

Representative Fred C. Cox proposes the following substitute bill:

BUILDING CODE REVIEW AND ADOPTION AMENDMENTS

2016 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Brad R. Wilson

Senate Sponsor: _____

LONG TITLE

General Description:

This bill amends provisions related to the State Construction Code.

Highlighted Provisions:

This bill:

▶ adopts, with amendments:

- the 2015 International Building Code;
- the 2015 International Residential Code;
- the 2015 International Plumbing Code;
- the 2015 International Mechanical Code;
- the 2015 International Fuel Gas Code;
- the 2014 National Electric Code;
- the 2015 International Energy Conservation Code; and
- the 2015 International Existing Building Code;

▶ updates provisions to coordinate with the newly adopted international codes;

▶ amends provisions related to the amount of fireworks a person may store in a building equipped with an approved sprinkler system;

▶ amends provisions related to carbon monoxide alarm installation;

▶ amends provisions related to supplying toilet facilities during building construction;



- 26 ▶ provides an alternative means of complying with the energy conservation code;
- 27 ▶ amends provisions related to air duct leakage testing;
- 28 ▶ modifies the amount of allowed air duct leakage;
- 29 ▶ modifies energy rating index compliance requirements;
- 30 ▶ modifies installation requirements for potable water supply protection;
- 31 ▶ modifies electrical wiring requirements for a basement, garage, or accessory
- 32 building;
- 33 ▶ deletes a requirement in the International Plumbing Code that trenching parallel to a
- 34 footing or wall not extend into the bearing plane of the footing or wall;
- 35 ▶ deletes an International Plumbing Code requirement for installation of a temperature
- 36 limiting device in a footbath, pedicure bath, or head shampoo sink;
- 37 ▶ deletes an International Plumbing Code requirement for multiple-compartment
- 38 sinks that discharge independently to a waste receptor;
- 39 ▶ provides an alternative method for storm drain installation;
- 40 ▶ provides for the use of a gray water recycling system in a single family residential
- 41 area;
- 42 ▶ provides an alternative compliance method related to embedded joints;
- 43 ▶ provides an alternative method for installing an overcurrent device; and
- 44 ▶ amends provisions to coordinate with newly adopted codes and related Utah Code
- 45 sections.

46 Money Appropriated in this Bill:

47 None

48 Other Special Clauses:

49 This bill provides a special effective date.

50 Utah Code Sections Affected:

51 AMENDS:

52 **15A-2-102**, as last amended by Laws of Utah 2014, Chapter 189

53 **15A-2-103**, as last amended by Laws of Utah 2015, Chapter 258

54 **15A-2-104**, as last amended by Laws of Utah 2014, Chapter 189

55 **15A-3-102**, as last amended by Laws of Utah 2013, Chapter 297

56 **15A-3-103**, as last amended by Laws of Utah 2013, Chapter 297

- 57 **15A-3-104**, as last amended by Laws of Utah 2014, Chapter 243
- 58 **15A-3-105**, as last amended by Laws of Utah 2013, Chapter 297
- 59 **15A-3-106**, as last amended by Laws of Utah 2014, Chapter 153
- 60 **15A-3-107**, as last amended by Laws of Utah 2013, Chapter 297
- 61 **15A-3-108**, as last amended by Laws of Utah 2013, Chapter 297
- 62 **15A-3-110**, as last amended by Laws of Utah 2013, Chapter 297
- 63 **15A-3-112**, as last amended by Laws of Utah 2013, Chapter 297
- 64 **15A-3-113**, as last amended by Laws of Utah 2013, Chapter 297
- 65 **15A-3-202**, as last amended by Laws of Utah 2015, Chapter 205
- 66 **15A-3-203**, as last amended by Laws of Utah 2013, Chapter 279
- 67 **15A-3-204**, as last amended by Laws of Utah 2013, Chapter 297
- 68 **15A-3-205**, as last amended by Laws of Utah 2013, Chapter 297
- 69 **15A-3-206**, as last amended by Laws of Utah 2013, Chapter 297
- 70 **15A-3-302**, as last amended by Laws of Utah 2013, Chapter 297
- 71 **15A-3-303**, as last amended by Laws of Utah 2013, Chapter 297
- 72 **15A-3-304**, as last amended by Laws of Utah 2013, Chapter 297
- 73 **15A-3-305**, as last amended by Laws of Utah 2013, Chapter 297
- 74 **15A-3-306**, as last amended by Laws of Utah 2014, Chapter 189
- 75 **15A-3-308**, as enacted by Laws of Utah 2011, Chapter 14
- 76 **15A-3-310**, as last amended by Laws of Utah 2013, Chapter 297
- 77 **15A-3-311**, as last amended by Laws of Utah 2013, Chapter 297
- 78 **15A-3-313**, as last amended by Laws of Utah 2013, Chapter 297
- 79 **15A-3-314**, as last amended by Laws of Utah 2013, Chapter 297
- 80 **15A-3-401**, as last amended by Laws of Utah 2014, Chapter 100
- 81 **15A-3-501**, as last amended by Laws of Utah 2013, Chapter 297
- 82 **15A-3-601**, as last amended by Laws of Utah 2013, Chapter 297
- 83 **15A-3-701**, as last amended by Laws of Utah 2013, Chapter 279
- 84 **15A-3-801**, as last amended by Laws of Utah 2013, Chapter 297
- 85 **15A-4-103**, as enacted by Laws of Utah 2011, Chapter 14
- 86 **15A-4-107**, as enacted by Laws of Utah 2011, Chapter 14
- 87 **15A-4-203**, as enacted by Laws of Utah 2011, Chapter 14

88 [58-11a-502](#), as last amended by Laws of Utah 2014, Chapter 100

89 ENACTS:

90 [15A-3-315](#), Utah Code Annotated 1953

91 [15A-3-901](#), Utah Code Annotated 1953

92 REPEALS:

93 [15A-3-106.5](#), as enacted by Laws of Utah 2014, Chapter 153



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

96 Section 1. Section [15A-2-102](#) is amended to read:

97 **[15A-2-102. Definitions.](#)**

98 As used in this chapter and Chapter 3, Statewide Amendments Incorporated as Part of
99 State Construction Code, and Chapter 4, Local Amendments Incorporated as Part of State
100 Construction Code:

101 (1) "HUD Code" means the Federal Manufactured Housing Construction and Safety
102 Standards Act, as issued by the Department of Housing and Urban Development and published
103 in 24 C.F.R. Parts 3280 and 3282 (as revised April 1, 1990).

104 (2) "IBC" means the edition of the International Building Code adopted under Section
105 [15A-2-103](#).

106 (3) "IEBC" means the edition of the International Existing Building Code adopted
107 under Section [15A-2-103](#).

108 [~~(4)~~] (4) "IECC" means the edition of the International Energy Conservation Code
109 adopted under Section [15A-2-103](#).

110 [~~(5)~~] (5) "IFGC" means the edition of the International Fuel Gas Code adopted under
111 Section [15A-2-103](#).

112 [~~(6)~~] (6) "IMC" means the edition of the International Mechanical Code adopted under
113 Section [15A-2-103](#).

114 [~~(7)~~] (7) "IPC" means the edition of the International Plumbing Code adopted under
115 Section [15A-2-103](#).

116 [~~(8)~~] (8) "IRC" means the edition of the International Residential Code adopted under
117 Section [15A-2-103](#).

118 [~~(9)~~] (9) "NEC" means the edition of the National Electrical Code adopted under

119 Section [15A-2-103](#).

120 ~~[(9)]~~ (10) "UWUI" means the edition of the Utah Wildland Urban Interface Code
121 adopted under Section [15A-2-103](#).

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

123 **15A-2-103. Specific editions adopted of construction code of a nationally**
124 **recognized code authority.**

125 (1) Subject to the other provisions of this part, the following construction codes are
126 incorporated by reference, and together with the amendments specified in Chapter 3, Part 3,
127 Statewide Amendments to International Plumbing Code, and Chapter 4, Local Amendments
128 Incorporated as Part of State Construction Code, are the construction standards to be applied to
129 building construction, alteration, remodeling, and repair, and in the regulation of building
130 construction, alteration, remodeling, and repair in the state:

131 (a) the ~~[2012]~~ 2015 edition of the International Building Code, including Appendix J,
132 issued by the International Code Council;

133 (b) the ~~[2012]~~ 2015 edition of the International Residential Code, issued by the
134 International Code Council;

135 (c) the ~~[2012]~~ 2015 edition of the International Plumbing Code, issued by the
136 International Code Council;

137 (d) the ~~[2012]~~ 2015 edition of the International Mechanical Code, issued by the
138 International Code Council;

139 (e) the ~~[2012]~~ 2015 edition of the International Fuel Gas Code, issued by the
140 International Code Council;

141 (f) the ~~[2011]~~ 2014 edition of the National Electrical Code, issued by the National Fire
142 Protection Association;

143 (g) the ~~[2012]~~ 2015 edition of the International Energy Conservation Code, issued by
144 the International Code Council;

145 (h) the 2015 edition of the International Existing Building Code, issued by the
146 International Code Council;

147 ~~[(h)]~~ (i) subject to Subsection [15A-2-104\(2\)](#), the HUD Code;

148 ~~[(i)]~~ (j) subject to Subsection [15A-2-104\(1\)](#), Appendix E of the ~~[2012]~~ 2015 edition of
149 the International Residential Code, issued by the International Code Council; and

150 [fj] (k) subject to Subsection 15A-2-104(1), the 2005 edition of the NFPA 225 Model
151 Manufactured Home Installation Standard, issued by the National Fire Protection Association.

