Assembly, the Double Check Detector
430 Assembly Backflow Preventer, the Reduced Pressure Principle Backflow Preventer, and
431 Reduced Pressure Detector Assembly. Third-party certification for backflow prevention
432 assemblies will consist of any combination of two certifications, laboratory or field.
433 Acceptable third-party laboratory certifying agencies are ASSE, IAPMO, and USC-FCCCHR.
434 USC-FCCCHR currently provides the only field testing of backflow protection assemblies.
435 Also see www.drinkingwater.utah.gov and rules made by the Drinking Water Board."

436 (7) In IRC, Section P2902.1, the following subsections are added as follows:
437 "P2902.1.1 General Installation Criteria.

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

442 P2902.1.2 Specific Installation Criteria.

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

444 The reduced pressure principle backflow prevention assembly shall be installed as
445 follows:

446 a. The assembly may not be installed in a pit.

447 b. The relief valve of the assembly shall not be directly connected to a waste disposal line,
448 including a sanitary sewer, a storm drain, or a vent.

449 c. The assembly shall be installed in a horizontal position only, unless listed or approved for
450 vertical installation in accordance with Section 303.4.

451 d. The bottom of the assembly shall be installed a minimum of 12 inches above the floor or
452 ground.

453 e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or
454 obstacle, and shall be readily accessible for testing, repair, and maintenance.

455 P2902.1.2.2 Double Check Valve Backflow Prevention Assembly.

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

457 a. The assembly shall be installed in a horizontal position only, unless listed or approved for
458 vertical installation.

459 b. The bottom of the assembly shall be a minimum of 12 inches above the ground or floor.

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

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

465 P2902.1.2.3 Pressure Vacuum Break Assembly and Spill Resistant Pressure Vacuum Breaker
466 Assembly.

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

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

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

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

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

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

477 (8) In IRC, Section 2903.5, at the beginning of the second sentence, insert "If

478 installed,".

479 (9) In IRC, Section P2903.9.3, the first sentence is deleted and replaced with the
480 following: "Unless the plumbing appliance or plumbing fixture has a wall-mount valve, shutoff
481 valves shall be required on each fixture supply pipe to each plumbing appliance and to each
482 plumbing fixture other than bathtubs and showers."

483 (10) IRC, Section P2910.5, is deleted and replaced with the following:

484 "P2910.5 Potable water connections.

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

488 (11) IRC, Section P2910.9.5, is deleted and replaced with the following:

489 "P2910.9.5 Makeup water.

490 Where an uninterrupted nonpotable water supply is required for the intended application,
491 potable or reclaimed water shall be provided as a source of makeup water for the storage tank.
492 The makeup water supply shall be protected against backflow by means of an air gap not less
493 than 4 inches (102 millimeters) above the overflow or by a reduced pressure backflow
494 prevention assembly installed in accordance with Section 2902."

495 (12) In IRC, Section P2911.12.4, the following words are deleted: "and backwater
496 valves."

497 (13) In IRC, Section P2912.15.6, the following words are deleted: "and backwater
498 valves."

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

501 [~~(15)~~] (14) IRC, Section P3009, is deleted and replaced with the following:

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

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

505 [~~(16)~~] (15) In IRC, Section P3103.6, the following sentence is added at the end of the
506 paragraph: "Vents extending through the wall shall terminate not less than 12 inches from the
507 wall with an elbow pointing downward."

508 [~~(17)~~] (16) In IRC, Section P3104.4, the following sentence is added at the end of the

509 paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain
510 and floor sink installations when installed below grade in accordance with Chapter 30, and
511 Sections P3104.2 and P3104.3. A wall cleanout shall be provided in the vertical vent."

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

513 **15A-3-206. Amendments to Chapters 37, 39, and 44 and Appendix F of IRC.**

514 (1) In IRC, Section E3601.6.2, a new exception is added as follows: "Exception: An
515 occupant of an accessory dwelling unit is not required to have access to the disconnect serving
516 the dwelling unit in which they reside."

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

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

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

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

528 (6) In Section E3902.17:

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

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

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

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

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

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

538 (a) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA
539 60335-2-40-2019"; and

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

544 (10) In IRC, Chapter 44, the standard for UL, is amended by changing the:
 545 (a) standard reference number "1995-2011" to "1995-2015";
 546 (b) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA
 547 60335-2-40-2019"; and

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

552 [~~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"

555 [~~8~~] (12) In IRC, Chapter 44, is amended by adding the following reference standard:
 556 "UL 9540-20: Energy Storage Systems and Equipment; R327.1, R327.2 and R327.6."

