

Representative Thomas W. Peterson proposes the following substitute bill:

STATE CONSTRUCTION CODE MODIFICATIONS

2024 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Thomas W. Peterson

Senate Sponsor: _____

LONG TITLE

General Description:

This bill modifies State Construction Code.

Highlighted Provisions:

This bill:

- ▶ amends the State Construction Code to:
 - align with updated standards in the International Residential Code (IRC); and
 - modify provisions of the IRC;
- ▶ creates a mass timber construction loan program; and
- ▶ makes technical changes.

Money Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:

AMENDS:

15A-1-104, as enacted by Laws of Utah 2014, Chapter 197

15A-2-103, as last amended by Laws of Utah 2023, Chapters 160, 209

15A-3-105, as last amended by Laws of Utah 2023, Chapter 209



- 26 **15A-3-202**, as last amended by Laws of Utah 2023, Chapter 209
- 27 **15A-3-203**, as last amended by Laws of Utah 2023, Chapter 209
- 28 **15A-3-204**, as last amended by Laws of Utah 2023, Chapter 209
- 29 **15A-3-205**, as last amended by Laws of Utah 2023, Chapter 209
- 30 **15A-3-206**, as last amended by Laws of Utah 2023, Chapter 209
- 31 **15A-3-401**, as last amended by Laws of Utah 2019, Chapter 20
- 32 **15A-3-701**, as last amended by Laws of Utah 2023, Chapter 209
- 33 **15A-3-801**, as last amended by Laws of Utah 2023, Chapter 209
- 34 **15A-5-103**, as last amended by Laws of Utah 2023, Chapter 95
- 35 **58-55-102**, as last amended by Laws of Utah 2023, Chapter 223



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

38 Section 1. Section **15A-1-104** is amended to read:

39 **15A-1-104. Permit approval required -- Certificate of occupancy valid.**

40 (1) As used in this section:

41 (a) "Compliance agency" is as defined in Section **15A-1-202**.

42 (b) "Project" is as defined in Section **15A-1-209**.

43 (2) A compliance agency for a political subdivision may not reject a permit, or
44 otherwise withhold approval of a project whenever approval is required, for failure to comply
45 with the applicable provisions of this title unless the compliance agency:

46 (a) cites with specificity the applicable provision with which the project has failed to
47 comply; and

48 (b) describes how the project has failed to comply.

49 (3) A municipality may not withhold a permit or project approval for a project because
50 of a noncomplying or non-conforming structure on the same property provided:

51 (a) it has been completed for a minimum of two years; and

52 (b) it does not pose an immediate health or life safety concerns.

53 (4) A municipality may not require additional permitting, engineering or inspections
54 for a non-conforming and non-complying structures after it has been completed for two years
55 or more if the work in question does not pose an immediate health or life safety concern.

56 (5) If a compliance agency or a representative of a compliance agency issues a

57 certificate of occupancy, the compliance agency may not withdraw the certificate of occupancy
58 or exert additional jurisdiction over the elements of the project for which the certificate was
59 issued unless additional changes or modifications requiring a building permit are made to
60 elements of the project after the certificate was issued.

61 Section 2. Section **15A-2-103** is amended to read:

62 **15A-2-103. Specific editions adopted of construction code of a nationally**
63 **recognized code authority.**

64 (1) Subject to the other provisions of this part, the following construction codes are
65 incorporated by reference, and together with the amendments specified in Chapter 3, Statewide
66 Amendments Incorporated as Part of State Construction Code, and Chapter 4, Local
67 Amendments Incorporated as Part of State Construction Code, are the construction standards to
68 be applied to building construction, alteration, remodeling, and repair, and in the regulation of
69 building construction, alteration, remodeling, and repair in the state:

70 (a) the 2021 edition of the International Building Code, including Appendices C and J,
71 issued by the International Code Council;

72 (b) ~~[except as provided in Subsection (1)(c);]~~ the 2021 edition of the International
73 Residential Code, issued by the International Code Council;

74 ~~[(c) the residential provisions of Chapter 11, Energy Efficiency, of the 2015 edition of~~
75 ~~the International Residential Code, issued by the International Code Council;]~~

76 ~~[(d)]~~ (c) Appendix AQ of the 2021 edition of the International Residential Code, issued
77 by the International Code Council;

78 ~~[(e)]~~ (d) the 2021 edition of the International Plumbing Code, issued by the
79 International Code Council;

80 ~~[(f)]~~ (e) the 2021 edition of the International Mechanical Code, issued by the
81 International Code Council;

82 ~~[(g)]~~ (f) the 2021 edition of the International Fuel Gas Code, issued by the International
83 Code Council;

84 ~~[(h)]~~ (g) the 2020 edition of the National Electrical Code, issued by the National Fire
85 Protection Association;

86 ~~[(i) the residential provisions of the 2015 edition of the International Energy~~
87 ~~Conservation Code, issued by the International Code Council;]~~

88 ~~[(j)]~~ (h) ~~[the commercial provisions of]~~ the 2021 edition of the International Energy
89 Conservation Code, issued by the International Code Council;

90 ~~[(k)]~~ (i) the 2021 edition of the International Existing Building Code, issued by the
91 International Code Council;

92 ~~[(t)]~~ (j) subject to Subsection 15A-2-104(2), the HUD Code;

93 ~~[(m)]~~ (k) subject to Subsection 15A-2-104(1), Appendix AE of the 2021 edition of the
94 International Residential Code, issued by the International Code Council;

95 ~~[(n)]~~ (l) subject to Subsection 15A-2-104(1), the 2005 edition of the NFPA 225 Model
96 Manufactured Home Installation Standard, issued by the National Fire Protection Association;

97 ~~[(o)]~~ (m) subject to Subsection (3), for standards and guidelines pertaining to plaster on
98 a historic property, as defined in Section 9-8a-302, the U.S. Department of the Interior
99 Secretary's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings;
100 and

101 ~~[(p)]~~ (n) the residential provisions of the 2021 edition of the International Swimming
102 Pool and Spa Code, issued by the International Code Council.

103 (2) Consistent with Title 65A, Chapter 8, Management of Forest Lands and Fire
104 Control, the Legislature adopts the 2006 edition of the Utah Wildland Urban Interface Code,
105 issued by the International Code Council, with the alternatives or amendments approved by the
106 Utah Division of Forestry, Fire, and State Lands, as a construction code that may be adopted by
107 a local compliance agency by local ordinance or other similar action as a local amendment to
108 the codes listed in this section.

109 (3) The standards and guidelines described in Subsection ~~[(t)]~~~~[(o)]~~ (1)(n) apply only if:

110 (a) the owner of the historic property receives a government tax subsidy based on the
111 property's status as a historic property;

112 (b) the historic property is wholly or partially funded by public money; or

113 (c) the historic property is owned by a government entity.

114 Section 3. Section 15A-3-105 is amended to read:

115 **15A-3-105. Amendments to Chapters 10 through 12 of IBC.**

116 (1) In IBC, Section 1010.2.4, number (2), the following is added at the end of the
117 sentence: "Blended assisted living facilities shall comply with Section 1010.2.14.1."

118 (2) A new IBC Section 1010.2.14.1 is added as follows: "1010.2.14.1 Blended assisted

119 living facilities. In occupancy Group I-1, Condition 2 or Group I-2, a Type-II assisted living
 120 facility licensed by the Department of Health and Human Services for residents with
 121 Alzheimers or dementia, and having a controlled egress locking system to prevent operation
 122 from the egress side shall be permitted to also house residents without a clinical need for their
 123 containment where all of the following provisions are met:

124 (a) locks in the means of egress comply with all IBC requirements for controlled egress
 125 doors;

126 (b) all residents without a clinical need for their containment shall have the keys, codes
 127 or other means necessary to operate the locking systems;

128 (c) residents or their legal representative acknowledge in writing that they understand
 129 and agree to living in a facility where egress is controlled; and

130 (d) the number of residents housed in a smoke compartment with controlled egress
 131 shall not be greater than 30."

132 (3) In IBC, Section 1011.5.2, exception 3 is deleted and replaced with the following: "

133 3. In Group R-3 occupancies, within dwelling units in Group R-2 occupancies, and in Group U
 134 occupancies that are accessory to a Group R-3 occupancy, or accessory to individual dwelling
 135 units in Group R-2 occupancies, the maximum riser height shall be 8 inches (203 mm) and the
 136 minimum tread depth shall be 9 inches (229 mm). The minimum winder tread depth at the
 137 walk line shall be 10 inches (254 mm), and the minimum winder tread depth shall be 6 inches
 138 (152 mm). A nosing not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm)
 139 shall be provided on stairways with solid risers where the tread depth is less than 10 inches
 140 (254 mm)."

141 [~~(2)~~] (4) In IBC, Section 1011.11, a new exception 6 is added as follows: " 6. In
 142 occupancies in Group R-3, as applicable in Section 101.2 and in occupancies in Group U,
 143 which are accessory to an occupancy in Group R-3, as applicable in Section 101.2, handrails
 144 shall be provided on at least one side of stairways consisting of four or more risers."

145 [~~(3)~~] (5) IBC, Section 1025, is deleted.

146 Section 4. Section **15A-3-202** is amended to read:

147 **15A-3-202. Amendments to Chapters 1 through 5 of IRC.**

148 (1) In IRC, Section R101.2, Exception, the words "where provided with an automatic
 149 sprinkler system complying with Section P2904" are deleted.

150 (2) In IRC, Section R102, a new Section R102.7.2 is added as follows: "R102.7.2
151 Physical change for bedroom window egress. A structure whose egress window in an existing
152 bedroom is smaller than required by this code, and that complied with the construction code in
153 effect at the time that the bedroom was finished, is not required to undergo a physical change to
154 conform to this code if the change would compromise the structural integrity of the structure or
155 could not be completed in accordance with other applicable requirements of this code,
156 including setback and window well requirements."

157 [~~(3)~~ IRC, Section R105.2, number 10, is deleted and replaced with the following: "~~10-~~
158 ~~Decks that are not more than 30 inches (762 mm) above grade at any point and not requiring~~
159 ~~guardrails, that do not serve the exit door required by Section R311.4.~~"]

160 (3) In IRC Section R105.2, under Building, the following changes are made:

161 (a) Number 3 is deleted and replaced with the following: "3. Retaining walls retaining
162 less than 4 feet (1219mm) of unbalanced fill, unless supporting a surcharge or requiring design
163 per Section R404.4."

164 (b) Number 10 is deleted and replaced with the following: "10. Decks that are not more
165 than 30 inches (762mm) above grade at any point and not requiring guardrails, that do not
166 serve exit door required by Section R311.4."

167 (4) In IRC, Section R105.2 a new exception is added: "11. Grade level, non-connected
168 conex boxes, less than 350 square feet, used for storage only."

169 [~~(4)~~ (5) In IRC, Section R108.3, the following sentence is added at the end of the
170 section: "The building official shall not request proprietary information."

171 [~~(5)~~ (6) IRC, Section 109.1.5, is deleted and replaced with the following: "R109.1.5
172 Weather-resistant exterior wall envelope inspections. An inspection shall be made of the
173 weather-resistant exterior wall envelope as required by Section R703.1 and flashings as
174 required by Section R703.4 to prevent water from entering the weather-resistive barrier."

175 [~~(6)~~ (7) In IRC, Section R202, the following definition is added: "ACCESSORY
176 DWELLING UNIT: A habitable living unit created within the existing footprint of a primary
177 owner-occupied single-family dwelling."

178 [~~(7)~~ (8) In IRC, Section R202, the definition for "Approved" is modified by adding the
179 words "or independent third-party licensed engineer or architect and submitted to the building
180 official" after the word "official."

181 ~~[(8)]~~ (9) In IRC, Section R202, the definition for "Approved Agency" is modified by
182 replacing the word "and" with "or."

183 ~~[(9)]~~ (10) In IRC, Section 202, the definition for "Approved Source" is modified by
184 adding the words "or licensed engineer or architect" after the word "official."

185 ~~[(10)]~~ (11) In IRC, Section R202, the following definition is added: "CERTIFIED
186 BACKFLOW PREVENTER ASSEMBLY TESTER: A person who has shown competence to
187 test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction
188 under Utah Code, Subsection 19-4-104(4)."

189 ~~[(11)]~~ (12) In IRC, Section R202, the definition of "Cross Connection" is deleted and
190 replaced with the following: "CROSS CONNECTION. Any physical connection or potential
191 connection or arrangement between two otherwise separate piping systems, one of which
192 contains potable water and the other either water of unknown or questionable safety or steam,
193 gas, or chemical, whereby there exists the possibility for flow from one system to the other,
194 with the direction of flow depending on the pressure differential between the two systems (see
195 "Backflow, Water Distribution")."

196 ~~[(12)]~~ (13) In IRC, Section 202, the following definition is added: "DUAL SOURCE
197 CONNECTION. A pipe that is installed so that either the nonpotable (i.e. secondary) irrigation
198 water or the potable water is connected to a pressurized irrigation system at one time, but not
199 both at the same time; or a pipe that is installed so that either the potable water or private well
200 water is connected to a residence at one time, but not both at the same time. The potable water
201 supply line shall be protected by a reduced pressure backflow preventer."

202 ~~[(13)]~~ (14) In IRC, Section 202, the following definition is added: "ENERGY
203 STORAGE SYSTEM (ESS). One or more devices, assembled together, that are capable of
204 storing energy for supplying electrical energy at a future time."

205 ~~[(14)]~~ (15) In IRC, Section 202, in the definition for gray water a comma is inserted
206 after the word "washers"; the word "and" is deleted; and the following is added to the end: "and
207 clear water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible;
208 without objectionable odors; non-highly pigmented; and will not interfere with the operation of
209 the sewer treatment facility."

210 ~~[(15)]~~ (16) In IRC, Section R202, the definition of "Potable Water" is deleted and
211 replaced with the following: "POTABLE WATER. Water free from impurities present in

212 amounts sufficient to cause disease or harmful physiological effects and conforming to the
 213 Utah Code, Title 19, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water
 214 Quality Act, and the regulations of the public health authority having jurisdiction."