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

158 Section 3. Section 15A-2-104 is amended to read:

159 **15A-2-104. Installation standards for manufactured housing.**

160 (1) The following are the installation standards for manufactured housing for new
161 installations or for existing manufactured or mobile homes that are subject to relocation,
162 building alteration, remodeling, or rehabilitation in the state:

163 (a) The manufacturer's installation instruction for the model being installed is the
164 primary standard.

165 (b) If the manufacturer's installation instruction for the model being installed is not
166 available or is incomplete, the following standards apply:

167 (i) Appendix E of the [2012] 2015 edition of the IRC, as issued by the International
168 Code Council for installations defined in Section AE101 of Appendix E; or

169 (ii) if an installation is beyond the scope of the [2012] 2015 edition of the IRC as
170 defined in Section AE101 of Appendix E, the 2005 edition of the NFPA 225 Model
171 Manufactured Home Installation Standard, issued by the National Fire Protection Association.

172 (c) A manufacturer, dealer, or homeowner is permitted to design for unusual
173 installation of a manufactured home not provided for in the manufacturer's standard installation
174 instruction, Appendix E of the [2012] 2015 edition of the IRC, or the 2005 edition of the
175 NFPA 225, if the design is approved in writing by a professional engineer or architect licensed
176 in Utah.

177 (d) For a mobile home built before June 15, 1976, the mobile home shall also comply
178 with the additional installation and safety requirements specified in Chapter 3, Part 8,
179 Installation and Safety Requirements for Mobile Homes Built Before June 15, 1976.

180 (2) Pursuant to the HUD Code Section 604(d), a manufactured home may be installed

181 in the state that does not meet the local snow load requirements as specified in Chapter 3, Part
182 2, Statewide Amendments to International Residential Code, except that the manufactured
183 home shall have a protective structure built over the home that meets the IRC and the snow
184 load requirements under Chapter 3, Part 2, Statewide Amendments to International Residential
185 Code.

186 Section 4. Section **15A-3-102** is amended to read:

187 **15A-3-102. Amendments to Chapters 1 through 3 of IBC.**

188 (1) IBC, Section 106, is deleted.

189 (2) [(a)] In IBC, Section 110, a new section is added as follows: "[~~H0.3.5~~] 110.3.5.1,
190 Weather-resistant exterior wall envelope. An inspection shall be made of the weather-resistant
191 exterior wall envelope as required by Section 1403.2, and flashing as required by Section
192 1405.4 to prevent water from entering the weather-resistive barrier."

193 [~~(b) The remaining sections of IBC, Section 110, are renumbered as follows: 110.3.6,
194 Lath or gypsum board inspection; 110.3.7, Fire- and smoke-resistant penetrations; 110.3.8,
195 Energy efficiency inspections; 110.3.9, Other inspections; 110.3.10, Special inspections; and
196 110.3.11, Final inspection.]~~

197 (3) IBC, Section 115.1, is deleted and replaced with the following: "115.1 Authority.
198 Whenever the building official finds any work regulated by this code being performed in a
199 manner either contrary to the provisions of this code or other pertinent laws or ordinances or is
200 dangerous or unsafe, the building official is authorized to stop work."

201 (4) In IBC, Section 202, the following definition is added for Ambulatory Surgical
202 Center: "AMBULATORY SURGICAL CENTER. A building or portion of a building licensed
203 by the Utah Department of Health where procedures are performed that may render patients
204 incapable of self preservation where care is less than 24 hours. See Utah Administrative Code
205 R432-13."

206 (5) In IBC, Section 202, the definition for Foster Care Facilities is modified by
207 changing the word "Foster" to "Child."

208 (6) In IBC, Section 202, the definition for "[F]Record Drawings" is modified by
209 deleting the words "a fire alarm system" and replacing them with "any fire protection system".

210 (7) In IBC, Section 202, the following definition is added for Residential
211 Treatment/Support Assisted Living Facility: "RESIDENTIAL TREATMENT/SUPPORT

212 ASSISTED LIVING FACILITY. See Section 308.1.2."

213 (8) In IBC, Section 202, the following definition is added for Type I Assisted Living
214 Facility: "TYPE I ASSISTED LIVING FACILITY. See Section 308.1.2."

215 (9) In IBC, Section 202, the following definition is added for Type II Assisted Living
216 Facility: "TYPE II ASSISTED LIVING FACILITY. See Section 308.1.2."

217 [~~(10) In the list in IBC, Section 304.1, the following words are added after the words
218 "Ambulatory care facilities": "where four or more care recipients are rendered incapable of self
219 preservation."~~]

220 [~~(11)~~ (10) In IBC, Section 305.2, the words "child care centers," are inserted after the
221 word "supervision," and the following sentence is added at the end of the paragraph: "See
222 Section 425 for special requirements for Day Care."

223 [~~(12)~~ (11) In IBC, Section 305.2.2 and 305.2.3, the word "five" is deleted and replaced
224 with the word "four" in both places.

225 [~~(13)~~ (12) A new IBC Section 305.2.4 is added as follows: "305.2.4 Child Day Care --
226 Residential Certificate or a Family License. Areas used for child day care purposes with a
227 Residential Certificate R430-50 or a Family License, as defined in Utah Administrative Code,
228 R430-90, Licensed Family Child Care, may be located in a Group R-2 or R-3 occupancy as
229 provided in Section 310.5 or shall comply with the International Residential Code in
230 accordance with Section R101.2."

231 [~~(14)~~ (13) A new IBC Section 305.2.5 is added as follows: "305.2.5 Child Care
232 Centers. Areas used for Hourly Child Care Centers, as defined in Utah Administrative Code,
233 R430-60, Child Care Center as defined in Utah Administrative Code, R430-100, or Out of
234 School Time Programs, as defined in Utah Administrative Code, R430-70, may be classified as
235 accessory occupancies."

236 (14) In IBC, Table 307.1(1), footnote "d" is added to the row for Consumer fireworks
237 in the column titled STORAGE - Solid Pounds (cubic feet).

238 (15) In IBC, Section 308.2, the word "FOSTER" is deleted and replaced with
239 "CHILD."

240 [~~(16)~~ (16) A new IBC Section 308.2.1 is added as follows: "308.2.1 Assisted living
241 facilities and related occupancies. The following words and terms shall, for the purposes of
242 this section and as used elsewhere in this code, have the meanings shown herein.

243 TYPE I ASSISTED LIVING FACILITY. A residential facility licensed by the Utah
 244 Department of Health that provides a protected living arrangement for ambulatory,
 245 non-restrained persons who are capable of achieving mobility sufficient to exit the facility
 246 without the assistance of another person.

247 Occupancies. Limited capacity, type I assisted living facilities with two to five residents shall
 248 be classified as R-3 occupancies. Small, type I assisted living facilities with six to sixteen
 249 residents shall be classified as R-4 occupancies. Large, type I assisted living facilities with
 250 over sixteen residents shall be classified as I-1 occupancies.

251 TYPE II ASSISTED LIVING FACILITY. A residential facility licensed by the Utah
 252 Department of Health that provides an array of coordinated supportive personal and health care
 253 services to residents who meet the definition of semi-independent.

254 Semi-Independent. A person who is:

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

256 B. Cognitively impaired or physically disabled but able to evacuate from the facility with the
 257 physical assistance of one person.

258 Occupancies. Limited capacity, type II assisted living facilities with two to five residents shall
 259 be classified as R-4 occupancies. Small, type II assisted living facilities with six to sixteen
 260 residents shall be classified as I-1 occupancies. Large, type II assisted living facilities with
 261 over sixteen residents shall be classified as I-2 occupancies.

262 RESIDENTIAL TREATMENT/SUPPORT ASSISTED LIVING FACILITY. A residential
 263 treatment/support assisted living facility which creates a group living environment for four or
 264 more residents licensed by the Utah Department of Human Services, and provides a protected
 265 living arrangement for ambulatory, non-restrained persons who are capable of achieving
 266 mobility sufficient to exit the facility without the physical assistance of another person."

267 [~~(16)~~] (17) In IBC, Section 308.3, the words "(see Section 308.2.1)" are added after the
 268 words "assisted living facilities[⁴]."