557 [~~9~~] (13) (a) When passive radon controls or portions thereof are voluntarily installed,
 558 the voluntary installation shall comply with Appendix F of the IRC.

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

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

562 **15A-3-306. Amendments to Chapter 6 of IPC.**

563 (1) IPC, Section 602.3, is deleted and replaced with the following: "602.3 Individual
 564 water supply. Where a potable public water supply is not available, individual sources of
 565 potable water supply shall be utilized provided that the source has been developed in
 566 accordance with Utah Code, Sections [73-3-1](#), [73-3-3](#), and [73-3-25](#), as administered by the

567 Department of Natural Resources, Division of Water Rights. In addition, the quality of the
568 water shall be approved by the local health department having jurisdiction. The source shall
569 supply sufficient quantity of water to comply with the requirements of this chapter."

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

572 (3) A new IPC, Section 604.4.1, is added as follows: "604.4.1 Manually operated
573 metering faucets for food service establishments. Self closing or manually operated metering
574 faucets shall provide a flow of water for at least 15 seconds without the need to reactivate the
575 faucet."

576 (4) IPC, Section 606.5, is deleted and replaced with the following: "606.5 Water
577 pressure booster systems. Water pressure booster systems shall be provided as required by
578 Section 606.5.1 through 606.5.11."

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

583 (6) In IPC, Section 608.1, the words "and pollution" are added after the word
584 "contamination."

585 (7) In IPC, Section 608.1, the following subsections are added as follows:
586 "608.1.1 General Installation Criteria.

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

590 608.1.2 Specific Installation Criteria.

591 608.1.2.1 Reduced Pressure Principle [~~Backflow~~] Backflow Prevention Assembly.

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

593 a. The assembly shall not be installed in a pit or below grade where the relief port could be
594 submerged in water or where fumes could be present at the relief port discharge.

595 b. The relief valve of the assembly shall not be directly connected to a waste disposal line,
596 including a sanitary sewer, storm drain, or vent.

597 c. The assembly shall be installed in a horizontal position, unless the assembly is listed or

598 approved for vertical installation in accordance with Section 303.4.

599 d. The bottom of each assembly shall be installed a minimum of 12 inches above the ground or
600 the floor.

601 e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or
602 obstacle, and shall be readily accessible for testing, repair, and maintenance.

603 608.1.2.2 Double Check Valve Backflow Prevention Assembly.

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

605 a. The assembly shall be installed in a horizontal position unless the assembly is listed or
606 approved for vertical installation.

607 b. The bottom of the assembly shall be a minimum of 12 inches above the ground or the floor.

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

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

613 608.1.2.3 Pressure Vacuum Breaker Assembly and Spill Resistant Pressure Vacuum Breaker
614 Assembly.

615 A pressure vacuum breaker assembly and spill resistant pressure vacuum breaker assembly
616 shall be installed as follows:

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

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

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

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

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

625 (8) In IPC, Section 608.3, the word "and" before the word "contamination" is deleted
626 and replaced with a comma and the words " or pollution" are added after the word
627 "contamination" in the first sentence.

628 (9) In IPC, Section 608.6, the words "with the potential to create a condition of either

629 contamination or pollution or" are added after the word "substances."

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

633 (11) IPC, Section 608.8, is deleted and replaced with the following: " 608.8 Stop and
634 Waste Valves installed below grade. Combination stop-and-waste valves shall be permitted to
635 be installed underground or below grade. Freeze proof yard hydrants that drain the riser into
636 the ground are considered to be stop-and-waste valves and shall be permitted. A
637 stop-and-waste valve shall be installed in accordance with a manufacturer's recommended
638 installation instructions."

639 (12) IPC, Section 608.14.3, is deleted and replaced with the following: " 608.14.3
640 Backflow preventer with intermediate atmospheric vent. Backflow preventers with
641 intermediate atmospheric vents shall conform to ASSE 1012 or CSA CAN/CSA-B64.3. These
642 devices shall be permitted to be installed on residential boilers, without chemical treatment,
643 where subject to continuous pressure conditions, and humidifiers in accordance with Section
644 608.17.10. The relief opening shall discharge by air gap and shall be prevented from being
645 submerged."

646 (13) IPC, Section 608.14.4, is deleted.

647 (14) IPC, Section 608.16.3, is deleted and replaced with the following: " 608.16.3
648 Protection by a backflow preventer with intermediate atmospheric vent. Connections to
649 residential boilers only, without chemical treatment, and humidifiers shall be protected by a
650 backflow preventer with an intermediate atmospheric vent."