215 [~~(16)~~] (17) IRC, Figure R301.2 (3), is deleted and replaced with R301.2 (3) as follows:

"TABLE R301.2 (3)			
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
Nephi	Juab	39	5131
Ogden	Weber	37	4334
Panguitch	Garfield	41	6630
Parowan	Iron	32	6007
Price	Carbon	31	5558

241	Provo	Utah	31	4541
242	Randolph	Rich	50	6286
243	Richfield	Sevier	27	5338
244	St. George	Washington	21	2585
245	Salt Lake City	Salt Lake	28	4239
246	Tooele	Tooele	35	5029
247	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.

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."

249 ~~[(17)]~~ (18) IRC, Section R301.6, is deleted and replaced with the following: "R301.6
250 Utah Snow Loads. The snow loads specified in Table R301.2(5b) shall be used for the
251 jurisdictions identified in that table. Otherwise, for other locations in Utah, see Bean, B.,
252 Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and
253 Environmental Engineering Faculty Publications, Paper 3589, <http://utahsnowload.usu.edu/>, for
254 ground snow load values."

255 ~~[(18)]~~ (19) In IRC, Section R302.2, the following sentence is added at the end of the
256 paragraph: "When an access/maintenance agreement or easement is in place, plumbing,
257 mechanical ducting, schedule 40 steel gas pipe, and electric service conductors including
258 feeders, are permitted to penetrate the common wall at grade, above grade, or below grade."

259 ~~[(19)]~~ (20) In IRC, Section R302.3, a new exception 3 is added as follows: "3.
260 Accessory dwelling units separated by walls or floor assemblies protected by not less than
261 1/2-inch (12.7 mm) gypsum board or equivalent on each side of the wall or bottom of the floor
262 assembly are exempt from the requirements of this section."

263 ~~[(20)]~~ (21) In IRC, Section R302.5.1, the last sentence is deleted.

264 [~~(21)~~] (22) IRC, Section R302.13, is deleted.

265 [~~(22)~~] (23) In IRC, Section R303.4, the following exception is added: "Exception:
266 Dwelling units tested in accordance with Section N1102.4.1.2 (R402.4.1.2) which has an air
267 tightness of 3.0 ACH (50) or greater do not require mechanical ventilation."

268 (24) In IRC, Section R310.1, all words in the last sentence after "or to a yard or court",
269 are deleted, and Exception 3 of this Section is deleted.

270 [~~(23)~~] (25) In IRC, Section R310.7, in the exception, the words "or accessory dwelling
271 units" are added after the words "sleeping rooms".

272 [~~(24)~~] (26) IRC, Sections R311.7.45 through R311.7.5.3, are deleted and replaced with
273 the following:

274 "R311.7.45.1 Stair treads and risers. R311.7.5.1 Riser height. The maximum riser
275 height shall be 8 inches (203 mm). The riser shall be measured vertically between leading
276 edges of the adjacent treads. The greatest riser height within any flight of stairs shall not
277 exceed the smallest by more than 3/8 inch (9.5 mm).

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

287 R311.7.5.3 Nosing. The radius of curvature at the leading edge of the tread shall be no
288 greater than 9/16 inch (14.3 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1
289 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing
290 projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm)
291 between two stories, including the nosing at the level of floors and landings. Beveling of
292 nosing shall not exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped from the
293 underside of the leading edge of the tread above at an angle not more than 30 degrees (0.51 rad)
294 from the vertical. Open risers are permitted, provided that the opening between treads does not

295 permit the passage of a 4-inch diameter (102 mm) sphere.

296 Exceptions.

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

298 2. The opening between adjacent treads is not limited on stairs with a total rise of 30

299 inches (762 mm) or less."

300 [~~25~~] (27) IRC, Section R312.2, is deleted.

301 [~~26~~] (28) IRC, Sections R313.1 through R313.2.1, are deleted and replaced with the

302 following: "R313.1 Design and installation. When installed, automatic residential fire

303 sprinkler systems for townhouses or one- and two-family dwellings shall be designed and

304 installed in accordance with Section P2904 or NFPA 13D."

305 [~~27~~] (29) In IRC, Section R314.2.2, the words "or accessory dwelling units" are

306 added after the words "sleeping rooms".

307 [~~28~~] (30) In IRC, Section R315.2.2, the words "or accessory dwelling units" are

308 added after the words "sleeping rooms".

309 [~~29~~] (31) In IRC, Section 315.3, the following words are added to the first sentence

310 after the word "installed": "on each level of the dwelling unit and."

311 [~~30~~] (32) A new IRC, Section R328.12, is added as follows:

312 "R328.12 Signage. A sign located on the exterior of the dwelling shall be installed at a

313 location approved by the authority having jurisdiction which identifies the battery chemistry

314 included in the ESS. This sign shall be of sufficient durability to withstand the environment

315 involved and shall not be handwritten."

316 [~~31~~] (33) In IRC, Section 403.1.3.5.3, an exception is added as follows: "Exception:

317 Vertical steel in footings shall be permitted to be located while concrete is still plastic and

318 before it has set. Where vertical steel resists placement or the consolidation of concrete around

319 steel is impeded, the concrete shall be vibrated to ensure full contact between the vertical steel

320 and concrete."

321 [~~32~~] (34) In IRC, Section R403.1.6, a new Exception 3 is added as follows: "3.

322 When anchor bolt spacing does not exceed 32 inches (813 mm) apart, anchor bolts may be

323 placed with a minimum of two bolts per plate section located not less than 4 inches (102 mm)

324 from each end of each plate section at interior bearing walls, interior braced wall lines, and at

325 all exterior walls."

326 [(33)] (35) In IRC, Section R403.1.6.1, a new exception is added at the end of Item 2
327 and Item 3 as follows: "Exception: When anchor bolt spacing does not exceed 32 inches (816
328 mm) apart, anchor bolts may be placed with a minimum of two bolts per plate section located
329 not less than 4 inches (102 mm) from each end of each plate section at interior bearing walls,
330 interior braced wall lines, and at all exterior walls."

331 [(34)] (36) In IRC, Section R404.1, a new exception is added as follows: "Exception:
332 As an alternative to complying with Sections R404.1 through R404.1.5.3, concrete and
333 masonry foundation walls may be designed in accordance with IBC Sections 1807.1.5 and
334 1807.1.6 as amended in Section 1807.1.6.4 and Table 1807.1.6.4 under these rules."

335 [(35)] (37) In IRC, Section R405.1, a second exception is added as follows:
336 "Exception: When a geotechnical report has been provided for the property, a drainage system
337 is not required unless the drainage system is required as a condition of the geotechnical report.
338 The geotechnical report shall make a recommendation regarding a drainage system."

339 [(36)] (38) In IRC, Section R506.2.3, the words "10-mil (0.010 inch; 0.25 mm)" are
340 deleted and replaced with "6-mil (0.006 inch; 0.152 mm)" and the words "conforming to
341 ASTM E1745 Class A requirements" are deleted.

342 Section 5. Section **15A-3-203** is amended to read:

343 **15A-3-203. Amendments to Chapters 6 through 15 of IRC.**

344 (1) IRC, Section [609.4.1] R609.4.1, is deleted.

345 (2) In IRC, Section N1101.4 (R102.1.1), a new section N1101.4.1 (R102.1.1) is added
346 as follows: "N1101.4.1 National Green Building Standard. Buildings complying with ICC
347 700-2020 National Green Building Standard and achieving the Gold rating level for the energy
348 efficiency category shall be deemed to exceed the energy efficiency required by this code. The
349 building shall also meet the requirements identified in table N1105.2 and the building thermal
350 envelope efficiency is greater than or equal to levels of efficiency and solar heat gain
351 coefficients (SHGC) in Tables N1102.2.2 and N1102.1.3 of the 2009 IRC."

352 [(2)] (3) In IRC, Section N1101.5 (R103.2), all words after the words "herein
353 governed." are deleted and replaced with the following: "Construction documents include all
354 documentation [~~required to be submitted in order to issue a building permit.~~"] required for
355 building permits shall include only those items specified in Subsection 10-5-132(8) of the Utah
356 Municipal Code."

- 357 (4) In IRC, Section N1101.10.3 (R303.1.3) the following changes are made:
 358 (a) The following is added at the end of the first sentence "or EN
 359 14351-1:2006+A1:2010."
 360 (b) The word "accredited" is replaced with "approved" in the third sentence.
 361 (c) The following sentence is added after the third sentence: "A conversion factor of
 362 5.678 shall be used to convert from U values expressed in SI units: $(\)/53678=$."
 363 (d) After "NFRC 200" the following words are added: "or EN
 364 14351-1:2006+A1:2010," and in the sentence the word "accredited" is replaced with the word
 365 "approved."
 366 (e) The following new sentence shall be inserted immediately prior to the last sentence:
 367 "Total Energy Transmittance values may be substituted for SHGC, and Luminous
 368 Transmission values may be substituted for VT."
 369 ~~[(3)] (5) In IRC, Section N1101.12 (R303.3), all wording after the first sentence is~~
 370 ~~deleted. [(4) In IRC, Section N1101.13 (R401.2), add Exception as follows:]~~
 371 ~~["2. Exception: A project complies if the project demonstrates compliance, using the~~
 372 ~~software RESCheck 2012 Utah Energy Conservation Code, of:]~~
 373 ~~[(a) on or after January 1, 2017, and before January 1, 2019, "3 percent better than~~
 374 ~~code";]~~
 375 ~~[(b) on or after January 1, 2019, and before January 1, 2021, "4 percent better than~~
 376 ~~code", and]~~
 377 ~~[(c) after January 1, 2021, "5 percent better than code.""] (5) In IRC, Table N1102.2~~
 378 ~~(R402.1.2), in the column titled MASS WALL R-VALUE, a new footnote j is added as~~
 379 ~~follows:]~~
 380 ~~["j. Log walls complying with ICC400 and with a minimum average wall thickness of~~
 381 ~~5 inches or greater shall be permitted in Zones 5 through 8 when overall window glazing has a~~
 382 ~~.31 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE~~
 383 ~~(oil), and all other component requirements are met."]~~
 384 (6) In IRC, Section N1101.13 (R401.2), in the first sentence, the words "Section
 385 N1101.13.5 and" are deleted.
 386 (7) In IRC, Section N1101.13.5 (R401.2.5) is deleted.
 387 (8) In IRC, Section N1101.14 (R401.3) Number 7, the words "and the compliance path

388 used" are deleted.

389 (9) In IRC, Table N1102.1.2 (R402.1.2):

390 (a) in the column titled Fenestration U-Factor the following changes are made:

391 (i) in the row titled "Climate Zone 3" delete 0.30 and replace it with 0.32;

392 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.30 and replace it with
393 0.32; and

394 (iii) in the row titled "Climate Zone 6" delete 0.30 and replace it with 0.32;

395 (b) in the column titled "Glazed Fenestration SHGC", the following change is made: in
396 the row titled "Climate Zone 3" delete 0.25 and replace it with 0.35;

397 (c) in the column titled "Ceiling U-Factor" the following changes are made:

398 (i) in the row titled "Climate Zone 3" delete 0.026 and replace it with 0.033;

399 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.024 and replace it with
400 0.030; and

401 (iii) in the row titled "Climate Zone 6" delete 0.024 and replace it with 0.030;

402 (d) in the column titled "Wood Frame Wall U Factor", the following changes are made:

403 (i) in the row titled "Climate Zone 3" delete 0.060 and replace it with 0.065;

404 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.045 and replace it with
405 0.065; and

406 (iii) in the row titled "Climate Zone 6" delete 0.045 and replace it with 0.065;

407 (e) in the column titled "Basement wall U-Factor" the following changes are made:

408 (i) in the row titled "Climate Zone 5" and Marine 4" delete 0.050 and replace it with
409 0.075; and

410 (ii) in the row titled "Climate Zone 6" delete 0.50 and replace it with 0.065; and

411 (f) in the column titled "Crawl Space Wall U-Factor" the following changes are made:

412 (i) in the row titled Climate "Zone 5 and Marine 4" delete 0.055 and replace it with
413 0.078; and

414 (ii) in the row titled "Climate Zone 6" delete 0.55 and replace it with 0.065.

415 [~~(6)~~] (10) In IRC, Table N1102.1.3(R402.1.3), the following changes are made:

416 (a) in the column titled "Wood Frame Walls R-Value" a new footnote indicator "j" is
417 added and at the bottom of the footnotes the following footnote "j" is added: "j. In climate
418 zone 3B and 5B, an R-15, and in climate zone 6, an R-20 shall be acceptable where

419 air-impermeable insulation is installed in the cavity space, exterior continuous insulation, or
420 some combination thereof; and the tested house air leakage is a maximum of 2.0 ACH50"; and

421 (b) add a new footnote "k" as follows: "k. Log walls complying with ICC400 and with
422 a minimum average wall thickness of 5 inches or greater shall be permitted in Zones 5 through
423 8 when overall window glazing has 0.30 U -factor or lower, minimum heating equipment
424 efficiency is for gas 95 AFUE, or for oil, 84 AFUE, and all other components requirements are
425 met."