269 [~~(17)~~] (18) In IBC, Section [~~308.3.1~~] 308.3.4, all of the words after the first
 270 International Residential Code are deleted.

271 [~~(18)~~] (19) In IBC, Section 308.4, the following changes are made:

272 (a) The words "five persons" are deleted and replaced with the words "three persons."

273 (b) The words "foster care facilities" are deleted and replaced with "child care

274 facilities."

275 (c) The words "(both intermediate care facilities and skilled nursing facilities)" are
276 added after "nursing homes."

277 [~~(d)~~ The words "Ambulatory Surgical Centers with five or more operating rooms" are
278 added to the list.]

279 [(19)] (20) In IBC, Section [~~308.4.1~~] 308.4.2, the word "five" is deleted and replaced
280 with the word "three" in both places.

281 [(20)] (21) In IBC, Section 308.6, the word "five" is deleted and replaced with the
282 word "four[^u]."

283 [(21)] (22) In IBC, Section 308.6.1, the following changes are made:

284 (a) The word "five" is deleted and replaced with the word "four[^u]."

285 (b) The words "2-1/2 years or less of age" are deleted and replaced with "under the age
286 of two[^u]."

287 (c) The following sentence is added at the end: "See Section [~~425~~] 427 for special
288 requirements for Day Care."

289 [(22)] (23) In IBC, Sections 308.6.3 and 308.6.4, the word "five" is deleted and
290 replaced with the word "four" in both places and the following sentence is added at the end:
291 "See Section [~~425~~] 427 for special requirements for Day Care."

292 [(23)] (24) In IBC, Section 310.5, the words "and single family dwellings complying
293 with the IRC" are added after "Residential occupancies[^u]."

294 [(24)] (25) In IBC, Section 310.5.1, the words "other than Child Care" are inserted
295 after the word "dwelling" in the first sentence and the following sentence is added at the end:
296 "See Section [~~425~~] 427 for special requirements for Child Day Care."

297 [(25)] (26) A new IBC Section [~~310.5.2~~] 310.5.3 is added as follows: "[~~310.5.2~~]
298 310.5.3 Child Care. Areas used for child care purposes may be located in a residential
299 dwelling unit under all of the following conditions and Section [~~425~~] 427:

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

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

- 305 a. Utah Administrative Code, R430-50, Residential Certificate Child Care.
- 306 b. Utah Administrative Code, R430-90, Licensed Family Child Care.

307 3. Compliance with all zoning regulations of the local regulator."

308 [~~(26)~~] (27) In IBC, Section 310.6, the words "(see Section 308.2.1)" are added after
309 "assisted living facilities["]."

310 Section 5. Section **15A-3-103** is amended to read:

311 **15A-3-103. Amendments to Chapters 4 through 6 of IBC.**

312 (1) IBC Section 403.5.5 is deleted.

313 [~~(2)~~] IBC Section (F)406.5.8 is deleted and replaced with the following: "(F)406.5.8

314 Standpipe system. An open parking garage shall be equipped with an approved Class I manual

315 standpipe system when fire department access is not provided for firefighting operations to

316 within 150 feet of all portions of the open parking garage as measured from the approved fire

317 department vehicle access:]

318 [Exception: Open parking garages equipped throughout with an automatic sprinkler system in

319 accordance with Section 903.3.1.1 and a standpipe system is not required by Section 905.3.1."]

320 [~~(3)~~] A new IBC Section (F)406.5.8.1 is added as follows: "(F)406.5.8.1 Installation

321 requirements. Class I manual standpipe shall be designed and installed in accordance with

322 Section 905 and NFPA 14. Class I manual standpipe shall be accessible throughout the

323 parking garage such that all portions of the parking structure are protected within 150 feet of a

324 hose connection."

325 [~~(4)~~] (2) In IBC, Section 422.2, a new paragraph is added as follows: "422.2

326 Separations: Ambulatory care facilities licensed by the Utah Department of Health shall be

327 separated from adjacent tenants with a fire [~~barrier~~] partition having a minimum one hour

328 fire-resistance rating. Any level below the level of exit discharge shall be separated from the

329 level of exit discharge by a horizontal assembly having a minimum one hour fire-resistance

330 rating.

331 Exception: A fire barrier is not required to separate the level of exit discharge when:

332 1. Such levels are under the control of the Ambulatory Care Facility.

333 2. Any hazardous spaces are separated by horizontal assembly having a minimum one hour

334 fire-resistance rating."

335 [~~(5)~~] (3) A new IBC Section [~~425~~] 427, Day Care, is added as follows:

336 "[~~425.1~~] 427.1 Detailed Requirements. In addition to the occupancy and construction
337 requirements in this code, the additional provisions of this section shall apply to all Day Care in
338 accordance with Utah Administrative Code R710-8 Day Care Rules.

339 [~~425.2~~] 427.2 Definitions.

340 [~~425.2.1~~] 427.2.1 Authority Having Jurisdiction (AHJ): State Fire Marshal, his duly authorized
341 deputies, or the local fire enforcement authority code official.

342 [~~425.2.2~~] 427.2.2 Day Care Facility: Any building or structure occupied by clients of any age
343 who receive custodial care for less than 24 hours by individuals other than parents, guardians,
344 relatives by blood, marriage or adoption.

345 [~~425.2.3~~] 427.2.3 Day Care Center: Providing care for five or more clients in a place other than
346 the home of the person cared for. This would also include Child Care Centers, Out of School
347 Time or Hourly Child Care Centers licensed by the Department of Health.

348 [~~425.2.4~~] 427.2.4 Family Day Care: Providing care for clients listed in the following two
349 groups:

350 [~~425.2.4.1~~] 427.2.4.1 Type 1: Services provided for five to eight clients in a home. This would
351 also include a home that is certified by the Department of Health as Residential Certificate
352 Child Care or licensed as Family Child Care.

353 [~~425.2.4.2~~] 427.2.4.2 Type 2: Services provided for nine to sixteen clients in a home with
354 sufficient staffing. This would also include a home that is licensed by the Department of
355 Health as Family Child Care.

356 [~~425.2.5~~] 427.2.5 R710-8: Utah Administrative Code, R710-8, Day Care Rules, as enacted
357 under the authority of the Utah Fire Prevention Board.

358 [~~425.3~~] 427.3 Family Day Care.

359 [~~425.3.1~~] 427.3.1 Family Day Care units shall have on each floor occupied by clients, two
360 separate means of egress, arranged so that if one is blocked the other will be available.

361 [~~425.3.2~~] 427.3.2 Family Day Care units that are located in the basement or on the second story
362 shall be provided with two means of egress, one of which shall discharge directly to the
363 outside.

364 [~~425.3.2.1~~] 427.3.2.1 Residential Certificate Child Care and Licensed Family Child Care with
365 five to eight clients in a home, located on the ground level or in a basement, may use an
366 emergency escape or rescue window as allowed in IFC, Chapter 10, Section [~~1029~~] 1030.

367 [425.3.3] 427.3.3 Family Day Care units shall not be located above the second story.

368 [425.3.4] 427.3.4 In Family Day Care units, clients under the age of two shall not be located
369 above or below the first story.

370 [425.3.4.1] 427.3.4.1 Clients under the age of two may be housed above or below the first story
371 where there is at least one exit that leads directly to the outside and complies with IFC, Section
372 [1009] 1011 or Section [1010] 1012 or Section [1026] 1027.

373 [425.3.5] 427.3.5 Family Day Care units located in split entry/split level type homes in which
374 stairs to the lower level and upper level are equal or nearly equal, may have clients housed on
375 both levels when approved by the AHJ.

376 [425.3.6] 427.3.6 Family Day Care units shall have a portable fire extinguisher on each level
377 occupied by clients, which shall have a classification of not less than 2A:10BC, and shall be
378 serviced in accordance with NFPA, Standard 10, Standard for Portable Fire Extinguishers.

379 [425.3.7] 427.3.7 Family Day Care units shall have single station smoke detectors in good
380 operating condition on each level occupied by clients. Battery operated smoke detectors shall
381 be permitted if the facility demonstrates testing, maintenance, and battery replacement to insure
382 continued operation of the smoke detectors.

383 [425.3.8] 427.3.8 Rooms in Family Day Care units that are provided for clients to sleep or nap,
384 shall have at least one window or door approved for emergency escape.

385 [425.3.9] 427.3.9 Fire drills shall be conducted in Family Day Care units quarterly and shall
386 include the complete evacuation from the building of all clients and staff. At least annually, in
387 Type I Family Day Care units, the fire drill shall include the actual evacuation using the escape
388 or rescue window, if one is used as a substitute for one of the required means of egress.

389 [425.4] 427.4 Day Care Centers.

390 [425.4.1] 427.4.1 Day Care Centers shall comply with either I-4 requirements or E
391 requirements of the IBC, whichever is applicable for the type of Day Care Center.

392 [425.4.2] 427.4.2 Emergency Evacuation Drills shall be completed as required in IFC, Chapter
393 4, Section 405.