651 (15) IPC, Section 608.16.4, is deleted and replaced with the following: " 608.16.4
652 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type
653 or pressure-type vacuum breakers. Vacuum breakers shall not be installed under exhaust hoods
654 or similar locations that will contain toxic fumes or vapors. Fill valves shall be set in
655 accordance with Section 425.3.1. Atmospheric Vacuum Breakers - The critical level of the
656 atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above the flood
657 level rim of the fixture or device. Pipe-applied vacuum breakers shall be installed not less than
658 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served. No
659 valves shall be installed downstream of the atmospheric vacuum breaker. The atmospheric

660 vacuum breaker shall not be installed where it may be subjected to continuous pressure for
661 more than 12 consecutive hours at any time. Pressure Vacuum Breaker - The critical level of
662 the pressure vacuum breaker shall be set a minimum of 12 inches (304 mm) above the flood
663 level of the fixture or device."

664 (16) In IPC, Section 608.16.4.2, the following is added after the first sentence:
665 "Add-on-backflow prevention devices shall be non-removable. In climates where freezing
666 temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow
667 preventer shall be used."

668 (17) In IPC, Section 608.17.1.2, the words "or ASSE 1024" are deleted.

669 (18) IPC, Section 608.17.2, is deleted and replaced as follows: " 608.17.2 Connections
670 to boilers. The potable supply to a boiler shall be protected by an air gap or a reduced pressure
671 principle backflow preventer, complying with ASSE 1013, CSA B64.4 or AWWA C511.
672 Exception: The potable supply to a residential boiler without chemical treatment may be
673 equipped with a backflow preventer with an intermediate atmospheric vent complying with
674 ASSE 1012 or CSA CAN/CSA-B64.3."

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

680 (20) IPC, Section 608.17.7, is deleted and replaced with the following: " 608.17.7
681 Chemical dispensers. Where chemical dispensers connect to the water distribution system, the
682 water supply system shall be protected against backflow in accordance with Section 608.14.1,
683 Section 608.14.2, Section 608.14.5, Section 608.14.6 or Section 608.14.8. Installation shall be
684 in accordance with Section 608.1.2. Chemical dispensers shall connect to a separate dedicated
685 water supply line, and not a sink faucet."

686 (21) IPC, Section 608.17.8, is deleted and replaced with the following: " 608.17.8
687 Portable cleaning equipment. Where the portable cleaning equipment connects to the water
688 distribution system, the water supply system shall be protected against backflow in accordance
689 with Section 608.14.1 or Section 608.14.2."

690 (22) A new IPC, Section 608.17.11, is added as follows: " 608.17.11 Automatic and

691 coin operated car washes. The water supply to an automatic or coin operated car wash shall be
692 protected in accordance with Section 608.14.1 or Section 608.14.2."

693 (23) IPC, Section 608.18, is deleted and replaced with the following: " 608.18
694 Protection of individual water supplies. See Section 602.3 for requirements."

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

696 **15A-3-402. Amendments to Chapters 1 through 5 of IMC.**

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

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

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

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

706 c. A nail salon that complies with Note h. 1a or h. 1b is not required to comply with the
707 labeling, listing, or testing requirements described in International Mechanical Code sections
708 301.7 or 301.8.

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

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

714 4. The requirements of this note apply to:

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

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

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

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

719 "502.20 Manicure stations. A nail salon that files or shapes an acrylic nail shall provide
720 each manicure station with a source capture system in accordance with Table 403.3.1.1, note h.
721 For a manicure table that does not have factory-installed source capture system inlets for

722 recirculating or exhausting air, a nail salon shall provide the manicure table with inlets for
 723 recirculating or exhausting air located not more than 12 inches (305 mm) horizontally and
 724 vertically from the point of any acrylic chemical application.

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

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

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

731 (4) In IMC, Section 918.1, the following words are added after "1995": "or UL/CSA
 732 [60335-2-40](#)."

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

735 (6) In IMC, Section 1101.2, the words "471 or 1995" are deleted and replaced with
 736 "471, 1995, or UL/CSA [60335-2-40](#)."

737 (7) In IMC, Section 1101.6, the following sentence is added at the end of the
 738 paragraph: "High probability systems utilizing A2L refrigerants shall comply with ASHRAE
 739 15."