426 (11) In IRC, Table N1102.1.3 (R402.1.3) the following changes are made:

427 (a) in the column titled "Fenestration U-Factor" the following changes are made:

428 (i) in the row titled "Climate Zone 3" delete 0.30 and replace it with 0.32;

429 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.30 and replace it with
430 0.32; and

431 (iii) in the row titled "Climate Zone 6" delete 0.30 and replace it with 0.32;

432 (b) in the column titled "Glazed Fenestration SHGC" the following change is made: in
433 the row titled "Climate Zone 3" deleted 0.25 and replace it with 0.35;

434 (c) in the Column R-Value the following changes are made:

435 (i) in the row titled "Climate Zone 3" delete 49 and replace it with 32;

436 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 60 and replace it with 49;

437 and

438 (iii) in the row titled "Climate Zone 6" delete 60 and replace it with 49;

439 (d) in the Column titled "Wood Frame Wall R-Value" the following changes are made:

440 (i) in the row titled "Climate Zone 3" delete all values and replace with 20+ Oci or
441 13+5ci or 015ci;

442 (ii) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with
443 21+Oci or 15+5ci or 0+15ci; and

444 (iii) in the row titled "Climate Zone 6" delete all values and replace with 21+Oci or
445 15+5ci or 0+15ci;

446 (e) in the column titled "Basement Wall R Value" the following changes are made:

447 (i) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with
448 15+Oci or 0+11ci or 11+5ci; and

449 (ii) in the row titled "Climate Zone 6" delete all values and replace with 19+Oci or

450 0+13ci or 11+5ci;

451 (f) in the column titled "Slab R Value and Depth" the following changes are made:

452 (i) in the row titled "Climate Zone 3" delete 10ci. 2ft and replace it with NR; and

453 (ii) in the row titled "Climate Zone 5 & Marine 4" delete 4 ft and replace it with 2 ft;

454 and

455 (g) in the column titled "Crawl Space Wall R-Value" the following changes are made:

456 (i) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with

457 15+ Oci or 0 + 11ci or 11 +5ci; and

458 (ii) in the row titled "Climate Zone 6" delete all values and replace with 19 + Oci or 0
459 + 13ci or 0 + 11 + 5 ci.

460 (12) In IRC, a new subsection N1102.1.5.1 (R402.1.5.1) is added as follows:

461 "1102.1.5.1 (R402.1.5.1) RESCheck 2012 Utah Energy Conservation Code. Compliance with
462 section N1102.1.5 (R402.1.5) may be satisfied using the software RESCheck 2012 Utah
463 Energy Conservation Code, which shall satisfy the R-value and U-factor requirements of
464 N1102.1, N1102.2, and N1102.3, provided the following conditions are met:

465 (a) in "Climate Zone 5 and 6" the software result shall show 5% better than code; and

466 (b) in "Climate Zone 3", the software result shall show 5% better than code when
467 software inputs for window U-factor .65 and window SHGC=0.40, notwithstanding actual
468 windows installed shall conform to requirements of Tables N1102.1.2 (R402.1.2) and
469 N1102.1.3 (R402.1.3)."

470 (13) In IRC, Sections N1102.2.1 (R402.2.1), a new Section N1102.2.1.1 is added as
471 follows:

472 "N1102.2.1.1. Unvented attic and unvented enclosed rafter assemblies. Unvented attic
473 and unvented enclosed rafter assemblies conforming to Section R806.5 shall be provided with
474 an R-value of R-22 (maximum U-Factor of 0.045) in Climate Zone 3-B or an R-value of R-26
475 (maximum U-factor of 0.038) in Climate Zones 5-B and 6-B shall be permitted provided all the
476 following conditions are met:

477 1. The unvented attic assembly complies with the requirements of the International
478 Residential Code, R806.5.

479 2. The house shall attain a blower door test result < 2.5ACH 50.

480 3. The house shall require a whole house mechanical ventilation system that does not

481 rely solely on a negative pressure strategy (must be positive, balanced or hybrid).

482 4. Where insulation is installed below the roof deck and the exposed portion of roof
483 rafters are not already covered by the R-20 depth of the air-impermeable insulation, the
484 exposed portion of the roof rafters shall be wrapped (covered) by minimum R-3 unless directly
485 covered by drywall/finished ceiling. Roof rafters are not required to be covered by minimum
486 R-3 if a continuous insulation is installed above the roof deck.

487 5. Indoor heating, cooling and ventilation equipment (including ductwork) shall be
488 inside the building thermal envelope."

489 ~~[(7)]~~ (14) In IRC, Section N1102.2.9.1 (R402.2.9.1) the numeral (i) is added before the
490 words "cut at a 45 degree" and the following is added after the words "exterior wall": "or (ii)
491 lowered from top of slab 4" when a 4" thermal break material such as, but not limited to, felt or
492 asphalt impregnated fiber board, with a minimum thickness of 1/4" is installed at the upper 4"
493 of slab".

494 (15) In IRC, Section N1102.4.1 (R402.4.1), in the first sentence, the word "and" is
495 deleted and replaced with the word "or."

496 ~~[(8)]~~ (16) In IRC, Section N1102.4.1.1 (R402.4.1.1), the last sentence is deleted and
497 replaced with the following: "Where allowed by the code official, the builder may certify
498 compliance to components criteria for items which may not be inspected during regularly
499 scheduled inspections."

500 ~~[(9)]~~ (17) In IRC, Table N1102.4.1.1 (R402.4.1.1) in the column titled
501 "COMPONENT, the following changes are made:

502 (a) In the row "Rim Joists" the word "exterior" in the first sentence is deleted, and the
503 second sentence is deleted.

504 (b) In the row "Electrical/phone box on the exterior walls" the last sentence is deleted
505 and replaced with: "Alternatively, close cell foam, caulking or gaskets may be used, or air
506 sealed boxes may be installed."

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

508 (a) In the ~~[first]~~ fourth sentence~~[:]~~, the word "third" is deleted.

509 ~~[(i) "The building or dwelling unit" is deleted and replaced with "A single-family~~
510 ~~dwelling";]~~

511 ~~[(ii) after January 1, 2019, replace the word "five" with "3.5"; and]~~

512 [~~(iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate~~
513 ~~Zones 3 through 8" are deleted.]~~

514 (b) The following sentence is [~~inserted after the first sentence: "A multi-family~~
515 ~~dwelling and townhouse shall be tested and verified as having an air leakage rate of not~~
516 ~~exceeding five air changes per hour."~~ (c) ~~In the third sentence, the word "third" is deleted.~~ (d)
517 ~~The following sentence is inserted after the third sentence:]~~ added after the fourth sentence:
518 "The following parties shall be approved to conduct testing: Parties certified by BPI or
519 RESNET, or licensed contractors who have completed training provided by Blower Door Test
520 equipment manufacturers or other comparable training."

521 (c) In the first Exception the second sentence is deleted.

522 [~~(10) (19) [In] IRC, Section N1103.3.3 (R403.3.3), [the exception for duct air leakage~~
523 ~~testing is deleted and replaced with the following:]~~ is deleted.

524 (a) on or after January 1, 2017, and before January 1, 2019, with the following:
525 "Exception: The duct air leakage test is not required for systems with all air handlers and at
526 least 65% of all ducts (measured by length) located entirely within the building thermal
527 envelope.";

528 [~~(b) on or after January 1, 2019, and before January 1, 2021, with the following:~~
529 ~~"Exception: The duct air leakage test is not required for systems with all air handlers and at~~
530 ~~least 75% of all ducts (measured by length) located entirely within the building thermal~~
531 ~~envelope."; and]~~

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

535 [~~(11) In IRC, Section N1103.3.3 (R403.3.3), the following is added after the second~~
536 ~~exception: "The following parties shall be approved to conduct testing: Parties certified by BPI~~
537 ~~or RESNET, or licensed contractors who have completed either training provided by Duct Test~~
538 ~~equipment manufacturers or other comparable training."]~~

539 [~~(12) In IRC, Section N1103.3.4 (R403.3.4):]~~

540 [~~(a) in Subsection 1, the number 4 is changed to 8, the number 113.3 is changed to 170;~~
541 ~~the number 3 is changed to 6, the number 85 is changed to 114.6; and]~~

542 [~~(b) in Subsection 2:]~~

543 ~~[(i) on or after January 1, 2017, and before January 1, 2019, the number 4 is changed to~~
544 ~~8 and the number 113.3 is changed to 226.5;]~~

545 ~~[(ii) on or after January 1, 2019, and before January 1, 2021, the number 4 is changed~~
546 ~~to 7 and the number 113.3 is changed to 198.2; and]~~

547 ~~[(iii) on or after January 1, 2021, the number 4 is changed to 6 and the number 113.3 is~~
548 ~~changed to 169.9;]~~

549 (20) IRC Section N1103.3.3.1 (R403.3.3.1) is deleted.

550 ~~[(13)]~~ (21) In IRC, Section N1103.3.5 (R403.3.5), the [words "or plenums" are
551 deleted;] the following changes are made:

552 (a) A second Exception is added as follows: "A duct leakage test shall not be required
553 for any system designed such that no air handlers or ducts are located within unconditioned
554 attics."

555 (b) The following is added at the end of the section: "The following parties shall be
556 approved to conduct testing:

557 (i) Parties certified by BPT or RESNET;

558 (ii) Licensed contractors who have completed training provided by Duct Test
559 equipment manufacturers or other comparable training."

560 ~~[(14) In IRC, Section N1103.5.3 (R403.5.3), Subsection 5 is deleted and Subsections 6~~
561 ~~and 7 are renumbered;]~~

562 (22) In IRC, Section N1103.3.6 (R403.3.6) the following changes are made:

563 (a) In Subsection 1:

564 (i) the number 4.0 is changed to 6.0;

565 (ii) the number 113.3 is changed to 170;

566 (iii) the number 3.0 is changed to 5.0; and

567 (iv) the number 85 is changed to 141;

568 (b) in Subsection 2:

569 (i) the number 4.0 is changed to 5.0; and

570 (ii) the number 113.3 is changed to 141;

571 (c) Subsection 3 is deleted.

572 (23) In IRC, Section N1103.3.7 (R403.3.7) the words "or plenums" are deleted.

573 (24) In IRC, Section N1103.5.1.1 (R403.5.1.1) the words "Where installed" are added

574 at the beginning of the first sentence.

575 (25) In IRC, Section N1103.5.2 (R403.5.2) the following change is made:

576 (a) Subsections 5 and 6 are deleted and Subsection 7 is renumbered to 5.

577 ~~[(15)]~~ (26) IRC, Section ~~[N1103.6.1 (R403.6.1)]~~ N1103.6.2 (R403.6.2), is deleted and
 578 replaced with the following: ~~["N1103.6.1 (R403.6.1)"]~~ "N1103.6.2 (R403.6.2) Whole-house
 579 mechanical ventilation system fan efficacy. Fans used to provide whole-house mechanical
 580 ventilation shall meet the efficacy requirements of Table ~~[N1103.6.1 (R403.6.1)]~~ N1103.6.2
 581 (R403.6.2).

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

585 ~~[(16)]~~ (27) In IRC, Section ~~[N1103.6.1 (R403.6.1);]~~ N1103.6.2 (R403.6.2), the table is
 586 deleted and replaced with the following:

587 "TABLE ~~[N1103.6.1 (R403.6.1)]~~ N1103.6.2 (R403.6.2),"
 588 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"

595 ~~[(17) In IRC, Section N1106.4 (R406.4), the table is deleted and replaced with the~~
 596 ~~following:]~~

597 ~~["TABLE N1106.4 (R406.4)~~

598 ~~[MAXIMUM ENERGY RATING INDEX]~~

[CLIMATE ZONE]	[ENERGY RATING INDEX]
[3]	[65]
[5]	[69]

602	[6]	[68 ^u]
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603 (28) IRC, Section N1103.6.3 (R403.6.3) is deleted.

604 ~~[(18)]~~ (29) In IRC, Section N1103.7 (R403.7) the word "approved" is deleted in the
605 first sentence and the following is added after the word "methodologies "[;]: "complying with
606 N1103.7.1(R403.7.1)".

607 ~~[(19)]~~ (30) A new IRC, Section N1103.7.1(R403.7.1) is added as follows: "N1103.7.1
608 Qualifications. An individual performing load calculations shall be qualified by completing
609 HVAC training from one of the following:

- 610 1. HVAC load calculation education from ACCA;
- 611 2. A recognized educational institution;
- 612 3. HVAC equipment manufacturer's training; or
- 613 4. Other recognized industry certification."

614 ~~[(20) In IRC, Section M1307.2, the words "In Seismic Design Categories D0, D1, and~~
615 ~~D2, and in townhouses in Seismic Design Category C", are deleted, and in Subparagraph 1, the~~
616 ~~last sentence is deleted.]~~

617 ~~[(21)]~~ (31) In IRC, Section N1104.1 (R404.1), the word "All" is replaced with "Not
618 less than 90 percent of the lamps in".

619 (32) IRC, Section N1104.1.1 (R404.1.1) is deleted.

620 (33) IRC, Section N1104.2 (R404.2) is deleted.

621 (34) IRC, Section N1104.3 (R404.3) is deleted.

622 (35) In IRC, section N1105.2 (R405.2) the following changes are made:

623 (a) In Subsection 3, the words "approved by the code official" are deleted; and

624 (b) In Subsection 3, the following words are added at the end of the sentence: "when
625 applicable and readily available".

626 (36) In IRC, Section N1106.3 (R406.3) "Building thermal envelope" is deleted, and
627 replaced with "Building thermal envelope and on-site renewables. The proposed total building
628 thermal envelope UA, which is the sum of U-factor times assembly area, shall be less than or
629 equal to the building thermal envelope UA using the prescriptive U-factors from Table
630 N1102.1.2 multiplied by 1.15 in accordance with Equation 11-4. The area-weighted maximum
631 fenestration SHGC permitted in Climate Zones 0 through 3 shall be:0.30.UAProposed design

632 =1.15xUAPrescriptive reference design (Equation 11-4)."

633 (37) In IRC, Section N1106.3.1 (R406.3.1) is deleted.

634 (38) In IRC, Section N1106.3.2 (R403.3.2) is deleted.

635 (39) In IRC, Section N1106.4 (R406.4) the following changes are made:

636 (a) In the first sentence, the words "in accordance with Equation 11-5" are deleted and
637 replaced with: "permitted to be calculated using the minimum total air exchange rate for the
638 rated home (Qtot) and for the index adjustment factor in accordance with Equation 11.5.";

639 (b) In equation 11-5, the words "Ventilation rate, CFM" are deleted and replaced with:
640 "Qtot"; and

641 (c) In the last sentence the number "5" is deleted and replaced with "15".

642 (40) In IRC N1106.5, in the column titled "ENERGY RATING INDEX" of Table
643 R406.5, the following changes are made:

644 (a) In the row for "Climate Zone 3", "51" is deleted and replaced with "65";

645 (b) In the row for "Climate Zone 5", "55" is deleted and replaced with "69"; and

646 (c) In the row for "Climate Zone 6", "54" is deleted and replaced with "68".