394 [425.4.3] 427.4.3 Location at grade. Group E child day care centers shall be located at the
395 level of exit discharge.

396 [425.4.3.1] 427.4.3.1 Child day care spaces for children over the age of 24 months may be
397 located on the second floor of buildings equipped with automatic fire protection throughout

398 and an automatic fire alarm system.

399 [425.4.4] 427.4.4 Egress. All Group E child day care spaces with an occupant load of more
400 than 10 shall have a second means of egress. If the second means of egress is not an exit door
401 leading directly to the exterior, the room shall have an emergency escape and rescue window
402 complying with Section [1029] 1030.

403 [425.4.5] 427.4.5 All Group E Child Day Care Centers shall comply with Utah Administrative
404 Code, R430-100 Child Care Centers, R430-60 Hourly Child Care Centers, and R430-70 Out of
405 School Time.

406 [425.5] 427.5 Requirements for all Day Care.

407 [425.5.1] 427.5.1 Heating equipment in spaces occupied by children shall be provided with
408 partitions, screens, or other means to protect children from hot surfaces and open flames.

409 [425.5.2] 427.5.2 A fire escape plan shall be completed and posted in a conspicuous place. All
410 staff shall be trained on the fire escape plan and procedure."

411 [6] (4) In IBC, Section [504.2] 504.4, a new section is added as follows: ["504.2.1]
412 "504.4.1 Notwithstanding the exceptions to Section 504.2, Group I-2 Assisted Living Facilities
413 shall be allowed [to be two stories of] on each level of a two-story building of Type V-A
414 construction when all of the following apply:

- 415 1. All secured units are located at the level of exit discharge in compliance with Section
416 [1008.1.9.3] 1010.1.9.3 as amended;
- 417 2. The total combined area of both stories shall not exceed the total allowable area for a
418 one-story building; and
- 419 3. All other provisions that apply in Section 407 have been provided."

420 Section 6. Section **15A-3-104** is amended to read:

421 **15A-3-104. Amendments to Chapters 7 through 9 of IBC.**

422 (1) IBC, Section (F)901.8, is deleted and replaced with the following: "(F)901.8 Pump
423 and riser room size. Fire pump and automatic sprinkler system riser rooms shall be designed
424 with adequate space for all installed equipment necessary for the installation and to provide
425 sufficient working space around the stationary equipment. Clearances around equipment shall
426 be in accordance with manufacturer requirements and not less than the following minimum
427 elements:

428 901.8.1 A minimum clear and unobstructed distance of 12-inches shall be provided from the

429 installed equipment to the elements of permanent construction.

430 901.8.2 A minimum clear and unobstructed distance of 12-inches shall be provided between
431 all other installed equipment and appliances.

432 901.8.3 A clear and unobstructed width of 36-inches shall be provided in front of all installed
433 equipment and appliances, to allow for inspection, service, repair or replacement without
434 removing such elements of permanent construction or disabling the function of a required
435 fire-resistance-rated assembly.

436 901.8.4 Automatic sprinkler system riser rooms shall be provided with a clear and
437 unobstructed passageway to the riser room of not less than 36-inches, and openings into the
438 room shall be clear and unobstructed, with doors swinging in the outward direction from the
439 room and the opening providing a clear width of not less than 34-inches and a clear height of
440 the door opening shall not be less than 80-inches.

441 901.8.5 Fire pump rooms shall be provided with a clear and unobstructed passageway to the
442 fire pump room of not less than 72-inches, and openings into the room shall be clear,
443 unobstructed and large enough to allow for the removal of the largest piece of equipment, with
444 doors swinging in the outward direction from the room and the opening providing a clear width
445 of not less than 68-inches and a clear height of the door opening shall not be less than
446 80-inches."

447 (2) In IBC, Section (F)903.2.2, the words "the entire floor" are deleted and replaced
448 with "a building" and the last paragraph is deleted.

449 (3) IBC, Section (F)903.2.4, condition 2, is deleted and replaced with the following: "2.
450 A Group F-1 fire area is located more than three stories above the lowest level of fire
451 department vehicle access."

452 (4) IBC, Section (F)903.2.7, condition 2, is deleted and replaced with the following: "2.
453 A Group M fire area is located more than three stories above the lowest level of fire department
454 vehicle access."

455 (5) IBC, Sections (F)903.2.8, (F)903.2.8.1, [~~and~~] (F)903.2.8.2, and (F)903.2.8.4, are
456 deleted and replaced with the following: "(F)903.2.8 Group R. An automatic sprinkler system
457 installed in accordance with Section 903.3 shall be provided throughout all buildings with a
458 Group R fire area.

459 Exceptions:

460 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses)
461 constructed in accordance with the International Residential Code For One- and Two-Family
462 Dwellings.

463 2. Single story Group R-1 occupancies with fire areas not more than 2,000 square feet that
464 contain no installed plumbing or heating, where no cooking occurs, and constructed of Type
465 I-A, I-B, II-A, or II-B construction."

466 (6) IBC, Sections (F)903.2.8.3 and (F)903.2.8.3.1, are renumbered to (F)903.2.8.1 and
467 (F)903.2.8.1.1.

468 (7) IBC, Section (F)903.2.8.3.2, is renumbered to (F)903.2.8.1.2 and the following
469 exception is added:

470 [3:] "Exception: Group R-4 fire areas not more than 4,500 gross square feet and not containing
471 more than 16 residents, provided the building is equipped throughout with an approved fire
472 alarm system that is interconnected and receives its primary power from the building wiring
473 and a commercial power system."

474 (8) IBC, Section (F)903.2.8.4, is deleted.

475 [~~6~~] (9) IBC, Section (F)903.2.9, condition 2, is deleted and replaced with the
476 following: "2. A Group S-1 fire area is located more than three stories above the lowest level
477 of fire department vehicle access."

478 [~~7~~] (10) IBC, Section [~~(F)904.11~~] (F)904.12, is deleted and replaced with the
479 following: "[~~(F)904.11~~] (F)904.12 Commercial cooking systems. The automatic
480 fire-extinguishing system for commercial cooking systems shall be of a type recognized for
481 protection of commercial cooking equipment and exhaust systems. Pre-engineered automatic
482 extinguishing systems shall be tested in accordance with UL 300 and listed and labeled for the
483 intended application. The system shall be installed in accordance with this code, its listing and
484 the manufacturer's installation instructions.

485 Exception: Factory-built commercial cooking recirculating systems that are tested in
486 accordance with UL 710B and listed, labeled, and installed in accordance with Section 304.1 of
487 the International Mechanical Code."

488 [~~8~~] (11) IBC, Sections [~~(F)904.11.3, (F)904.11.3.1, (F)904.11.4, and (F)904.11.4.1;~~
489 (F)904.12.3, (F)904.12.3.1, (F)904.12.4, and (F)904.12.4.1, are deleted.

490 (12) In IBC, Section 905, a new subsection, Section (F)905.3.9, is added as follows:

491 "Open Parking Garages. Open parking garages shall be equipped with an approved
 492 Class 1 manual standpipe system when fire department access is not provided for firefighting
 493 operations to within 150 feet of all portions of the open parking garage as measured from the
 494 approved fire department vehicle access. Class 1 manual standpipe shall be accessible
 495 throughout the parking garage such that all portions of the parking structure are protected
 496 within 150 feet of a hose connection."

497 (13) In IBC, Section (F)905.8, the exception is deleted and replaced with the following:

498 "Exception: Where subject to freezing and approved by the fire code official."

499 ~~[(9)]~~ (14) In IBC, Section (F)907.2.3 Group E[-(a) The], the first sentence is deleted
 500 and rewritten as follows: "A manual fire alarm system that [initiates] activates the occupant
 501 notification system in accordance with Section (F)907.5 [and] shall be installed, in accordance
 502 with Section (F)907.6 [shall be installed] and administrative rules made by the State Fire
 503 Prevention Board in Group E occupancies."