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

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

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

<u>"Standard reference number</u>	<u>Title</u>	<u>Referenced in code section number</u>
<u>CSA: CSA C22.2 60335-2-40-2019</u>	<u>Standard for Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers – 3rd Edition</u>	<u>M1403.1, M1412.1, M1413.1"</u>

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

748 UL:

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

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

752 **15A-5-202. Amendments and additions to IFC related to administration, permits,**
 753 **definitions, and general and emergency planning.**

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

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

756 "102.5 Application of residential code.

757 If a structure is designed and constructed in accordance with the International
 758 Residential Code, the provisions of this code apply only as follows:

759 1. The construction and design provisions of this code apply only to premises
 760 identification, fire apparatus access, fire hydrants and water supplies, and construction permits
 761 required by Section 105.7.

762 2. This code does not supercede the land use, subdivision, or development standards
 763 established by a local jurisdiction.

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

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

766 "102.9 Matters not provided for.

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

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

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

774 102.9.1 Limitation of emergency order.

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

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

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

780 101.9.2 Right to appeal emergency order.

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

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

786 "Fire sprinkler system layout may be prepared and submitted by a person certified by
787 the National Institute for Certification in Engineering Technologies at level III or IV in
788 Water-Based System Layout. Fire alarm system layout may be prepared and submitted by a
789 person certified by the National Institute for Certification in Engineering Technologies at level
790 III or IV in Fire Alarm Systems."

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

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

797 "109.1.1 Application of residential code.

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

802 [~~(e)~~] (f) In IFC, Chapter 1, Section 109, a new Section 109.4, Notice of right to appeal,
803 is added as follows: "At the time a fire code official makes an order, decision, or determination

804 that relates to the application or interpretation of this chapter, the fire code official shall inform
805 the person affected by the order, decision, or determination of the person's right to appeal under
806 this section. Upon request, the fire code official shall provide a person affected by an order,
807 decision, or determination that relates to the application or interpretation of this chapter a
808 written notice that describes the person's right to appeal under this section."

809 [~~(f)~~] (g) IFC, Chapter 1, Section 110.3, Notice of violation, is deleted and rewritten as
810 follows:

811 "110.3 Notice of violation.

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

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

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

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

827 (c) IFC, Chapter 2, Section 202, General Definitions, FOSTER CARE FACILITIES is
828 amended as follows: The word "Foster" is changed to the word "Child."

829 (d) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY
830 CLASSIFICATION, Educational Group E, Group E, day care facilities, is amended as follows:

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

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

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

834 CLASSIFICATION, Educational Group E, Five or fewer children, is amended as follows: The

835 word "five" is deleted and replaced with the word "four" in both places.

836 (f) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY
837 CLASSIFICATION, Educational Group E, Five or fewer children in a dwelling unit, is
838 amended as follows: The word "five" is deleted and replaced with the word "four" in both
839 places.

840 (g) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY
841 CLASSIFICATION, Educational Group E, a new section is added as follows: "Child day care
842 -- residential child care certificate or a license. Areas used for child day care purposes with a
843 residential child care certificate, as described in Utah Administrative Code, R430-50,
844 Residential Certificate Child Care, or a residential child care license, as described in Utah
845 Administrative Code, R430-90, Licensed Family Child Care, may be located in a Group R-2 or
846 R-3 occupancy as provided in Residential Group R-3, or shall comply with the International
847 Residential Code in accordance with Section R101.2."

848 (h) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY
849 CLASSIFICATION, Educational Group E, a new section is added as follows: "Child care
850 centers. Each of the following areas may be classified as accessory occupancies:

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

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

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

857 (i) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY
858 CLASSIFICATION, Institutional Group I-1, is amended as follows: Insert "Type I" in front of
859 the words "Assisted living facilities".

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

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

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

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

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

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

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

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

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

- 894 1. Compliance with Utah Administrative Code, R710-8, Day Care Rules, as enacted
895 under the authority of the Utah Fire Prevention Board;
896 2. Use is approved by the Department of Health under the authority of Utah Code, Title

897 26, Chapter 39, Utah Child Care Licensing Act, and in any of the following categories:

898 1.1. Utah Administrative Code, R430-50, Residential Certificate Child Care; or

899 1.2. Utah Administrative Code, R430-90, Licensed Family Child Care; and

900 1.3 Compliance with all zoning regulations of the local regulator."