647 (41) In IRC, Section N1108 (R408) is deleted.

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

650 [~~(22)~~] (43) A new IRC, Section M1401.3.1, is added as follows: "M1401.3.1

651 Qualifications. An individual performing load calculations shall be qualified by completing
652 HVAC training from one of the following:

653 1. HVAC load calculation education from ACCA;

654 2. A recognized educational institution;

655 3. HVAC equipment manufacturer's training; or

656 4. Other recognized industry certification."

657 [~~(23)~~] (44) In IRC, Section M1402.1, the following is added at the end of the second
658 sentence: "or UL/CSA 60335-2-40."

659 [~~(24)~~] (45) In IRC, Section M1403.1, the characters "/ANCE" are deleted.

660 [~~(25)~~] (46) IRC, Section M1411.9, is deleted.

661 [~~(26)~~] (47) In IRC, Section M1412.1, the characters "/ANCE" are deleted.

662 [~~(27)~~] (48) In IRC, Section M1413.1, the characters "/ANCE" are deleted.

663 Section 6. Section 15A-3-204 is amended to read:

664 **15A-3-204. Amendments to Chapters 16 through 25 of IRC.**

665 (1) In IRC, Section M1602.2, a new exception is added at the end of Item 8 as follows:

666 "Exception: The discharge of return air from an accessory dwelling unit into another dwelling
667 unit, or into an accessory dwelling unit from another dwelling unit, is not prohibited."

668 (2) A new IRC, Section G2401.2, is added as follows: "G2401.2 Meter Protection.
669 Fuel gas services shall be in an approved location and/or provided with structures designed to
670 protect the fuel gas meter and surrounding piping from physical damage, including falling,
671 moving, or migrating ice and snow. If an added structure is used, it must provide access for
672 service and comply with the IBC or the IRC."

673 [~~(3) IRC, Section P2503.2, is deleted and replaced with the following: "P2503.2
674 Testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure
675 detector fire protection, double check detector fire protections, and spill-resistant vacuum
676 breaker backflow preventer assemblies shall be tested at the time of installation, immediately
677 after repairs or relocation and at least annually. The Utah Cross-Connection Control
678 Commission has adopted the field test procedures published by the Manual of Cross
679 Connection Control, Tenth Edition. This manual is published by the University of Southern
680 California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges
681 shall comply with ASSE 1064."~~]

682 (3) In IRC, Section 2503.5.1, #2 Air Test is deleted and replaced with the following:

683 "Where water is not available at the construction site or where freezing conditions limit the use
684 of water on the construction site, plastic drainage and vent pipe may be permitted to be tested
685 with air. The following procedures shall be followed:

686 (a) Contractor shall recognize that plastic is extremely brittle at lower temperatures and
687 can explode, causing serious injury or death.

688 (b) Contractor assumes all liability for injury or death to persons or damage to property
689 or for claims for labor and/or material arising from any alleged failure of the system during
690 testing with air or compressed gasses.

691 (c) Proper personal protective equipment, including safety eyewear and protective
692 headgear, should be worn by all individuals in any area where an air or gas test is being
693 conducted.

694 (d) Contractor shall take all precautions necessary to limit the pressure within the
695 plastic piping.

696 (e) No drain and vent system shall be pressurized in excess of 6 psi as measured by
697 accurate gauges graduated to no more than three times the test pressure.

698 (f) The pressure gauge shall be monitored during the test period, which should not
699 exceed 15 minutes.

700 (g) At the conclusion of the test, the system shall be depressurized gradually, all
701 trapped air or gases should be vented, and test balls and plugs should be removed with
702 caution."

703 (4) In IRC, Section P2503.8, the word "devices" is deleted and replaced with the word
704 "assemblies."

705 (5) IRC, Section P2503.8.2, is deleted and replaced with the following: "P2503.2
706 Testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure
707 detector fire protection, double check detector fire protections, and spill-resistant vacuum
708 breaker backflow preventer assemblies shall be tested at the time of installation, immediately
709 after repairs or relocation and at least annually. The Utah Cross-Connection Control
710 Commission has adopted the field test procedures published by the Manual of Cross
711 Connection Control, Tenth Edition. This manual is published by the University of Southern
712 California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges
713 shall comply with ASSE 1064."

714 Section 7. Section **15A-3-205** is amended to read:

715 **15A-3-205. Amendments to Chapters 26 through 35 of IRC.**

716 (1) IRC, Section P2602.1, is deleted and replaced with the following: "P2602.1
717 General. The water-distribution system of any building or premises where plumbing fixtures
718 are installed shall be connected to a public water supply. Where a potable public water supply
719 is not available, individual sources of potable water supply shall be utilized provided that the
720 source has been developed in accordance with Utah Code Sections [73-3-1](#), [73-3-3](#), and
721 [73-3-25](#), as administered by the Department of Natural Resources, Division of Water Rights. In
722 addition, the quality of the water shall be approved by the local health department having
723 jurisdiction. The source shall supply sufficient quantity of water to comply with the
724 requirements of this chapter.

725 Every building in which plumbing fixtures are installed and all premises having
726 drainage piping shall be connected to a public sewer where the sewer is accessible and is
727 within 300 feet of the property line in accordance with Utah Code Section 10-8-38, or an
728 approved private sewage disposal system in accordance with Utah Administrative Code, Rule
729 R317-4, as administered by the Department of Environmental Quality, Division of Water
730 Quality.

731 Exception: Sanitary drainage piping and systems that convey only the discharge from
732 bathtubs, showers, lavatories, clothes washers, and laundry trays shall not be required to
733 connect to a public sewer or to a private sewage disposal system provided that the piping or
734 systems are connected to a system in accordance with Sections P2910 or P2911."

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

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

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

749 (5) In IRC, Section P2705, a new Item 9 is added as follows: "9. Lavatories. A lavatory
750 shall not be set closer than 12 inches from its center to any side wall or partition. A lavatory
751 shall be provided with a clearance of 24 inches in width and 21 inches in depth in front of the
752 lavatory to any side wall, partition, or obstruction." Remaining item numbers are renumbered
753 accordingly.

754 (6) In IRC, Section P2801.6.2, the following is added at the end of the section: "When
755 permitted by the code official, the pan drain may be directly connected to a soil stack, waste

756 stack, or branch drain. The pan drain shall be individually trapped and vented as required in
757 Section 907.1. The pan drain shall not be directly or indirectly connected to any vent. The trap
758 shall be provided with a trap primer conforming to ASSE 1018 or ASSE 1044, a barrier type
759 floor drain trap seal protection device meeting ASSE 1072, or a deep seal p-trap."

760 (7) A new IRC, Section P2801.6.3, is added as follows: "P2801.6.3 Pan designation. A
761 water heater pan shall be considered an emergency receptor designated to receive the discharge
762 of water from the water heater only and shall not receive the discharge from any other fixtures,
763 devises, or equipment."

764 (8) IRC, Section P2801.8, is deleted and replaced with the following: "P2801.8 Water
765 heater seismic bracing. As a minimum requirement, water heaters shall be anchored or strapped
766 to resist horizontal displacement caused by earthquake motion. Strapping shall be at points
767 within the upper one-third and lower one-third of the appliance's vertical dimensions.

768 (9) In IRC, Section P2804.6.1, a new number 15 is added as follows: "15. Be installed
769 in accordance with the manufacturer's installation instructions, not to exceed 180 degrees in
770 directional changes."

771 (10) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow
772 assembly testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced
773 pressure detector fire protection, double check detector fire protection, and spill-resistant
774 vacuum breaker backflow preventer assemblies shall be tested at the time of installation,
775 immediately after repairs or relocation and at least annually. The Utah Cross Connection
776 Control Commission has adopted the field test procedures published by the Manual of Cross
777 Connection Control, Tenth Edition. This manual is published by the University of Southern
778 California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges
779 shall comply with ASSE 1064.

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

781 "P2902.1.[2] 1 General Installation Criteria.

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

786 P2902.1.2 Specific Installation Criteria.

787 P2902.1.1.[2] 3 Reduced Pressure Principle Backflow Prevention Assembly.

788 The reduced pressure principle backflow prevention assembly shall be installed as
789 follows:

790 a. The assembly may not be installed in a pit or below grade where the relief port could
791 be submerged in water or where fumes could be present at the relief port discharge.

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

794 c. The assembly shall be installed in a horizontal position only, unless listed or
795 approved for vertical installation in accordance with Section 303.4 of the International
796 Plumbing Code as amended in Utah Code, Subsection 15A-3-303(1).

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

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

801 P2902.1.2.[2] 4 Double Check Valve Backflow Prevention Assembly.

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

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

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

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

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

812 P2902.1.2.[3] 5 Pressure Vacuum Break Assembly and Spill Resistant Pressure
813 Vacuum Breaker Assembly.

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

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

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

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

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

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

824 (12) In IRC, Table 2903.2, the following changes are made in the column titled
825 "MAXIMUM FLOW RATE OR QUANTITY":

826 (a) In the row titled "Lavatory faucet" the text is deleted and replaced with "1.5 gpm at
827 60 psi".

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

830 (13) In IRC, Section P2903.3, the words "public water main or an" are deleted and the
831 following sentence is added at the end: "A water pressure booster pump may not be connected
832 to a public water main unless allowed by Utah Administrative Code, Rule R309-540."

833 (14) In IRC, Section 2903.5, at the beginning of the second sentence, insert "If
834 installed,".

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

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

840 "P2910.5 Potable water connections.

841 A system that utilizes nonpotable water (i.e., pressurized irrigation) and installs a
842 connection to the potable water system for backup must install a Reduced Pressure Principle
843 Assembly (RP) directly downstream of the potable water connection (Stop and Waste) and
844 install a "dual source connection" directly downstream from the (RP) installed so that either the
845 potable water system or the nonpotable water is connected at any time to prevent a direct Cross
846 Connection and to protect the potable water from any potential hazard from the nonpotable
847 water system. See Utah Code Section [19-4-112](#). Note: RP must be tested within 10 days of
848 installation and annually whether the drinking water is used or not."

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

850 "P2910.9.5 Makeup water.

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

856 (18) In IRC, Section P2911.12.4, the following words are deleted: "and backwater
857 valves."

858 (19) In IRC, Section P2912.15.6, the following words are deleted: "and backwater
859 valves."

860 (20) In IRC, Section P3007.3.3.1, the words "stainless steel, cast iron, galvanized steel,
861 brass" are added after the word "PE."

862 (21) IRC, Section P3009, is deleted and replaced with the following:

863 "P3009 Graywater soil absorption systems: Graywater recycling systems utilized for
864 subsurface irrigation for single-family residences shall comply with the requirements of Utah
865 Administrative Code, R317-401, Graywater Systems. Graywater recycling systems utilized for
866 subsurface irrigation for other occupancies shall comply with Utah Administrative Code,
867 R317-3, Design Requirements for Wastewater Collection, Treatment, and Disposal Systems,
868 and Utah Administrative Code, R317-4, Onsite Wastewater Systems."

869 (22) In IRC, Section P3101.4, the following sentence is added at the end of the
870 paragraph: "Vents extending through the wall shall terminate not less than 12 inches from the
871 wall with an elbow pointing downward."

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

876 (24) In IRC, Section E3401.2 the second sentence is modified by adding the words
877 "townhouses", after the word "dwellings" and the word "their" before the word "accessory" and
878 the following is added after "NFPA 70", "such as, but not limited to the following equipment:

879 (a) fixed outdoor electric deicing and snow-melting equipment;

- 880 (b) motors;
881 (c) generators;
882 (d) transformers;
883 (e) phase converters;
884 (f) stationary standby batteries;
885 (g) elevators;
886 (h) dumbwaiters;
887 (i) platform lifts;
888 (j) stairway chairlifts;
889 (k) electric vehicle power transfer systems;
890 (l) electric welders;
891 (m) audio signal processing, amplification, and reproduction equipment;
892 (n) information technology equipment;
893 (o) solar photovoltaic (PV) systems;
894 (p) optional standby systems;
895 (q) interconnected electric power production sources;
896 (r) energy storage systems; and
897 (s) energy management systems.

898 Section 8. Section **15A-3-206** is amended to read:

899 **15A-3-206. Amendments to Chapters 36, 37, 39, and 44 and Appendix F of IRC.**

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

903 (2) IRC, Section E3606.5, is deleted.

904 (3) IRC, Section E3901.4.2, is deleted and replaced with the following:

905 "E3901.4.2 Island and Peninsular Countertops and Work Spaces. Receptacle outlets, if
906 installed to serve an island or peninsular countertop or work surface, shall be installed in
907 accordance with E3901.4.3. If a receptacle outlet is not provided to serve an island or
908 peninsular countertop or work surface, provisions shall be provided at the island or peninsula
909 for future addition of a receptacle outlet to serve the island or peninsular countertop or work
910 surface.

911 (4) IRC, Section E3901.4.3, is deleted and replaced with the following:

912 "E3901.4.3 Receptacle Outlet Location. Receptacle outlets shall be located in one or
913 more of the following:

914 1. On or above, but not more than 20 inches (508 mm) above a countertop or work
915 surface.

916 2. In a countertop using receptacle outlet assemblies listed for use in countertops.

917 3. In a work surface using receptacle outlet assemblies listed for use in work surface or
918 listed for use in countertops.

919 Receptacle outlets rendered not readily accessible by appliances fastened in place,
920 appliance garages, sinks, or range tops as covered in the exception to Section E3901.4.1 or
921 appliances occupying assigned spaces shall not be considered as these required outlets.

922 4. Under the countertop not more than 14 inches from the bottom leading edge of the
923 countertop."

924 (5) In IRC, Section 3902.1, after the word "125-volt" add "single phase 15 and 20
925 ampere" and strike the words "through 250 volt."

926 (6) In IRC, Section 3902.2, after the word "125-volt" add "single phase 15 and 20
927 ampere" and strike the words "through 250 volt."

928 (7) In IRC, Section 3902.3, after the word "125-volt" add "single phase 15 and 20
929 ampere" and strike the words "through 250 volt."