504 ~~[(b) In Exception number 3, starting on line five, the words "emergency voice/alarm~~
 505 ~~communication system" are deleted and replaced with "occupant notification system".]~~

506 ~~[(10) In IBC, Section (F)908.7, the first sentence is deleted and replaced as follows:~~
 507 ~~"Groups R-1, R-2, R-3, R-4, I-1, and I-4 occupancies"; the exceptions are deleted and the~~
 508 ~~following sentence is added after the first sentence: "A minimum of one carbon monoxide~~
 509 ~~alarm shall be installed on each habitable level."]~~

510 ~~[(11) In IBC, Section (F)908.7, the following new subsections are added:]~~

511 ~~["(F)908.7.1 Interconnection. Where more than one carbon monoxide alarm is required to be~~
 512 ~~installed within Group R or I-1 occupancies, the carbon monoxide alarms shall be~~
 513 ~~interconnected in such a manner that the activation of one alarm will activate all of the alarms.~~
 514 ~~Physical interconnection of carbon monoxide alarms shall not be required where listed wireless~~
 515 ~~alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be~~
 516 ~~clearly audible in all bedrooms over background noise levels with all intervening doors closed.]~~

517 ~~[(F)908.7.2 Power source. In new construction, required carbon monoxide alarms shall receive~~
 518 ~~their primary power from the building wiring where such wiring is served from a commercial~~
 519 ~~source and shall be equipped with a battery backup. Carbon monoxide alarms with integral~~
 520 ~~strobes that are not equipped with battery backup shall be connected to an emergency electrical~~
 521 ~~system. Carbon monoxide alarms shall emit a signal when the batteries are low. Wiring shall~~

522 ~~be permanent and without a disconnecting switch other than as required for overcurrent~~
523 ~~protection.]~~

524 ~~[Exception: Carbon monoxide alarms are not required to be equipped with battery backup~~
525 ~~where they are connected to an emergency electrical system."]~~

526 ~~[(12) IBC, Section (F)908.7.1, is renumbered to 908.7.3.]~~

527 (15) IBC, Sections (F)915 through (F)915.6, are deleted and replaced with the
528 following:

529 "(F)915 Where required.

530 Group I-1, I-2, I-4, and R occupancies located in a building containing a fuel-burning appliance
531 or in a building that has an attached garage shall be equipped with single-station carbon
532 monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 or
533 UL 2075 and be installed and maintained in accordance with NFPA 720 and the manufacturer's
534 instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage,
535 ventilated in accordance with Section 404 of the International Mechanical Code, shall not be
536 considered an attached garage. A minimum of one carbon monoxide alarm shall be installed
537 on each habitable level.

538 (F)915.1 Interconnection.

539 Where more than one carbon monoxide alarm is required to be installed within Group I-1, I-2,
540 I-4, or R occupancies, the carbon monoxide alarm shall be interconnected in such a manner that
541 the activation of one alarm will activate all of the alarms. Physical interconnection of carbon
542 monoxide alarms shall not be required where listed wireless alarms are installed and all alarms
543 sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over
544 background noise levels with all intervening doors closed.

545 (F)915.2 Power Source.

546 In new construction, required carbon monoxide alarms shall receive their primary power from
547 the building wiring where such wiring is served from a commercial source and shall be
548 equipped with a battery backup. Carbon monoxide alarms with integral strobes that are not
549 equipped with a battery backup shall be connected to an emergency electrical system. Carbon
550 monoxide alarms shall emit a signal when the batteries are low. Wiring shall be permanent and
551 without a disconnecting switch other than as required for overcurrent protection.

552 Exceptions.

553 1. Carbon monoxide alarms are not required to be equipped with a battery backup where they
554 are connected to an emergency electrical system.

555 2. Hard wiring of carbon monoxide alarms in existing areas shall not be required where the
556 alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing
557 the structure, unless there is an attic, crawl space, or basement available that could provide
558 access for hard wiring without the removal of interior finishes.

559 (F)915.3 Group E.

560 A carbon monoxide detection system shall be installed in new buildings that contain Group E
561 occupancies in accordance with IFC, Chapter 9, Section 915. A carbon monoxide detection
562 system shall be installed in existing buildings that contain Group E occupancies in accordance
563 with IFC, Chapter 11, Section 1103.9.

564 (F)915.3.1 Where required.

565 In Group E occupancies, a carbon monoxide detection system shall be provided where a
566 fuel-burning appliance, a fuel-burning fireplace, or a fuel-burning forced air furnace is present.

567 (F)915.3.2 Detection equipment.

568 Each carbon monoxide detection system shall be installed in accordance with NFPA 720 and
569 the manufacturer's instructions and be listed as complying with, for single station detectors, UL
570 2034 and, for system detectors, UL 2075.

571 (F)915.3.3 Locations.

572 Each carbon monoxide detection system shall be installed in the locations specified in NFPA
573 720.

574 (F)915.3.4 Combination detectors.

575 A combination carbon monoxide/smoke detector is an acceptable alternative to a carbon
576 monoxide detection system if the combination carbon monoxide/smoke detector is listed in
577 accordance with UL 2075 and UL 268.

578 (F)915.3.5 Power source.

579 Each carbon monoxide detection system shall receive primary power from the building wiring
580 if the wiring is served from a commercial source. If primary power is interrupted, each carbon
581 monoxide detection system shall receive power from a battery. Wiring shall be permanent and
582 without a disconnecting switch other than that required for overcurrent protection.

583 (F)915.3.6 Maintenance.

584 Each carbon monoxide detection system shall be maintained in accordance with NFPA 720. A
585 carbon monoxide detection system that becomes inoperable or begins to produce end of life
586 signals shall be replaced."

587 Section 7. Section **15A-3-105** is amended to read:

588 **15A-3-105. Amendments to Chapters 10 through 12 of IBC.**

589 (1) In IBC, Section [~~1008.1.9.6~~, the words "Group I-1 and" are added in the title and in
590 the first sentence before the words "Group I-2" and] 1010.1.9.6, a new number [8] 9 is added as
591 follows: "[8] 9. The secure area or unit with special egress locks shall be located at the level of
592 exit discharge in Type V construction."

593 [~~(2) In IBC, Section 1008.1.9.7, a new number 7 is added as follows: "7. The secure~~
594 ~~area or unit with delayed egress locks shall be located at the level of exit discharge in Type V~~
595 ~~construction."~~]

596 [~~(3)~~ (2) In IBC, Section [~~1009.7.2~~] 1011.5.2, exception [5] 3 is deleted and replaced
597 with the following: "[5] 3. In Group R-3 occupancies, within dwelling units in Group R-2
598 occupancies, and in Group U occupancies that are accessory to a Group R-3 occupancy, or
599 accessory to individual dwelling units in Group R-2 occupancies, the maximum riser height
600 shall be 8 inches (203 mm) and the minimum tread depth shall be 9 inches (229 mm). The
601 minimum winder tread depth at the walk line shall be 10 inches (254 mm), and the minimum
602 winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.75 inch (19.1 mm) but
603 not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the
604 tread depth is less than 10 inches (254 mm)."

605 [~~(4)~~ (3) In IBC, Section [~~1009.15~~] 1011.11, a new exception [6] 5 is added as follows:
606 "[6] 5. In occupancies in Group R-3, as applicable in Section 101.2 and in occupancies in
607 Group U, which are accessory to an occupancy in Group R-3, as applicable in Section 101.2,
608 handrails shall be provided on at least one side of stairways consisting of four or more risers."

609 [~~(5)~~ (4) In IBC, Section [~~1011.5~~] 1013.5, the words ", including when the building
610 may not be fully occupied." are added at the end of the sentence.

611 [~~(6)~~ (5) IBC, Section [~~1024~~] 1025, is deleted.

612 [~~(7)~~ (6) In IBC, Section [~~1028.12~~] 1029.14, exception 2 is deleted.

613 [~~(8)~~ (7) In IBC, Section 1109.8, the following words "shall be capable of operation
614 without a key and" are inserted in the second sentence between the words "lift" and "shall".

615 ~~[(9)]~~ (8) In IBC, Section 1208.4, subparagraph 1 is deleted and replaced with the
 616 following: "1. The unit shall have a living room of not less than 165 square feet (15.3 m²) of
 617 floor area. An additional 100 square feet (9.3 m²) of floor area shall be provided for each
 618 occupant of such unit in excess of two."

619 Section 8. Section **15A-3-106** is amended to read:

620 **15A-3-106. Amendments to Chapters 13, 14, and 15 of IBC.**

621 IBC, Chapters 13 ~~[and]~~, 14, and 15 are not amended.

622 Section 9. Section **15A-3-107** is amended to read:

623 **15A-3-107. Amendments to Chapter 16 of IBC.**

624 (1) In IBC, Table 1604.5, Risk Category III, in the sentence that begins "Group I-2," a
 625 new footnote c is added as follows: "c. Type II Assisted Living Facilities that are I-2
 626 occupancy classifications in accordance with Section 308 shall be Risk Category II in this
 627 table."

628 (2) In IBC, Section 1605.2, in the portion of the definition for the value of f_2 , the words
 629 "and 0.2 for other roof configurations" are deleted and replaced with the following: " $f_2 = 0.20 +$
 630 $.025(A-5)$ for other configurations where roof snow load exceeds 30 psf;
 631 $f_2 = 0$ for roof snow loads of 30 psf (1.44kN/m²) or less.
 632 Where A = Elevation above sea level at the location of the structure (ft./1,000)."

633 (3) In IBC, Sections 1605.3.1 and 1605.3.2, exception 2 in each section is deleted and
 634 replaced with the following: "2. Flat roof snow loads of 30 pounds per square foot (1.44
 635 kNm²) or less need not be combined with seismic loads. Where flat roof snow loads exceed 30
 636 pounds per square foot (1.44 kNm²), the snow loads may be reduced in accordance with the
 637 following in load combinations including both snow and seismic loads. W_s as calculated
 638 below, shall be combined with seismic loads.