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

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

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

917 Limited Capacity: two to five residents;

918 Small: six to sixteen residents; and

919 Large: over sixteen residents."

920 (t) IFC, Chapter 2, Section 202, General Definitions, the following definition is added
921 for Type II Assisted Living Facility. "TYPE II ASSISTED LIVING FACILITY. A residential
922 facility licensed by the Department of Health that provides an array of coordinated supportive
923 personal and health care services to two or more residents who are:

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

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

927 Limited Capacity: two to five residents;

928 Small: six to sixteen residents; and
929 Large: over sixteen residents."

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

931 **15A-5-302. Amendments and additions to NFPA related to National Fire Alarm**
932 **and Signaling Code.**

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

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

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

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

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

949 "Service personnel shall be qualified and experienced in the inspection, testing, and
950 maintenance of fire alarm systems. Qualified personnel shall meet the certification
951 requirements stated in rule made by the State Fire Prevention Board in accordance with Title
952 63G, Chapter 3, Utah Administrative Rulemaking Act."

953 (5) NFPA 72, Chapter 10, Section 10.12, Fire Alarm Signal Deactivation, Subsection
954 10.13.2, is amended to add the following sentence: "When approved by the AHJ, the audible
955 notification appliances may be deactivated during the investigation mode to prevent
956 unauthorized reentry into the building."

957 (6) In NFPA 72, Chapter 23, Section 23.8.5.9, Signal Initiation -- Fire Pump,
958 Subsection 23.8.5.9.3 is added as follows: "Automatic fire pumps shall be supervised in

959 accordance with NFPA 20, Standard for the Installation of Stationary Pumps for Fire
960 Protection, and the AHJ."

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

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

965 **58-22-305. Exemption from licensure.**

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

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

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

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

976 (A) is not licensed in the state;

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

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

982 (iii) notifies the division in writing of the person's intent to offer to render professional
983 engineering, professional structural engineering, or professional land surveying services in the
984 state; and

985 (iv) does not provide professional engineering, professional structural engineering, or
986 professional land surveying services, or engage in the practice of professional engineering,
987 professional structural engineering, or professional land surveying in this state until licensed to
988 do so;

989 (b) a person preparing a plan and specification for a one or two-family residence not

990 exceeding two stories in height;

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

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

999 (e) a person preparing a plan or specification for, or supervising the alteration of or
1000 repair to, an existing building affecting an area not exceeding 3,000 square feet when structural
1001 elements of a building are not changed, such as foundations, beams, columns, and structural
1002 slabs, joists, bearing walls, and trusses;

1003 (f) an employee of a communications, utility, railroad, mining, petroleum, or
1004 manufacturing company, or an affiliate of such a company, if the professional engineering or
1005 professional structural engineering work is performed solely in connection with the products or
1006 systems of the company and is not offered directly to the public;

1007 (g) an organization engaged in the practice of professional engineering, structural
1008 engineering, or professional land surveying, provided that:

1009 (i) the organization employs a principal; and

1010 (ii) all individuals employed by the organization, who are engaged in the practice of
1011 professional engineering, structural engineering, or land surveying, are licensed or exempt from
1012 licensure under this chapter; [~~and~~]

1013 (h) a person licensed as a professional engineer, a professional structural engineer, or a
1014 professional land surveyor in a state other than Utah serving as an expert witness, provided the
1015 expert testimony meets one of the following:

1016 (i) oral testimony as an expert witness in an administrative, civil, or criminal
1017 proceeding; or

1018 (ii) written documentation included as part of the testimony in a proceeding, including
1019 designs, studies, plans, specifications, or similar documentation, provided that the purpose of
1020 the written documentation is not to establish specifications, plans, designs, processes, or

1021 standards to be used in the future in an industrial process, system, construction, design, or
1022 repair[-];

1023 (i) a person certified by the National Institute for Certification in Engineering
1024 Technologies at level III or IV in Water-Based System Layout, who submits a fire sprinkler
1025 system to the authority having jurisdiction, the fire code official, or the building official for
1026 approval;

1027 (j) a person certified by the National Institute for Certification in Engineering
1028 Technologies at level III or IV in Fire Alarm Systems, who submits a fire alarm system layout
1029 to the authority having jurisdiction, the fire code official, or the building official for approval;

1030 (k) a fire code or building official reviewing construction documents for code
1031 compliance; and

1032 (l) a fire code or building official conducting an inspection for code compliance.

1033 (2) Nothing in this section shall be construed to restrict a person from preparing plans
1034 for a client under the ~~[exemption]~~ exemptions provided in ~~[Subsection (1)(b)]~~ Subsections
1035 (1)(b), (1)(i), or (1)(j), or taking those plans to a professional engineer for the engineer's
1036 review, approval, and subsequent fixing of the engineer's seal to that set of plans.