930 (8) In IRC, Section 3902.4, after the word "125-volt" add "single phase 15 and 20
931 ampere" and strike the words "through 250 volt."

932 (9) In IRC, Section 3902.5, after the word "125-volt" add the words "single phase 15
933 and 20 ampere in unfinished portions of the basement shall have ground-fault
934 circuit-interrupter protection for personnel" and delete the rest of the section.

935 (10) In IRC, Section 3902.6, after the word "125-volt" add "single phase 15 and 20
936 ampere" and strike the words "through 250 volt."

937 (11) In IRC, Section 3902.7, after the word "125-volt" add "single phase 15 and 20
938 ampere" and strike the words "through 250 volt."

939 (12) In IRC, Section 3902.8, after the word "125-volt" add "single phase 15 and 20
940 ampere" and strike the words "through 250 volt."

941 (13) In IRC, Section 3902.9, after the word "125-volt" add "single phase 15 and 20

942 ampere" and strike the words "through 250 volt."

943 (14) IRC, Section 3902.10, is deleted.

944 (15) In IRC, Section 3902.12, after the word "125-volt" add "single phase 15 and 20
945 ampere" and strike the words "through 250 volt."

946 (16) In IRC, Section 3902.13, after the word "125-volt" add "single phase 15 and 20
947 ampere" and strike the words "through 250 volt."

948 (17) IRC, Section E3902.16 is deleted.

949 (18) IRC Section E3902.17 is deleted.

950 (19) IRC, Section E3902.18 is deleted.

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

952 (21) In IRC, Chapter 44, the standard for ASHRAE is amended by changing "34-2013"
953 to "34-2019."

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

955 (a) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA
956 60335-2-40-2019"; and

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

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

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

963 (b) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA
964 60335-2-40-2019"; and

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

969 (24) In IRC, Chapter 44, the standard for ANSI/RESNET/ICC 201-2019 section 4.4.4
970 is added follows: "4.4.4. Air Source Heat Pumps and Air Conditioners. For Heat Pumps and
971 Air Conditioners with the more recent Manufacturers Equipment Performance Ratings (HSPF2
972 or SEER2) available, and HSPF and SEER are not available, these ratings shall be converted to

973 HSPF and SEER values by dividing HSPF2 or SEER2 by the conversion factors in Table
 974 4.4.4.1(1). If the type of equipment is not determined, the conversion shall default to the
 975 Ducted Split System factors. All calculations, including Equation 4.1-1a shall use HSPF or
 976 SEER values as made available by the Manufacturer or converted as specified in this section.

977 (a) (i) (A) Table 4.4.4.1(1) SEER2 and HSPF2 Conversion Factors³.

Equipment Type	SEER2/SEER	EER/EER4	HSPF/HSPF
Ductless Systems	1.00	1.00	0.90
Ducted Split System	0.95	0.95	0.85
Ducted Package System	0.95	0.95	0.84
Small Duct High Velocity System	1.00	not applicable	0.85
Ducted Space-Constrained Air Conditioner	0.97	not applicable	not applicable
Ducted Space-Constrained Heat Pump		not applicable	0.85

985 (25) 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"

988 [~~25~~] (26) In IRC, Chapter 44, is amended by adding the following reference standard:
 989 "UL 9540-20: Energy Storage Systems and Equipment; R328.1, R328.2, and R328.6."

990 [~~26~~] (27) (a) When passive radon controls or portions thereof are voluntarily
 991 installed, the voluntary installation shall comply with Appendix F of the IRC.

992 (b) An additional inspection of a voluntary installation described in Subsection
993 [~~(22)(a)~~] (27)(a) is not required.

994 Section 9. Section **15A-3-401** is amended to read:

995 **15A-3-401. General provisions.**

996 (1) The amendments in this part are adopted as amendments to the IMC to be
997 applicable statewide.

998 (2) In IMC, Section 505.4, a new subsection 505.4.1 is added as follows: "505.4.1
999 Makeup Air. Makeup air is not required in residential dwelling units where gas, liquid, or solid
1000 fuel-burning appliances located within a units air barrier are all direct-vent or use a mechanical
1001 draft venting system."

1002 (3) In IMC, Section 1004.2, the first sentence is deleted and replaced with the
1003 following: " In accordance with Title 34A, Chapter 7, Safety, and requirements made by rule by
1004 the Labor Commission, boilers and pressure vessels in Utah are regulated by the Utah Labor
1005 Commission, Division of Boiler, Elevator and Coal Mine Safety, except those located in
1006 private residences or in apartment houses of less than five family units. Boilers shall be
1007 installed in accordance with their listing and labeling, with minimum clearances as prescribed
1008 by the manufacturer's installation instructions and the state boiler code, whichever is greater."

1009 [~~(3)~~] (4) In IMC, Section 1004.3.1, the word "unlisted" is inserted before the word
1010 "boilers".

1011 [~~(4)~~] (5) In IMC, Section 1209.3, the following words are added at the end of the
1012 section: "or other methods approved for the application."

1013 Section 10. Section **15A-3-701** is amended to read:

1014 **15A-3-701. General provisions.**

1015 The following is adopted as an amendment to the IECC to be applicable statewide:

1016 (1) IECC, Section C405.11, is deleted and replaced with the following: "C405.11
1017 Automatic receptacle control. Automatic receptacle control to be optional and decided by
1018 property owner."

1019 (2) In IECC, Section R102.1.1, a new section R102.1.1 is added as follows: "R102.1.1
1020 National Green Building Standard complying with ICC 700-2020 National Green Building
1021 Standard and achieving the Gold rating level for the energy efficiency category shall be deemed
1022 to exceed the energy efficiency required by this code. The building shall also meet the

1023 requirements identified in table N1105.2 and the building thermal envelope efficiency is
 1024 greater than or equal to levels of efficiency and solar heat gain coefficients (SHGC) in Tables
 1025 N1102.2.2 and N1102.1.3 of the 2009 IRC."

1026 ~~[(2)]~~ (3) In IECC, Section R103.2, all words after the words "herein governed." are
 1027 deleted and replaced with the following: "Construction documents include all documentation
 1028 required ~~[to be submitted in order to issue a building permit.]~~ for building permits shall
 1029 include only those items specified in 10-5-132(8) of the Utah Municipal Code."

1030 ~~[(3)]~~ (4) In IECC, Section R303.1.3 the following changes are made:

1031 (a) The following is added at the end of the first sentence "or EN
 1032 14351-1:2006+A1:2010."

1033 (b) The word "accredited" is replaced with "approved" in the third sentence.

1034 (c) The following sentence is added after the third sentence: "A conversion factor of
 1035 5.678 shall be used to convert from U values expressed in SI units: $()/53678=.$ "

1036 (d) After "NFRC 200" the following words are added: "or EN
 1037 14351-1:2006+A1:2010", and in the sentence the word "accredited" is replaced with the word
 1038 "approved".

1039 (e) The following new sentence shall be inserted immediately prior to the last sentence:
 1040 "Total Energy Transmittance values may be substituted for SHGC, and Luminous
 1041 Transmission values may be substituted for VT."

1042 (5) In IECC, Section R303.3, all wording after the first sentence is deleted.

1043 ~~[(4)]~~ (6) In IECC, Section R401.2, ~~[a new number 4 is added as follows:]~~ in the first
 1044 sentence, the words "Section R401.13.5 and" are deleted.

1045 ~~["4. Compliance may be shown by demonstrating a result, using the software~~
 1046 ~~RESCheck 2012 Utah Energy Conservation Code, of:]~~

1047 ~~[(a) on or after January 1, 2017, and before January 1, 2019, "3 percent better than~~
 1048 ~~code";]~~

1049 ~~[(b) on or after January 1, 2019, and before January 1, 2021, "4 percent better than~~
 1050 ~~code"; and]~~

1051 ~~[(c) after January 1, 2021, "5 percent better than code"."]~~

1052 ~~[(5) In IECC, Table R402.2, in the column entitled MASS WALL R-VALUE, a new~~
 1053 ~~footnote j is added as follows:]~~

1054 ~~["j. Log walls complying with ICC400 and with a minimum average wall thickness of 5~~
1055 ~~inches or greater shall be permitted in Zones 5 through 8 when overall window glazing has a~~
1056 ~~.31 U-factor or lower, minimum heating equipment efficiency is, for gas, 90 AFUE, or, for oil,~~
1057 ~~84 AFUE, and all other component requirements are met."]~~

1058 (7) In IECC, Section R401.2.5 is deleted.

1059 (8) In IECC, Section R401.3 Number 7, the words "and the compliance path used" are
1060 deleted.

1061 (9) In IECC Table R402.1.2, the following changes are made:

1062 (a) in the column titled "Fenestration U-Factor" the following changes are made:

1063 (i) in the row titled "Climate Zone 3" delete 0.30 and replace it with 0.32;

1064 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.30 and replace it with
1065 0.32; and

1066 (iii) in the row titled "Climate Zone 6" delete 0.30 and replace it with 0.32;

1067 (b) in the column titled "Glazed Fenestration SHGC", the following change is made: in
1068 the row titled "Climate Zone 3" delete 0.25 and replace it with 0.35;

1069 (c) in the column titled "Climate U-Factor" the following changes are made:

1070 (i) in the row titled "Climate Zone 3" delete 0.026 and replace it with 0.033;

1071 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.024 and replace it with
1072 0.030; and

1073 (iii) in the row titled "Climate Zone 6" delete 0.024 and replace it with 0.030;

1074 (d) in the column titled "Wood Frame Wall U Factor", the following changes are made:

1075 (i) in the row titled "Climate Zone 3" delete 0.060 and replace it with 0.065;

1076 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.045 and replace it with
1077 0.065; and

1078 (iii) in the row titled "Climate Zone 6" delete 0.045 and replace it with 0.065;

1079 (e) in the column titled "Basement wall U-Factor" the following changes are made:

1080 (i) in the row titled "Climate Zone 5 and Marine 4" delete 0.050 and replace it with
1081 0.075; and

1082 (ii) in the row titled "Climate Zone 6" delete 0.50 and replace it with 0.065; and

1083 (f) in the column titled "Crawl Space Wall U-Factor" the following changes are made:

1084 (i) in the row titled "Climate Zone 5 and Marine 4" delete 0.055 and replace it with

- 1085 0.078; and
- 1086 (ii) in the row titled Climate Zone 6 delete 0.55 and replace it with 0.065.
- 1087 (10) In IECC, Table R402.1.3 the following changes are made:
- 1088 (a) in the column titled "Fenestration U-Factor" the following changes are made:
- 1089 (i) in the row titled "Climate Zone 3" delete 0.30 and replace it with 0.32;
- 1090 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.30 and replace it with
- 1091 0.32; and
- 1092 (iii) in the row titled "Climate Zone 6" delete 0.30 and replace it with 0.32;
- 1093 (b) in the column titled "Glazed Fenestration" SHGC the following change is made: in
- 1094 the row titled Climate Zone 3" deleted 0.25 and replace it with 0.35;
- 1095 (c) in the Column R-Value the following changes are made:
- 1096 (i) in the row titled "Climate Zone 3" delete 49 and replace it with 38;
- 1097 (ii) in the row titled "Climate Zone 5 and Marine 4" delete 60 and replace it with 49;
- 1098 and
- 1099 (iii) in the row titled "Climate Zone 6" delete 60 and replace it with 49;
- 1100 (d) in the Column titled "Wood Frame Wall R-Value" the following changes are made:
- 1101 (i) in the row titled "Climate Zone 3" delete all values and replace with "20+ Oci or
- 1102 13+5ci or 0+15ci";
- 1103 (ii) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with
- 1104 21+Oci or 15+5ci or 0+15ci"; and
- 1105 (iii) in the row titled Climate Zone 6 delete all values and replace with "21+Oci or
- 1106 "15+5ci or 0+15ci";
- 1107 (e) in the column titled "Basement Wall R-Value" the following changes are made:
- 1108 (i) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with
- 1109 "15+Oci or 0+11ci or 11+5ci"; and
- 1110 (ii) in the row titled Climate Zone 6 delete all values and replace with "19+Oci or
- 1111 0+13ci or 11+5ci";
- 1112 (f) in the column titled "Slab R-Value and Depth" the following changes are made:
- 1113 (i) in the row titled "Climate Zone 3" delete "10ci. 2ft" and replace it with "NR"; and
- 1114 (ii) in the row titled "Climate Zone 5 & Marine 4" delete "4 ft" and replace it with "2
- 1115 ft";

1116 (g) in the column titled "Crawl Space Wall R-Value" the following changes are made:

1117 (i) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with

1118 "15+ Oci or 0 + 11ci or 11 +5ci"; and

1119 (ii) in the row titled Climate Zone 6 delete all values and replace with "19 + Oci or 0 +

1120 13ci or 0 + 11 + 5 ci"; and

1121 (h) in IECC, Table R402.2, in the column titled "MASS WALL R-VALUE", a new

1122 footnote "j" is added as follows: "j Log walls complying with ICC400 and with a minimum

1123 average wall thickness of 5 inches or greater shall be permitted in "Zones 5 through 8" when

1124 overall window glazing has a .31 U-factor or lower, minimum heating equipment efficiency is

1125 90 AFUE (gas) or 84 AFUE (oil), and all other component requirements are met."

1126 [(6)] (11) In IECC, a new subsection R402.1.5.1 is added as follows: "R402.1.5.1

1127 RESCheck 2012 Utah Energy Conservation Code. Compliance with section N1102.1.5

1128 (R402.1.5) may be satisfied using the software RESCheck 2012 Utah Energy Conservation

1129 Code, which shall satisfy the R-value and U-factor requirements of N1102.1, N1102.2, and

1130 N1102.3, provided the following conditions are met:

1131 (a) In Climate Zone 5 and 6 the software result shall show 5% better than code; and

1132 (b) In Climate Zone 3, the software result shall show 5% better than code when

1133 software inputs for window U-factor = 0.65 and window SHGC = 0.40, notwithstanding actual

1134 windows installed shall conform to requirements of Tables N1102.1.2 (R402.1.2) and

1135 N1102.1.3 (R402.1.3)."

1136 (12) In IECC, Section R402.2.1, a new section is added as follows: "R402.2.1.1.