639 $W_s = (0.20 + 0.025(A-5))P_f$ is greater than or equal to $0.20 P_f$.

640 Where:

641 W_s = Weight of snow to be included in seismic calculations

642 A = Elevation above sea level at the location of the structure (ft./1,000)

643 P_f = Design roof snow load, psf.

644 For the purpose of this section, snow load shall be assumed uniform on the roof footprint
 645 without including the effects of drift or sliding. The Importance Factor, I, used in calculating P_f

646 may be considered 1.0 for use in the formula for W_s ".

647 (4) IBC, Section 1608.1, is deleted and replaced with the following: "1608.1 General.
648 Except as modified in Sections 1608.1.1, 1608.1.2, and 1608.1.3, design snow loads shall be
649 determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall not be less
650 than that determined by Section 1607."

651 (5) A new IBC, Section 1608.1.1, is added as follows: "1608.1.1 Section 7.4.5 of
652 Chapter 7 of ASCE 7 referenced in Section 1608.1 of the IBC is deleted and replaced with the
653 following: Section 7.4.5 Ice Dams and Icicles Along Eaves. Where ground snow loads exceed
654 75 psf, eaves shall be capable of sustaining a uniformly distributed load of $2p_f$ on all
655 overhanging portions. No other loads except dead loads shall be present on the roof when this
656 uniformly distributed load is applied. All building exits under down-slope eaves shall be
657 protected from sliding snow and ice."

658 (6) In IBC, Section 1608.1.2, a new section is added as follows: "1608.1.2 Utah Snow
659 Loads. The snow loads specified in Table 1608.1.2(b) shall be used for the jurisdictions
660 identified in that table. Otherwise, the ground snow load, P_g , to be used in the determination of
661 design snow loads for buildings and other structures shall be determined by using the following
662 formula: $P_g = (P_o^2 + S^2(A-A_o)^2)^{0.5}$ for A greater than A_o , and $P_g = P_o$ for A less than or equal to
663 A_o .

664 WHERE:

665 P_g = Ground snow load at a given elevation (psf);

666 P_o = Base ground snow load (psf) from Table No. 1608.1.2(a);

667 S = Change in ground snow load with elevation (psf/100 ft.) From Table No. 1608.1.2(a);

668 A = Elevation above sea level at the site (ft./1,000);

669 A_o = Base ground snow elevation from Table 1608.1.2(a) (ft./1,000).

670 The building official may round the roof snow load to the nearest 5 psf. The ground snow
671 load, P_g , may be adjusted by the building official when a licensed engineer or architect submits
672 data substantiating the adjustments.

673 Where the minimum roof live load in accordance with Section [~~1607.11~~] 1607.12 is greater
674 than the design roof snow load, such roof live load shall be used for design, however, it shall
675 not be reduced to a load lower than the design roof snow load. Drifting need not be considered
676 for roof snow loads less than 20 psf."

677 (7) IBC, Table 1608.1.2(a) and Table 1608.1.2(b), are added as follows:

"TABLE NO. 1608.1.2(a)				
STATE OF UTAH - REGIONAL SNOW LOAD FACTORS				
	COUNTY	P _o	S	A _o
680	Beaver	43	63	6.2
681	Box Elder	43	63	5.2
682	Cache	50	63	4.5
683	Carbon	43	63	5.2
684	Daggett	43	63	6.5
685	Davis	43	63	4.5
686	Duchesne	43	63	6.5
687	Emery	43	63	6.0
688	Garfield	43	63	6.0
689	Grand	36	63	6.5
690	Iron	43	63	5.8
691	Juab	43	63	5.2
692	Kane	36	63	5.7
693	Millard	43	63	5.3
694	Morgan	57	63	4.5
695	Piute	43	63	6.2
696	Rich	57	63	4.1
697	Salt Lake	43	63	4.5
698	San Juan	43	63	6.5
699	Sanpete	43	63	5.2
700	Sevier	43	63	6.0
701	Summit	86	63	5.0
702	Tooele	43	63	4.5
703	Uintah	43	63	7.0

705	Utah	43	63	4.5
706	Wasatch	86	63	5.0
707	Washington	29	63	6.0
708	Wayne	36	63	6.5
709	Weber	43	63	4.5

710 TABLE NO. 1608.1.2(B)

711 REQUIRED SNOW LOADS FOR SELECTED UTAH CITIES AND TOWNS^{1,2}

712 The following jurisdictions require design snow load values that differ from the Equation in the Utah Snow Load Study.

713	County	City	Elevation	Ground Snow Load (psf)	Roof Snow Load (psf) ⁶
714	Carbon	Price ³	5550	43	30
		All other county locations ⁵	--	--	--
715	Davis	Fruit Heights ³	4500 - 4850	57	40
716	Emery	Green River ³	4070	36	25
717	Garfield	Panguitch ³	6600	43	30
718	Rich	Woodruff ³	6315	57	40
		Laketown ⁴	6000	57	40
		Garden City ⁵	--	--	--
		Randolph ⁴	6300	57	40
719	San Juan	Monticello ³	6820	50	35
720	Summit	Coalville ³	5600	86	60
		Kamas ⁴	6500	114	80
721	Tooele	Tooele ³	5100	43	30
722	Utah	Orem ³	4650	43	30
		Pleasant Grove ⁴	5000	43	30
		Provo ⁵	--	--	--
723	Wasatch	Heber ⁵	--	--	--

724	Washington	Leeds ³	3460	29	20
		Santa Clara ³	2850	21	15
		St. George ³	2750	21	15
		All other county locations ⁵	--	--	--
725	Wayne	Loa ³	7080	43	30
726	¹ The IBC requires a minimum live load - See [1607.11.2] Section 1607.12.				
727	² This table is informational only in that actual site elevations may vary. Table is only valid if site elevation is within 100 feet of the listed elevation. Otherwise, contact the local Building Official.				
728	³ Values adopted from Table VII of the Utah Snow Load Study.				
729	⁴ Values based on site-specific study. Contact local Building Official for additional information.				
730	⁵ Contact local Building Official.				
731	⁶ Based on $C_e = 1.0$, $C_t = 1.0$ and $I_s = 1.0$ "				

732 (8) A new IBC, Section 1608.1.3, is added as follows: "1608.1.3 Thermal Factor. The
 733 value for the thermal factor, C_t , used in calculation of P_f shall be determined from Table 7.3 in
 734 ASCE 7.

735 Exception: Except for unheated structures, the value of C_t need not exceed 1.0 when ground
 736 snow load, P_g is calculated using Section 1608.1.2 as amended."

737 (9) IBC, Section 1608.2, is deleted and replaced with the following: "1608.2 Ground
 738 Snow Loads. The ground snow loads to be used in determining the design snow loads for roofs
 739 in states other than Utah are given in Figure 1608.2 for the contiguous United States and Table
 740 1608.2 for Alaska. Site-specific case studies shall be made in areas designated CS in figure
 741 1608.2. Ground snow loads for sites at elevations above the limits indicated in Figure 1608.2
 742 and for all sites within the CS areas shall be approved. Ground snow load determination for
 743 such sites shall be based on an extreme value statistical analysis of data available in the vicinity
 744 of the site using a value with a 2-percent annual probability of being exceeded (50-year mean
 745 recurrence interval). Snow loads are zero for Hawaii, except in mountainous regions as
 746 approved by the building official."

747 (10) A new IBC, Section 1613.1.1, is added as follows: "1613.1.1 ASCE 12.7.2 and

748 12.14.8.1 of Chapter 12 of ASCE 7 referenced in Section 1613.1, Definition of W, Item 4 is
749 deleted and replaced with the following:

750 4. Where the flat roof snow load, P_f , exceeds 30 psf, the snow load included in seismic design
751 shall be calculated, in accordance with the following formula: $W_s = (0.20 + 0.025(A-5))P_f$ is
752 greater than or equal to $0.20 P_f$.

753 WHERE:

754 W_s = Weight of snow to be included in seismic calculations

755 A = Elevation above sea level at the location of the structure (ft./1,000)

756 P_f = Design roof snow load, psf.

757 For the purposes of this section, snow load shall be assumed uniform on the roof footprint
758 without including the effects of drift or sliding. The Importance Factor, I, used in calculating P_f
759 may be considered 1.0 for use in the formula for W_s ."

760 (11) A new IBC, Section [~~1613.5~~] 1613.7, is added as follows: " [~~1613.5~~] 1613.7
761 ASCE 7, Section 13.5.6.2.2 paragraph (e) is modified to read as follows: (e) Penetrations shall
762 have a sleeve or adapter through the ceiling tile to allow for free movement of at least 1 inch
763 (25 mm) in all horizontal directions.

764 Exceptions:

- 765 1. Where rigid braces are used to limit lateral deflections.
- 766 2. At fire sprinkler heads in frangible surfaces per NFPA 13."