1137 Unvented attic and unvented enclosed rafter assemblies. Unvented attic and unvented enclosed

1138 rafter assemblies conforming to Section R806.5 shall be provided with an R-value of R-22

1139 (maximum U-Factor of 0.045) in Climate Zone 3-B or an R-value of R-26 (maximum U-factor

1140 of 0.038) in Climate Zones 5-B and 6-B shall be permitted provided all the following

1141 conditions are met:

1142 1. The unvented attic assembly complies with the requirements of the International

1143 Residential Code, Section R806.5.

1144 2. The house shall attain a blower door test result < 2.5ACH 50.

1145 3. The house shall require a whole house mechanical ventilation system that does not

1146 rely solely on a negative pressure strategy (must be positive, balanced or hybrid).

1147 4. Where insulation is installed below the roof deck and the exposed portion of roof
1148 rafters are not already covered by the R-20 depth of the air-impermeable insulation, the
1149 exposed portion of the roof rafters shall be wrapped (covered) by minimum R-3 unless directly
1150 covered by drywall/finished ceiling. Roof rafters are not required to be covered by minimum
1151 R-3 if a continuous insulation is installed above the roof deck."

1152 5. Indoor heating, cooling and ventilation equipment (including ductwork) shall be
1153 inside the building thermal envelope.

1154 ~~[(7)]~~ (13) A new IECC, Section R402.2.1.3 is added as follows: "R402.2.1.3 Walls
1155 with Air-Impermeable Insulation. Where IECC Table R402.1.2 requires R-20 for wood framed
1156 walls in climate zones 3-B and 5-B or R-20+5CI for climate zone 6-B, an air-impermeable
1157 insulation installed in the wall cavity with R-value of R-15 for climate zones 3-B and 5-B or
1158 R-20 for climate zone 6-B shall be deemed equivalent to the provisions in IECC Table
1159 R402.1.2, provided the home attains a blower door test < 2.5ACH."

1160 (14) In IECC, Section R402.2.9.1 the numeral "(i)" is added before the words "cut at a
1161 45 degree" and the following is added after the words "exterior wall:": "or (ii) lowered from
1162 top of slab 4" when a 4" thermal break material such as, but not limited to, felt or asphalt
1163 impregnated fiber board, with a minimum thickness of 1/4" is installed at the upper 4" of slab."

1164 (15) In IECC, Section R402.4.1, in the first sentence, the word "and" is deleted and
1165 replaced with the word "or".

1166 ~~[(8)]~~ (16) In IECC, Section R402.4.1.1, the ~~[last sentence is]~~ second and the last
1167 sentences are deleted and replaced with the following: "Where ~~[allowed]~~ required by the code
1168 official, the builder ~~[may]~~ shall certify compliance ~~[to components criteria for items which may~~
1169 not be inspected during regularly scheduled inspections] with criteria indicated in Table
1170 R1102.4.1 for items which are not readily visible during regularly scheduled inspections."

1171 ~~[(9)]~~ (17) In IECC, Table R402.4.1.1 in the column titled "COMPONENT", the
1172 following changes are made:

1173 (a) In the row "Rim Joists" the word "exterior" in the first sentence is deleted, and the
1174 second sentence is deleted.

1175 (b) In the row "Electrical/phone box on the exterior walls" the last sentence is deleted
1176 and replaced with: "Alternatively, close cell foam, caulking or gaskets may be used, or air
1177 sealed boxes may be installed."

1178 (18) In IECC, Section R402.4.1.2, the following changes are made:

1179 (a) In the [~~first~~] fourth sentence[~~;~~], the word "third" is deleted.

1180 [~~(i) "The building or dwelling unit" is deleted and replaced with "A single-family~~
1181 ~~dwelling";]~~

1182 [~~(ii) after January 1, 2019, replace the word "five" with "3.5"; and]~~

1183 [~~(iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate~~
1184 ~~Zones 3 through 8" are deleted.]~~

1185 (b) The following sentence is [~~inserted after the first sentence: "A multi-family~~
1186 ~~dwelling and townhouse shall be tested and verified as having an air leakage rate of not~~
1187 ~~exceeding five air changes per hour." (c) In the third sentence, the word "third" is deleted. (d)~~
1188 ~~The following sentence is inserted after the third sentence:]~~ added after the fourth sentence:
1189 The following parties shall be approved to conduct testing: Parties certified by BPI or
1190 RESNET, or licensed contractors who have completed training provided by Blower Door Test
1191 equipment manufacturers or other comparable training."

1192 (c) In the first Exception the second sentence is deleted.

1193 [~~(10) In IECC, Section R403.3.3, the exception for duct air leakage testing is deleted~~
1194 ~~and replaced with the following:]~~

1195 [~~(a) on or after January 1, 2017, and before January 1, 2019, with the following:~~
1196 ~~"Exception: The total leakage test is not required for systems with all air handlers and at least~~
1197 ~~65% of all ducts (measured by length) located entirely within the building thermal envelope.";]~~

1198 [~~(b) on or after January 1, 2019, and before January 1, 2021, with the following:~~
1199 ~~"Exception: The duct air leakage test is not required for systems with all air handlers and at~~
1200 ~~least 75% of all ducts (measured by length) located entirely within the building thermal~~
1201 ~~envelope."; and]~~

1202 [~~(c) on or after January 1, 2021, with the following: "Exception: The duct air leakage~~
1203 ~~test is not required for systems with all air handlers and at least 80% of all ducts (measured by~~
1204 ~~length) located entirely within the building thermal envelope."]~~

1205 [~~(11) In IECC, Section R403.3.3, the following is added after the exception:]~~

1206 [~~"The following parties shall be approved to conduct testing:]~~

1207 [~~1. Parties certified by BPI or RESNET.]~~

1208 [~~2. Licensed contractors who have completed training provided by Duct Test equipment~~

1209 manufacturers or other comparable training."]

1210 [~~(12) In IECC, Section R403.3.4:~~]

1211 [~~(a) in Subsection 1, the number 4 is changed to 8, the number 113.3 is changed to 170;~~
1212 ~~the number 3 is changed to 6, and the number 85 is changed to 114.6; and]~~

1213 [~~(b) in Subsection 2:~~]

1214 [~~(i) on or after January 1, 2017, and before January 1, 2019, the number 4 is changed to~~
1215 ~~8 and the number 113.3 is changed to 226.5;]~~

1216 [~~(ii) on or after January 1, 2019, and before January 1, 2021, the number 4 is changed~~
1217 ~~to 7 and the number 113.3 is changed to 198.2; and]~~

1218 [~~(iii) on or after January 1, 2021, the number 4 is changed to 6 and the number 113.3 is~~
1219 ~~changed to 169.9;]~~

1220 (19) In IECC, Section R402.4.1.3 the following changes are made:

1221 (a) in the first sentence, the words 5.0 air changes per hour in Climate Zones 0, 1 and 2,
1222 and 3.0 are deleted and replaced with 4.0., and the words in Climate Zone 3 through 8 are
1223 deleted;

1224 (b) in the first sentence of the Exception, 0.28 is replaced with 5.0 air changes per hour
1225 or 0.30; and

1226 (c) in Number 2 the words of "conditioned floor area" are inserted before the words "or
1227 smaller."

1228 (20) IECC, Section R402.6 is deleted.

1229 (21) In IECC, Section R403.3.1 is deleted and replaced with the following: "Ducts
1230 located outside conditioned space. Supply and return ducts in attics shall be insulated to a
1231 minimum of R-8 where 3 inches (76.2 mm) in diameter and greater and R-6 where less than 3
1232 inches (76.2 mm) in diameter. Supply and return ducts in other portions of the building shall be
1233 insulated to a minimum of R-6 where 3 inches (76.2 mm) in diameter or greater and R-4.2
1234 where less than 3 inches (76.2 mm) in diameter. Exception: Ducts or portions thereof located
1235 completely inside the building thermal envelope."

1236 (22) In IECC, Section R403.3.3, is deleted.

1237 (23) In IECC, Section R403.3.3.1 is deleted.

1238 [~~(13)~~] (24) In IECC, Section R403.3.5, the [words "or plenums" are deleted.] following
1239 changes are made:

1240 (a) A second Exception is added as follows: "A duct leakage test shall not be required
1241 for any system designed such that no air handlers or ducts are located within unconditioned
1242 attics."

1243 (b) The following is added at the end of the section: "The following parties shall be
1244 approved to conduct testing:

1245 (i) Parties certified by BPT or RESNET

1246 (ii) Licensed contractors who have completed training provided by Duct Test
1247 equipment manufacturers or other comparable training."

1248 ~~[(14) In IECC, Section R403.5.3, Subsection 5 is deleted and Subsections 6 and 7 are~~
1249 ~~renumbered.]~~

1250 (25) In IECC, Section N1103.3.6 (R403.3.6) the following changes are made:

1251 (a) in Subsection 1:

1252 (i) the number 4.0 is changed to 6.0;

1253 (ii) the number 113.3 is changed to 170;

1254 (iii) the number 3.0 is changed to 5.0; and

1255 (iv) the number 85 is changed to 141;

1256 (b) in Subsection 2:

1257 (i) the number 4.0 is changed to 5.0; and

1258 (ii) the number 113.3 is changed to 141; and

1259 (c) Subsection 3 is deleted.

1260 (26) In IECC, Section N1103.3.7 (R403.3.7) the words "or plenums" are deleted.

1261 (27) In IECC, Section N1103.5.1.1 (R403.5.1.1) the words "Where installed" are added
1262 at the beginning of the first sentence.

1263 ~~[(15)]~~ (28) IECC, Section ~~[R403.6.1]~~ R403.6.2, is deleted and replaced with the
1264 following: ~~["R403.6.1]~~ "R403.6.2 Whole-house mechanical ventilation system fan efficacy.
1265 Fans used to provide whole-house mechanical ventilation shall meet the efficacy requirements
1266 of Table ~~[R403.6.1]~~ R403.6.2."

1267 "Exception: Where an air handler that is integral to tested and listed HVAC equipment
1268 is used to provide whole-house mechanical ventilation, the air handler shall be powered by an
1269 electronically commutated motor."

1270 ~~[(16)]~~ (29) In IECC, Section ~~[R403.6.1]~~ R403.6.2, the table is deleted and replaced

1271 with the following:

1272 "TABLE [~~R403.6.1~~] R403.6.2"

1273 "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"

1280 [~~(17) In IECC, Section R406.5, the table is deleted and replaced with the following:~~]

1281 [~~"TABLE R406.5]~~

1282 [~~MAXIMUM ENERGY RATING INDEX]~~

[CLIMATE ZONE]	[ENERGY RATING INDEX]
[3]	[65]
[5]	[69]
[6]	[68"]

1287 [~~(18)~~] (30) IECC, Section R403.6.3 is deleted

1288 (31) In IECC, Section R403.7 the word "approved" is deleted in the first sentence and
 1289 the following is added after the word "methodologies": "complying with R403.7.1."

1290 (32) A new IECC, Section R403.7.1, is added as follows: "R403.7.1 Qualifications. An
 1291 individual performing load calculations shall be qualified by completing HVAC training from
 1292 one of the following:

- 1293 1. HVAC load calculation education from ACCA;
- 1294 2. A recognized educational institution;
- 1295 3. HVAC equipment manufacturer's training; or
- 1296 4. Other recognized industry certification."

1297 (33) In IECC, Section R404.1, the word "All" is replaced with "Not less than 90
 1298 percent of the lamps in."

- 1299 (34) IECC, Section R404.1.1 is deleted.
- 1300 (35) IECC, Section R404.2 is deleted.
- 1301 (36) IECC, Section R404.3 is deleted.
- 1302 (37) In IECC, Section R405.2 the following changes are made:
- 1303 (a) in Subsection 3 the words "approved by the code official" are deleted; and
- 1304 (b) in Subsection 3 the following words are added at the end of the sentence: "when
- 1305 applicable and readily available."
- 1306 (38) in IECC, Section R406.3 "Building thermal envelope" is deleted, and replaced
- 1307 with the following: "Building thermal envelope and on-site renewables. The proposed total
- 1308 building thermal envelope UA, which is the sum of U-factor times assembly area, shall be less
- 1309 than or equal to the building thermal envelope UA using the prescriptive U-factors From Table
- 1310 N1102.1.2 multiplied by 1.15 in accordance with Equation 11-4. The area-weighted maximum
- 1311 fenestration SHGC permitted in Climate Zones 0 through 3 shall be 0.30. $U_{\text{Proposed design}} =$
- 1312 $1.15 \times U_{\text{Prescriptive reference design}}$ (Equation 11-4) "
- 1313 (39) in IECC, Section R406.3.1 is deleted.
- 1314 (40) in IECC, Section R406.3.2 is deleted.
- 1315 (41) in IECC, Section R406.4 the following changes are made:
- 1316 (a) in the first sentence, the words "in accordance with Equation 11-5" are deleted and
- 1317 replaced with: "permitted to be calculated using the minimum total air exchange Rate for the
- 1318 rated home (Q_{tot}) and for the index adjustment factor in accordance with Equation 11.5.";
- 1319 (b) in equation 11-5, the words "Ventilation rate, CFM" are deleted and replaced with:
- 1320 " Q_{tot} "; and
- 1321 (c) in the last sentence the number "5" is deleted and replaced with "15".
- 1322 (42) In IECC, Section R406.5 in the column titled ENERGY RATING INDEX of
- 1323 Table R406.5, the following changes are made:
- 1324 (a) in the row for Climate Zone 3, "51" is deleted and replaced with "65";
- 1325 (b) in the row for Climate Zone 5, "55" is deleted and replaced with "69"; and
- 1326 (c) in the row for Climate Zone 6 "54" is deleted and replaced with "68".
- 1327 (43) In IECC, Section R408 is deleted.
- 1328 (44) In IECC, Chapter 6, the standard for ANSI/RESNET/ICC 201-2019 section 4.4.4
- 1329 is added as follows: "4.4.4. Air Source Heat Pumps and Air Conditioners. For Heat Pumps and

1330 Air Conditioners with the more recent Manufacturers Equipment Performance Ratings (HSPF2
 1331 or SEER2) available, and HSPF and SEER are not available, these ratings shall be converted to
 1332 HSPF and SEER values by dividing HSPF2 or SEER2 by the conversion factors in Table
 1333 4.4.4.1(1). If the type of equipment is not determined, the conversion shall default to the
 1334 Ducted Split System factors. All calculations, including Equation 4.1-1a shall use HSPF or
 1335 SEER values as made available by the Manufacturer or converted as specified in this section.
 1336 Table 4.4.4.1(1) SEER2 and HSPF2 Conversion"

<u>Equipment Type</u>	<u>SEER2/SEER</u>	<u>EER2/EER4</u>	<u>HSPF2/HSPF</u>
<u>Ductless Systems</u>	<u>1.00</u>	<u>1.00</u>	<u>0.90</u>
<u>Ducted Split System</u>	<u>0.95</u>	<u>0.95</u>	<u>0.85</u>
<u>Ducted Packaged System</u>	<u>0.95</u>	<u>0.95</u>	<u>0.84</u>
<u>Small Duct High Velocity System</u>	<u>1.00</u>	<u>Not Applicable</u>	<u>0.85</u>
<u>Ducted Space-Constrained Air Conditioner</u>	<u>0.97</u>	<u>Not Applicable</u>	<u>Not Applicable</u>
<u>Ducted Space-Constrained Heat Pump</u>	<u>0.99</u>	<u>Not Applicable</u>	<u>0.85"</u>

1344 Section 11. Section **15A-3-801** is amended to read:

1345 **15A-3-801. General provisions.**

1346 The following are adopted as amendments to the IEBC and are applicable statewide:

1347 (1) In IEBC, Section 202, the definition for "Approved" is modified by adding the
 1348 words "or independent third-party licensed engineer or architect and submitted to the building
 1349 official after the word official."

1350 (2) In Section 202, the following definition is added: "BUILDING OFFICIAL. See
 1351 Code Official."

1352 [(2)] (3) In Section 202, the definition for "code official" is deleted and replaced with

1353 the following:

1354 "CODE OFFICIAL. The officer or other designated authority having jurisdiction
1355 (AHJ) charged with the administration and enforcement of this code."

1356 [~~(3)~~] (4) In Section 202, the definition for existing buildings is deleted and replaced
1357 with the following:

1358 "EXISTING BUILDING. A building that is not a dangerous building and that was
1359 either lawfully erected under a prior adopted code, or deemed a legal non-conforming building
1360 by the code official."

1361 [~~(4)~~] (5) In IEBC, Section 302.3 the following is added after the words "code official"
1362 in the last sentence: "or independent third-party licensed engineer or architect and submitted to
1363 the building official."

1364 (6) In Section 301.3, the exception is deleted.

1365 [~~(5)~~] (7) In Section 305.4.2, number 7 is added after number 6 as follows: "7. When a
1366 change of occupancy in a building or portion of a building results in a Group R-2 occupancy,
1367 not less than 20% of the dwelling or sleeping units shall be Type-B dwelling or sleeping units.
1368 These dwelling or sleeping units may be located on any floor of the building provided with an
1369 accessible route. Two percent, but not less than one unit, of the dwelling or sleeping units shall
1370 be Type-A dwelling units."

1371 [~~(6)~~] (8) Section 503.6 is deleted and replaced with the following:

1372 "503.6 Bracing for unreinforced masonry parapets and other appendages upon
1373 reroofing.

1374 Where the intended alteration requires a permit for reroofing and involves removal of
1375 roofing materials from more than 25% of the roof area of a building assigned to Seismic
1376 Design Category D, E, or F that has parapets constructed of unreinforced masonry or
1377 appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include
1378 installation of bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates
1379 compliance of such items. Reduced seismic forces are permitted for design purposes."

1380 [~~(7)~~] (9) In Section 705.1, Exception number 3, the following is added at the end of the
1381 exception:

1382 "This exception does not apply if the existing facility is undergoing a change of
1383 occupancy classification."

1384 [~~8~~] (10) Section 706.3.1 is deleted and replaced with the following:

1385 "706.3.1 Bracing for unreinforced masonry bearing wall parapets and other appendages.

1386 Where a permit is issued for reroofing more than 25 percent of the roof area of a

1387 building assigned to Seismic Design Category D, E, or F that has parapets constructed of

1388 unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary,

1389 etc., the work shall include installation of bracing to resist the reduced International Building

1390 Code level seismic forces as specified in Section 303 of this code unless an evaluation

1391 demonstrates compliance of such items."

1392 [~~9~~] (11) Section 906.6 is deleted and replaced with the following:

1393 "906.6 Bracing for unreinforced masonry parapets and other appendages upon

1394 reroofing.

1395 Where the intended alteration requires a permit for reroofing and involves removal of

1396 roofing materials from more than 25% of the roof area of a building assigned to Seismic

1397 Design Category D, E, or F that has parapets constructed of unreinforced masonry or

1398 appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include

1399 installation of bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates

1400 compliance with such items. Reduced seismic forces are permitted for design purposes."

1401 [~~10~~] (12) (a) Section 1006.3 is deleted and replaced with the following:

1402 "1006.3 Seismic Loads. Where a change of occupancy results in a building being

1403 assigned to a higher risk category, or when a change of occupancy results in a design occupant

1404 load increase of 100% or more, the building shall satisfy the requirements of Section 1613 of

1405 the International Building Code using full seismic forces."

1406 (b) Section 1006.3, exceptions 1 through 3 remain unchanged.

1407 (c) In Section 1006.3, add a new exception 5 as follows:

1408 " 5. Where the design occupant load increase is less than 25 occupants and the

1409 occupancy category does not change."

1410 [~~11~~] (13) In Section [~~1012.7.3~~] 1011.7.3, exception 2 is deleted.

1411 Section 12. Section **15A-5-103** is amended to read:

1412 **15A-5-103. Nationally recognized codes incorporated by reference.**

1413 The following codes are incorporated by reference into the State Fire Code:

1414 (1) the International Fire Code, 2021 edition, excluding appendices, as issued by the

1415 International Code Council, Inc., except as amended by Part 2, Statewide Amendments and
1416 Additions to International Fire Code Incorporated as Part of State Fire Code;

1417 (2) National Fire Protection Association, NFPA 1, Chapter 38, Marijuana Growing,
1418 Processing, and Extraction Facilities, 2018 edition;

1419 (3) National Fire Protection Association, NFPA 54, National Fuel Gas Code, [~~2021~~]
1420 2024 edition; and

1421 (4) National Fire Protection Association, NFPA 58, Liquefied Petroleum Gas Code,
1422 [~~2023~~] 2024 edition.

1423 Section 13. Section **58-55-102** is amended to read:

1424 **58-55-102. Definitions.**

1425 In addition to the definitions in Section **58-1-102**, as used in this chapter:

1426 (1) (a) "Alarm business" or "alarm company" means a person engaged in the sale,
1427 installation, maintenance, alteration, repair, replacement, servicing, or monitoring of an alarm
1428 system, except as provided in Subsection (1)(b).

1429 (b) "Alarm business" or "alarm company" does not include:

1430 (i) a person engaged in the manufacture or sale of alarm systems unless:

1431 (A) that person is also engaged in the installation, maintenance, alteration, repair,
1432 replacement, servicing, or monitoring of alarm systems;

1433 (B) the manufacture or sale occurs at a location other than a place of business
1434 established by the person engaged in the manufacture or sale; or

1435 (C) the manufacture or sale involves site visits at the place or intended place of
1436 installation of an alarm system; or

1437 (ii) an owner of an alarm system, or an employee of the owner of an alarm system who
1438 is engaged in installation, maintenance, alteration, repair, replacement, servicing, or monitoring
1439 of the alarm system owned by that owner.

1440 (2) "Alarm company agent":

1441 (a) except as provided in Subsection (2)(b), means any individual employed within this
1442 state by an alarm business; and

1443 (b) does not include an individual who:

1444 (i) is not engaged in the sale, installation, maintenance, alteration, repair, replacement,
1445 servicing, or monitoring of an alarm system; and

1446 (ii) does not, during the normal course of the individual's employment with an alarm
1447 business, use or have access to sensitive alarm system information.

1448 (3) "Alarm company officer" means:

1449 (a) a governing person, as defined in Section 48-3a-102, of an alarm company;

1450 (b) an individual appointed as an officer of an alarm company that is a corporation in
1451 accordance with Section 16-10a-830;

1452 (c) a general partner, as defined in Section 48-2e-102, of an alarm company; or

1453 (d) a partner, as defined in Section 48-1d-102, of an alarm company.

1454 (4) "Alarm company owner" means:

1455 (a) a shareholder, as defined in Section 16-10a-102, who owns directly, or indirectly
1456 through an entity controlled by the individual, 5% or more of the outstanding shares of an
1457 alarm company that:

1458 (i) is a corporation; and

1459 (ii) is not publicly listed or traded; or

1460 (b) an individual who owns directly, or indirectly through an entity controlled by the
1461 individual, 5% or more of the equity of an alarm company that is not a corporation.

1462 (5) "Alarm company proprietor" means the sole proprietor of an alarm company that is
1463 registered as a sole proprietorship with the Division of Corporations and Commercial Code.

1464 (6) "Alarm company trustee" means an individual with control of or power of
1465 administration over property held in trust.

1466 (7) (a) "Alarm system" means equipment and devices assembled for the purpose of:

1467 (i) detecting and signaling unauthorized intrusion or entry into or onto certain
1468 premises; or

1469 (ii) signaling a robbery or attempted robbery on protected premises.

1470 (b) "Alarm system" includes a battery-charged suspended-wire system or fence that is
1471 part of and interfaces with an alarm system for the purposes of detecting and deterring
1472 unauthorized intrusion or entry into or onto certain premises.

1473 (8) "Apprentice electrician" means a person licensed under this chapter as an
1474 apprentice electrician who is learning the electrical trade under the immediate supervision of a
1475 master electrician, residential master electrician, a journeyman electrician, or a residential
1476 journeyman electrician.

1477 (9) "Apprentice plumber" means a person licensed under this chapter as an apprentice
1478 plumber who is learning the plumbing trade under the immediate supervision of a master
1479 plumber, residential master plumber, journeyman plumber, or a residential journeyman
1480 plumber.

1481 (10) "Approved continuing education" means instruction provided through courses
1482 under a program established under Subsection 58-55-302.5(2).

1483 (11) (a) "Approved prelicensure course provider" means a provider that is the
1484 Associated General Contractors of Utah, the Utah Chapter of the Associated Builders and
1485 Contractors, or the Utah Home Builders Association, and that meets the requirements
1486 established by rule by the commission with the concurrence of the director, to teach the
1487 25-hour course described in Subsection 58-55-302(1)(e)(iii).

1488 (b) "Approved prelicensure course provider" may only include a provider that, in
1489 addition to any other locations, offers the 25-hour course described in Subsection
1490 58-55-302(1)(e)(iii) at least six times each year in one or more counties other than Salt Lake
1491 County, Utah County, Davis County, or Weber County.

1492 (12) "Board" means the Electrician Licensing Board, Alarm System Security and
1493 Licensing Board, or Plumbers Licensing Board created in Section 58-55-201.

1494 (13) "Combustion system" means an assembly consisting of:

1495 (a) piping and components with a means for conveying, either continuously or
1496 intermittently, natural gas from the outlet of the natural gas provider's meter to the burner of the
1497 appliance;

1498 (b) the electric control and combustion air supply and venting systems, including air
1499 ducts; and

1500 (c) components intended to achieve control of quantity, flow, and pressure.

1501 (14) "Commission" means the Construction Services Commission created under
1502 Section 58-55-103.

1503 (15) "Construction trade" means any trade or occupation involving:

1504 (a) (i) construction, alteration, remodeling, repairing, wrecking or demolition, addition
1505 to, or improvement of any building, highway, road, railroad, dam, bridge, structure, excavation
1506 or other project, development, or improvement to other than personal property; and

1507 (ii) constructing, remodeling, or repairing a manufactured home or mobile home as

1508 defined in Section 15A-1-302; or

1509 (b) installation or repair of a residential or commercial natural gas appliance or
1510 combustion system.

1511 (16) "Construction trades instructor" means a person licensed under this chapter to
1512 teach one or more construction trades in both a classroom and project environment, where a
1513 project is intended for sale to or use by the public and is completed under the direction of the
1514 instructor, who has no economic interest in the project.

1515 (17) (a) "Contractor" means any person who for compensation other than wages as an
1516 employee undertakes any work in the construction, plumbing, or electrical trade for which
1517 licensure is required under this chapter and includes:

1518 (i) a person who builds any structure on the person's own property for the purpose of
1519 sale or who builds any structure intended for public use on the person's own property;

1520 (ii) any person who represents that the person is a contractor, or will perform a service
1521 described in this Subsection (17) by advertising on a website or social media, or any other
1522 means;

1523 (iii) any person engaged as a maintenance person, other than an employee, who
1524 regularly engages in activities set forth under the definition of "construction trade";

1525 (iv) any person engaged in, or offering to engage in, any construction trade for which
1526 licensure is required under this chapter; or

1527 (v) a construction manager, construction consultant, construction assistant, or any other
1528 person who, for a fee:

1529 (A) performs or offers to perform construction consulting;

1530 (B) performs or offers to perform management of construction subcontractors;

1531 (C) provides or offers to provide a list of subcontractors or suppliers; or

1532 (D) provides or offers to provide management or counseling services on a construction
1533 project.

1534 (b) "Contractor" does not include:

1535 (i) an alarm company or alarm company agent; or

1536 (ii) a material supplier who provides consulting to customers regarding the design and
1537 installation of the material supplier's products.

1538 (18) (a) "Electrical trade" means the performance of any electrical work involved in the

1539 installation, construction, alteration, change, repair, removal, or maintenance of facilities,
1540 buildings, or appendages or appurtenances.