767 Section 10. Section **15A-3-108** is amended to read:

768 **15A-3-108. Amendments to Chapters 17 through 19 of IBC.**

769 (1) A new IBC, Section 1807.1.6.4, is added as follows: "1807.1.6.4 Empirical
770 concrete foundation design. Group R, Division 3 Occupancies three stories or less in height,
771 and Group U Occupancies, which are constructed in accordance with Section 2308, or with
772 other methods employing repetitive wood-frame construction or repetitive cold-formed steel
773 structural member construction, shall be permitted to have concrete foundations constructed in
774 accordance with Table 1807.1.6.4."

775 (2) A new IBC, Table 1807.1.6.4 is added as follows:

776 "TABLE 1807.1.6.4
777 EMPIRICAL FOUNDATION WALLS (1,7,8)

778	Max. Height	Top Edge Support	Min. Thickness	Vertical Steel (2)	Horizontal Steel (3)	Steel at Openings (4)	Max. Lintel Length	Min. Lintel Length
779	2'(610 mm)	None	6"	(5)	2- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
780	3'(914 mm)	None	6"	#4@32"	3- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
781	4'(1,219 mm)	None	6"	#4@32"	4- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	3'(914 mm)	2" for each foot of opening width; min. 6"
782	6'(1,829 mm)	Floor or roof Diaphragm (6)	8"	#4@24"	5- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
783	8'(2,438 mm)	Floor or roof Diaphragm (6)	8"	#4@24"	6- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
784	9'(2,743 mm)	Floor or roof Diaphragm (6)	8"	#4@16"	7- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
785	Over 9'(2,743 mm), Engineering required for each column							
786	Footnotes:							
787	(1) Based on 3,000 psi (20.6 Mpa) concrete and 60,000 psi (414 Mpa) reinforcing steel.							
788	(2) To be placed in the center of the wall, and extended from the footing to within three inches (76 mm) of the top of the wall; dowels of #4 bars to match vertical steel placement shall be provided in the footing, extending 24 inches (610 mm) into the foundation wall.							
789	(3) One bar shall be located in the top four inches (102 mm), one bar in the bottom four inches (102 mm) and the other bars equally spaced between. Such bar placement satisfies the requirements of Section 1805.9. Corner reinforcing shall be provided so as to lap 24 inches (610 mm).							

790 (4) Bars shall be placed within two inches (51 mm) of the openings and extend 24 inches
 (610 mm) beyond the edge of the opening; vertical bars may terminate three inches (76 mm)
 from the top of the concrete.

791 (5) Dowels of #4 bar at 32 inches on center shall be provided in the footing, extending 18
 inches (457 mm) into the foundation wall.

792 (6) Diaphragm shall conform to the requirements of Section 2308.

793 (7) Footing shall be a minimum of nine inches thick by 20 inches wide.

794 (8) Soil backfill shall be soil classification types GW, GP, SW, or SP, per Table 1610.1. Soil
 shall not be submerged or saturated in groundwater."

795 [~~(3) In IBC, Section 1904.2, a new exception 1 is added as follows and the current~~
 796 ~~exception is modified to be number 2.~~]

797 [Exceptions:]

798 ["~~1. In ACI Table 4.3.1, for Exposure Class F1, change Maximum w/cm from 0.45 to~~
 799 ~~0.5 and Minimum f_c from 4,500 psi to 3,000 psi."~~]

800 [(4)] (3) A new IBC, Section [~~1905.1.11~~] 1905.1.9, is added as follows: ["~~1905.1.11~~
 801 "1905.1.9 ACI 318, Table 4.2.1." Modify ACI 318, Table [~~4.2.1~~] 19.3.1.1 to read as follows:
 802 In the portion of the table designated as "Conditions", the following Exposure [~~categories~~]
 803 category and [~~classes are~~] class is deleted and replaced with the following:

804 "F0: Concrete elements not exposed to freezing and thawing cycles to include footing and
 805 foundation elements that are completely buried in soil."

806 [~~F1: Concrete elements exposed to freezing and thawing cycles and are not likely to be~~
 807 ~~saturated or exposed to deicing chemicals.~~]

808 [~~F2: Concrete elements exposed to freezing and thawing cycles and are likely to be saturated,~~
 809 ~~but not exposed to deicing chemicals.~~]

810 [~~F3: Concrete elements exposed to freezing and thawing cycles and are likely to be saturated~~
 811 ~~and exposed to deicing chemicals."~~]

812 Section 11. Section **15A-3-110** is amended to read:

813 **15A-3-110. Amendments to Chapters 23 through 25 of IBC.**

814 (1) A new IBC, Section 2306.1.5, is added as follows: "2306.1.5 Load duration factors.
 815 The allowable stress increase of 1.15 for snow load, shown in Table 2.3.2, Frequently Used

816 Load Duration Factors, Cd, of the National Design Specifications, shall not be utilized at
817 elevations above 5,000 feet (1,524 M)."

818 (2) In IBC, Section [~~2308.6~~] 2308.3.1, a new exception, 3, is added as follows:

819 "[~~Exception:~~] 3. Where foundation plates or sills are bolted or anchored to the foundation with
820 not less than 1/2 inch (12.7 mm) diameter steel bolts or approved anchors, embedded at least 7
821 inches (178 mm) into concrete or masonry and spaced not more than 32 inches (816 mm) apart,
822 there shall be a minimum of two bolts or anchor straps per piece located not less than 4 inches
823 (102 mm) from each end of each piece. A properly sized nut and washer shall be tightened on
824 each bolt to the plate."

825 (3) IBC, Section 2506.2.1, is deleted and replaced with the following: "2506.2.1 Other
826 materials. Metal suspension systems for acoustical and lay-in panel ceilings shall conform with
827 ASTM C635 listed in Chapter 35 and Section 13.5.6 of ASCE 7, as amended in Section
828 [~~+613.8~~] 1613.5, for installation in high seismic areas."

829 Section 12. Section **15A-3-112** is amended to read:

830 **15A-3-112. Amendments to Chapters 29 through 31 of IBC.**

831 (1) In IBC [P] Table 2902.1 the following changes are made:

832 (a) The title for [P] Table 2902.1 is deleted and replaced with the following: "[P] Table
833 2902.1, Minimum Number of Required Plumbing Facilities ^{a, h}".

834 (b) In the row for "E" occupancy in the field for "OTHER" a new footnote i is added.

835 (c) In the row for "I-4" occupancy in the field for "OTHER" a new footnote i is added.

836 (d) A new footnote h is added as follows: "FOOTNOTE: h. When provided, in public
837 toilet facilities there shall be an equal number of diaper changing facilities in male toilet rooms
838 and female toilet rooms."

839 (e) A new footnote i is added to the table as follows: "FOOTNOTE i: Non-residential
840 child care facilities shall comply with additional sink requirements of Utah Administrative
841 Code R430-100-4."

842 (2) In IBC, a new section, [P]2902.7, is added as follows:

843 "[P]2902.7 Toilet Facilities for Workers.

844 Toilet facilities shall be provided for construction workers and such facilities shall be
845 maintained in a sanitary condition. Construction worker toilet facilities of the nonsewer type
846 shall conform to ANSI Z4.3."

847 ~~[(2)]~~ (3) In IBC, Section 3006.5, a new exception is added as follows: "Exception:
848 Hydraulic elevators and roped hydraulic elevators with a rise of 50 feet or less."

849 Section 13. Section **15A-3-113** is amended to read:

850 **15A-3-113. Amendments to Chapters 32 through 35 of IBC.**

851 ~~[(1) A new section IBC, Section 3401.7, is added as follows: "3401.7 Parapet bracing,~~
852 ~~wall anchors, and other appendages. Until June 30, 2014, a building constructed before 1975~~
853 ~~shall have parapet bracing, wall anchors, and appendages such as cornices, spires, towers,~~
854 ~~tanks, signs, statuary, etc. evaluated by a licensed engineer when the building is undergoing~~
855 ~~structural alterations, which may include structural sheathing replacement of 10% or greater, or~~
856 ~~other structural repairs. Reroofing or water membrane replacement may not be considered a~~
857 ~~structural alteration or repair for purposes of this section. Beginning July 1, 2014, a building~~
858 ~~constructed before 1975 shall have parapet bracing, wall anchors, and appendages such as~~
859 ~~cornices, spires, towers, tanks, signs, statuary, etc. evaluated by a licensed engineer when the~~
860 ~~building is undergoing a total reroofing. Parapet bracing, wall anchors, and appendages~~
861 ~~required by this section shall be evaluated in accordance with 75% of the seismic forces as~~
862 ~~specified in Section 1613. When allowed by the local building official, alternate methods of~~
863 ~~equivalent strength as referenced in an approved code under Utah Code, Subsection~~
864 ~~15A-1-204(6)(a), will be considered when accompanied by engineer-sealed drawings, details,~~
865 ~~and calculations. When found to be deficient because of design or deteriorated condition, the~~
866 ~~engineer's recommendations to anchor, brace, reinforce, or remove the deficient feature shall be~~
867 ~~implemented.]~~

868 [Exceptions:]

869 [1. Group R-3 and U occupancies.]