1541 (b) "Electrical trade" does not include:

1542 (i) transporting or handling electrical materials;

1543 (ii) preparing clearance for raceways for wiring;

1544 (iii) work commonly done by unskilled labor on any installations under the exclusive
1545 control of electrical utilities;

1546 (iv) work involving cable-type wiring that does not pose a shock or fire-initiation
1547 hazard; or

1548 (v) work involving class two or class three power-limited circuits as defined in the
1549 National Electrical Code.

1550 (19) "Elevator" means the same as that term is defined in Section [34A-7-202](#), except
1551 that for purposes of this chapter it does not mean a stair chair, a vertical platform lift, or an
1552 incline platform lift.

1553 (20) "Elevator contractor" means a sole proprietor, firm, or corporation licensed under
1554 this chapter that is engaged in the business of erecting, constructing, installing, altering,
1555 servicing, repairing, or maintaining an elevator.

1556 (21) "Elevator mechanic" means an individual who is licensed under this chapter as an
1557 elevator mechanic and who is engaged in erecting, constructing, installing, altering, servicing,
1558 repairing, or maintaining an elevator under the immediate supervision of an elevator contractor.

1559 (22) "Employee" means an individual as defined by the division by rule giving
1560 consideration to the definition adopted by the Internal Revenue Service and the Department of
1561 Workforce Services.

1562 (23) "Engage in a construction trade" means to:

1563 (a) engage in, represent oneself to be engaged in, or advertise oneself as being engaged
1564 in a construction trade; or

1565 (b) use the name "contractor" or "builder" or in any other way lead a reasonable person
1566 to believe one is or will act as a contractor.

1567 (24) (a) "Financial responsibility" means a demonstration of a current and expected
1568 future condition of financial solvency evidencing a reasonable expectation to the division and
1569 the board that an applicant or licensee can successfully engage in business as a contractor

1570 without jeopardy to the public health, safety, and welfare.

1571 (b) Financial responsibility may be determined by an evaluation of the total history
1572 concerning the licensee or applicant including past, present, and expected condition and record
1573 of financial solvency and business conduct.

1574 (25) "Gas appliance" means any device that uses natural gas to produce light, heat,
1575 power, steam, hot water, refrigeration, or air conditioning.

1576 (26) (a) "General building contractor" means a person licensed under this chapter as a
1577 general building contractor qualified by education, training, experience, and knowledge to
1578 perform or superintend construction of structures for the support, shelter, and enclosure of
1579 persons, animals, chattels, or movable property of any kind or any of the components of that
1580 construction except plumbing, electrical work, mechanical work, work related to the operating
1581 integrity of an elevator, and manufactured housing installation, for which the general building
1582 contractor shall employ the services of a contractor licensed in the particular specialty, except
1583 that a general building contractor engaged in the construction of single-family and multifamily
1584 residences up to four units may perform the mechanical work and hire a licensed plumber or
1585 electrician as an employee.

1586 (b) The division may by rule exclude general building contractors from engaging in the
1587 performance of other construction specialties in which there is represented a substantial risk to
1588 the public health, safety, and welfare, and for which a license is required unless that general
1589 building contractor holds a valid license in that specialty classification.

1590 (27) (a) "General electrical contractor" means a person licensed under this chapter as a
1591 general electrical contractor qualified by education, training, experience, and knowledge to
1592 perform the fabrication, construction, and installation of generators, transformers, conduits,
1593 raceways, panels, switch gear, electrical wires, fixtures, appliances, or apparatus that uses
1594 electrical energy.

1595 (b) The scope of work of a general electrical contractor may be further defined by rules
1596 made by the commission, with the concurrence of the director, in accordance with Title 63G,
1597 Chapter 3, Utah Administrative Rulemaking Act.

1598 (28) (a) "General engineering contractor" means a person licensed under this chapter as
1599 a general engineering contractor qualified by education, training, experience, and knowledge to
1600 perform or superintend construction of fixed works or components of fixed works requiring

- 1601 specialized engineering knowledge and skill in any of the following:
- 1602 (i) irrigation;
 - 1603 (ii) drainage;
 - 1604 (iii) water power;
 - 1605 (iv) water supply;
 - 1606 (v) flood control;
 - 1607 (vi) an inland waterway;
 - 1608 (vii) a harbor;
 - 1609 (viii) a railroad;
 - 1610 (ix) a highway;
 - 1611 (x) a tunnel;
 - 1612 (xi) an airport;
 - 1613 (xii) an airport runway;
 - 1614 (xiii) a sewer;
 - 1615 (xiv) a bridge;
 - 1616 (xv) a refinery;
 - 1617 (xvi) a pipeline;
 - 1618 (xvii) a chemical plant;
 - 1619 (xviii) an industrial plant;
 - 1620 (xix) a pier;
 - 1621 (xx) a foundation;
 - 1622 (xxi) a power plant; [or]
 - 1623 (xxii) a utility plant or installation[:]; or
 - 1624 (xxiii) underground electric utility conduit.
- 1625 (b) A general engineering contractor may not perform or superintend:
- 1626 (i) construction of a structure built primarily for the support, shelter, and enclosure of
 - 1627 persons, animals, and chattels; or
 - 1628 (ii) performance of:
 - 1629 (A) plumbing work;
 - 1630 (B) electrical work beyond underground electric utility conduit; or
 - 1631 (C) mechanical work.

1632 (29) (a) "General plumbing contractor" means a person licensed under this chapter as a
1633 general plumbing contractor qualified by education, training, experience, and knowledge to
1634 perform the fabrication or installation of material and fixtures to create and maintain sanitary
1635 conditions in a building by providing permanent means for a supply of safe and pure water, a
1636 means for the timely and complete removal from the premises of all used or contaminated
1637 water, fluid and semi-fluid organic wastes and other impurities incidental to life and the
1638 occupation of such premises, and a safe and adequate supply of gases for lighting, heating, and
1639 industrial purposes.

1640 (b) The scope of work of a general plumbing contractor may be further defined by rules
1641 made by the commission, with the concurrence of the director, in accordance with Title 63G,
1642 Chapter 3, Utah Administrative Rulemaking Act.

1643 (30) "Immediate supervision" means reasonable direction, oversight, inspection, and
1644 evaluation of the work of a person:

- 1645 (a) as the division specifies in rule;
- 1646 (b) by, as applicable, a qualified electrician or plumber;
- 1647 (c) as part of a planned program of training; and
- 1648 (d) to ensure that the end result complies with applicable standards.

1649 (31) "Individual" means a natural person.

1650 (32) "Journeyman electrician" means a person licensed under this chapter as a
1651 journeyman electrician having the qualifications, training, experience, and knowledge to wire,
1652 install, and repair electrical apparatus and equipment for light, heat, power, and other purposes.

1653 (33) "Journeyman plumber" means a person licensed under this chapter as a
1654 journeyman plumber having the qualifications, training, experience, and technical knowledge
1655 to engage in the plumbing trade.

1656 (34) "Master electrician" means a person licensed under this chapter as a master
1657 electrician having the qualifications, training, experience, and knowledge to properly plan,
1658 layout, and supervise the wiring, installation, and repair of electrical apparatus and equipment
1659 for light, heat, power, and other purposes.

1660 (35) "Master plumber" means a person licensed under this chapter as a master plumber
1661 having the qualifications, training, experience, and knowledge to properly plan and layout
1662 projects and supervise persons in the plumbing trade.

1663 (36) "Person" means a natural person, sole proprietorship, joint venture, corporation,
1664 limited liability company, association, or organization of any type.

1665 (37) (a) "Plumbing trade" means the performance of any mechanical work pertaining to
1666 the installation, alteration, change, repair, removal, maintenance, or use in buildings, or within
1667 three feet beyond the outside walls of buildings, of pipes, fixtures, and fittings for the:

1668 (i) delivery of the water supply;

1669 (ii) discharge of liquid and water carried waste;

1670 (iii) building drainage system within the walls of the building; and

1671 (iv) delivery of gases for lighting, heating, and industrial purposes.

1672 (b) "Plumbing trade" includes work pertaining to the water supply, distribution pipes,
1673 fixtures and fixture traps, soil, waste and vent pipes, the building drain and roof drains, and the
1674 safe and adequate supply of gases, together with their devices, appurtenances, and connections
1675 where installed within the outside walls of the building.

1676 (38) "Ratio of apprentices" means the number of licensed plumber apprentices or
1677 licensed electrician apprentices that are allowed to be under the immediate supervision of a
1678 licensed supervisor as established by the provisions of this chapter and by rules made by the
1679 commission, with the concurrence of the director, in accordance with Title 63G, Chapter 3,
1680 Utah Administrative Rulemaking Act.

1681 (39) "Residential and small commercial contractor" means a person licensed under this
1682 chapter as a residential and small commercial contractor qualified by education, training,
1683 experience, and knowledge to perform or superintend the construction of single-family
1684 residences, multifamily residences up to four units, and commercial construction of not more
1685 than three stories above ground and not more than 20,000 square feet, or any of the components
1686 of that construction except plumbing, electrical work, mechanical work, and manufactured
1687 housing installation, for which the residential and small commercial contractor shall employ
1688 the services of a contractor licensed in the particular specialty, except that a residential and
1689 small commercial contractor engaged in the construction of single-family and multifamily
1690 residences up to four units may perform the mechanical work and hire a licensed plumber or
1691 electrician as an employee.

1692 (40) "Residential building," as it relates to the license classification of residential
1693 journeyman plumber and residential master plumber, means a single or multiple family

1694 dwelling of up to four units.

1695 (41) (a) "Residential electrical contractor" means a person licensed under this chapter
1696 as a residential electrical contractor qualified by education, training, experience, and
1697 knowledge to perform the fabrication, construction, and installation of services, disconnecting
1698 means, grounding devices, panels, conductors, load centers, lighting and plug circuits,
1699 appliances, and fixtures in a residential unit.

1700 (b) The scope of work of a residential electrical contractor may be further defined by
1701 rules made by the commission, with the concurrence of the director, in accordance with Title
1702 63G, Chapter 3, Utah Administrative Rulemaking Act.

1703 (42) "Residential journeyman electrician" means a person licensed under this chapter
1704 as a residential journeyman electrician having the qualifications, training, experience, and
1705 knowledge to wire, install, and repair electrical apparatus and equipment for light, heat, power,
1706 and other purposes on buildings using primarily nonmetallic sheath cable.

1707 (43) "Residential journeyman plumber" means a person licensed under this chapter as a
1708 residential journeyman plumber having the qualifications, training, experience, and knowledge
1709 to engage in the plumbing trade as limited to the plumbing of residential buildings.

1710 (44) "Residential master electrician" means a person licensed under this chapter as a
1711 residential master electrician having the qualifications, training, experience, and knowledge to
1712 properly plan, layout, and supervise the wiring, installation, and repair of electrical apparatus
1713 and equipment for light, heat, power, and other purposes on residential projects.

1714 (45) "Residential master plumber" means a person licensed under this chapter as a
1715 residential master plumber having the qualifications, training, experience, and knowledge to
1716 properly plan and layout projects and supervise persons in the plumbing trade as limited to the
1717 plumbing of residential buildings.

1718 (46) (a) "Residential plumbing contractor" means a person licensed under this chapter
1719 as a residential plumbing contractor qualified by education, training, experience, and
1720 knowledge to perform the fabrication or installation of material and fixtures to create and
1721 maintain sanitary conditions in residential buildings by providing permanent means for a
1722 supply of safe and pure water, a means for the timely and complete removal from the premises
1723 of all used or contaminated water, fluid and semi-fluid organic wastes and other impurities
1724 incidental to life and the occupation of such premises, and a safe and adequate supply of gases

1725 for lighting, heating, and residential purposes.

1726 (b) The scope of work of a residential plumbing contractor may be further defined by
1727 rules made by the commission, with the concurrence of the director, in accordance with Title
1728 63G, Chapter 3, Utah Administrative Rulemaking Act.

1729 (47) "Residential project," as it relates to an electrician or electrical contractor, means
1730 buildings primarily wired with nonmetallic sheathed cable, in accordance with standard rules
1731 and regulations governing this work, including the National Electrical Code, and in which the
1732 voltage does not exceed 250 volts line to line and 125 volts to ground.

1733 (48) "Responsible management personnel" means:

1734 (a) a qualifying agent;

1735 (b) an operations manager; or

1736 (c) a site manager.

1737 (49) "Sensitive alarm system information" means:

1738 (a) a pass code or other code used in the operation of an alarm system;

1739 (b) information on the location of alarm system components at the premises of a
1740 customer of the alarm business providing the alarm system;

1741 (c) information that would allow the circumvention, bypass, deactivation, or other
1742 compromise of an alarm system of a customer of the alarm business providing the alarm
1743 system; and

1744 (d) any other similar information that the division by rule determines to be information
1745 that an individual employed by an alarm business should use or have access to only if the
1746 individual is licensed as provided in this chapter.

1747 (50) (a) "Specialty contractor" means a person licensed under this chapter under a
1748 specialty contractor classification established by rule, who is qualified by education, training,
1749 experience, and knowledge to perform those construction trades and crafts requiring
1750 specialized skill, the regulation of which are determined by the division to be in the best
1751 interest of the public health, safety, and welfare.

1752 (b) A specialty contractor may perform work in crafts or trades other than those in
1753 which the specialty contractor is licensed if they are incidental to the performance of the
1754 specialty contractor's licensed craft or trade.

1755 (51) "Unincorporated entity" means an entity that is not:

1756 (a) an individual;

1757 (b) a corporation; or

1758 (c) publicly traded.

1759 (52) "Unlawful conduct" means the same as that term is defined in Sections 58-1-501

1760 and 58-55-501.

1761 (53) "Unprofessional conduct" means the same as that term is defined in Sections

1762 58-1-501 and 58-55-502 and as may be further defined by rule.

1763 (54) "Wages" means amounts due to an employee for labor or services whether the

1764 amount is fixed or ascertained on a time, task, piece, commission, or other basis for calculating

1765 the amount.

1766 Section 14. **Effective date.**

1767 This bill takes effect on May 1, 2024.