870 [2. Unreinforced masonry parapets need not be braced according to the above stated provisions
871 provided that the maximum height of an unreinforced masonry parapet above the level of the
872 diaphragm tension anchors or above the parapet braces shall not exceed one and one-half times
873 the thickness of the parapet wall. The parapet height may be a maximum of two and one-half
874 times its thickness in other than Seismic Design Categories D, E, or F.]

875 ~~[(2) IBC, Section 3408.4, is deleted and replaced with the following: "3408.4 Seismic.~~
876 ~~When a change in occupancy results in a structure being reclassified to a higher Risk Category~~
877 ~~(as defined in Table 1604.5), or when such change of occupancy results in a design occupant~~

878 load increase of 100% or more, the structure shall conform to the seismic requirements for a
879 new structure.]

880 [Exceptions:]

881 [~~1. Specific seismic detailing requirements of this code or ASCE 7 for a new structure shall
882 not be required to be met where it can be shown that the level of performance and seismic
883 safety is equivalent to that of a new structure. A demonstration of equivalence analysis shall
884 consider the regularity, overstrength, redundancy, and ductility of the structure. Alternatively,
885 the building official may allow the structure to be upgraded in accordance with referenced
886 sections as found in an approved code under Utah Code, Subsection 15A-1-204(6)(a).]~~

887 [~~2. When a change of use results in a structure being reclassified from Risk Category I or II to
888 Risk Category III and the structure is located in a seismic map area where SDS is less than
889 0.33, compliance with the seismic requirements of this code and ASCE 7 are not required.]~~

890 [~~3. Where design occupant load increase is less than 25 occupants and the Risk Category does
891 not change."]~~

892 [~~(3)~~] (1) In IBC, Chapter 35, the referenced standard ICCA117.1-09, Section 606.2,
893 Exception 1 is modified to include the following sentence at the end of the exception:

894 "The minimum clear floor space shall be centered on the sink assembly."

895 [~~(4)~~] (2) The following referenced standard is added under UL in IBC, Chapter 35:

"Number	Title	Referenced in code section number
2034-2008	Standard of Single- and Multiple-station Carbon Monoxide Alarms	907.9"

898 Section 14. Section 15A-3-202 is amended to read:

899 **15A-3-202. Amendments to Chapters 1 through 5 of IRC.**

900 (1) In IRC, Section R102, a new Section R102.7.2 is added as follows: "R102.7.2
901 Physical change for bedroom window egress. A structure whose egress window in an existing
902 bedroom is smaller than required by this code, and that complied with the construction code in
903 effect at the time that the bedroom was finished, is not required to undergo a physical change to
904 conform to this code if the change would compromise the structural integrity of the structure or
905 could not be completed in accordance with other applicable requirements of this code,

906 including setback and window well requirements."

907 (2) In IRC, Section 109:

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

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

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

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

927 (5) In IRC, Section R202, the definition for "CONDITIONED SPACE" is modified by
928 deleting the words at the end of the sentence "being heated or cooled by any equipment or
929 appliance" and replacing them with the following: "enclosed within the building thermal
930 envelope that is directly heated or cooled, or indirectly heated or cooled by any of the following
931 means:

- 932 1. Openings directly into an adjacent conditioned space.
933 2. An un-insulated floor, ceiling or wall adjacent to a conditioned space.
934 3. Un-insulated duct, piping or other heat or cooling source within the space."

935 (6) In IRC, Section R202, the definition of "Cross Connection" is deleted and replaced
936 with the following: "CROSS CONNECTION. Any physical connection or potential

937 connection or arrangement between two otherwise separate piping systems, one of which
 938 contains potable water and the other either water of unknown or questionable safety or steam,
 939 gas, or chemical, whereby there exists the possibility for flow from one system to the other,
 940 with the direction of flow depending on the pressure differential between the two systems (see
 941 "Backflow, Water Distribution")."

942 (7) In IRC, Section 202, in the definition for gray water a comma is inserted after the
 943 word "washers"; the word "and" is deleted; and the following is added to the end: "and clear
 944 water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without
 945 objectionable odors; non-highly pigmented; and will not interfere with the operation of the
 946 sewer treatment facility."

947 (8) In IRC, Section R202, the definition of "Potable Water" is deleted and replaced
 948 with the following: "POTABLE WATER. Water free from impurities present in amounts
 949 sufficient to cause disease or harmful physiological effects and conforming to the Utah Code,
 950 Title 19, [~~Chapters~~] Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water
 951 Quality Act, and the regulations of the public health authority having jurisdiction."

952 (9) IRC, Figure R301.2(5), is deleted and replaced with Table R301.2(5a) and Table
 953 R301.2(5b) as follows:

"TABLE NO. R301.2(5a)				
STATE OF UTAH - REGIONAL SNOW LOAD FACTORS				
	COUNTY	Po	S	Ao
	Beaver	43	63	6.2
	Box Elder	43	63	5.2
	Cache	50	63	4.5
	Carbon	43	63	5.2
	Daggett	43	63	6.5
	Davis	43	63	4.5
	Duchesne	43	63	6.5
	Emery	43	63	6.0
	Garfield	43	63	6.0
	Grand	36	63	6.5

967	Iron	43	63	5.8
968	Juab	43	63	5.2
969	Kane	36	63	5.7
970	Millard	43	63	5.3
971	Morgan	57	63	4.5
972	Piute	43	63	6.2
973	Rich	57	63	4.1
974	Salt Lake	43	63	4.5
975	San Juan	43	63	6.5
976	Sanpete	43	63	5.2
977	Sevier	43	63	6.0
978	Summit	86	63	5.0
979	Tooele	43	63	4.5
980	Uintah	43	63	7.0
981	Utah	43	63	4.5
982	Wasatch	86	63	5.0
983	Washington	29	63	6.0
984	Wayne	36	63	6.5
985	Weber	43	63	4.5

TABLE NO. R301.2(5b)

REQUIRED SNOW LOADS FOR SELECTED UTAH CITIES AND TOWNS^{1,2}

The following jurisdictions require design snow load values that differ from the Equation in the Utah Snow Load Study.

County	City	Elevation	Ground Snow Load (psf)	Roof Snow Load (psf) ⁶
Carbon	Price ³	5550	43	30
	All other county locations ⁵	--	--	--
Davis	Fruit Heights ³	4500 - 4850	57	40

992	Emery	Green River ³	4070	36	25
993	Garfield	Panguitch ³	6600	43	30
994	Rich	Woodruff ³	6315	57	40
		Laketown ⁴	6000	57	40
		Garden City ⁵	--	--	--
		Randolph ⁴	6300	57	40
995	San Juan	Monticello ³	6820	50	35
996	Summit	Coalville ³	5600	86	60
		Kamas ⁴	6500	114	80
997	Tooele	Tooele ³	5100	43	30
998	Utah	Orem ³	4650	43	30
		Pleasant Grove ⁴	5000	43	30
		Provo ⁵	--	--	--
999	Wasatch	Heber ⁵	--	--	--
1000	Washington	Leeds ³	3460	29	20
		Santa Clara ³	2850	21	15
		St. George ³	2750	21	15
		All other county locations ⁵	--	--	--
1001	Wayne	Loa ³	7080	43	30
1002	1The IRC requires a minimum live load -- See R301.6.				
1003	2This table is informational only in that actual site elevations may vary. Table is only valid if site elevation is within 100 feet of the listed elevation. Otherwise, contact the local Building Official.				
1004	3Values adopted from Table VII of the Utah Snow Load Study				
1005	4Values based on site-specific study. Contact local Building Official for additional information.				
1006	5Contact local Building Official.				
1007	6Based on Ce =1.0, Ct =1.0 and Is =1.0"				

1008 (10) IRC, Section R301.6, is deleted and replaced with the following: "R301.6 Utah

1009 Snow Loads. The snow loads specified in Table R301.2(5b) shall be used for the jurisdictions
 1010 identified in that table. Otherwise, the ground snow load, P_g , to be used in the determination
 1011 of design snow loads for buildings and other structures shall be determined by using the
 1012 following formula: $P_g = (P_o^2 + S^2(A-A_o)^2)^{0.5}$ for A greater than A_o , and $P_g = P_o$ for A less
 1013 than or equal to A_o .

1014 WHERE:

1015 P_g = Ground snow load at a given elevation (psf);

1016 P_o = Base ground snow load (psf) from Table No. R301.2(5a);

1017 S = Change in ground snow load with elevation (psf/100 ft.) From Table No. R301.2(5a);

1018 A = Elevation above sea level at the site (ft./1,000);

1019 A_o = Base ground snow elevation from Table R301.2(5a) (ft./1,000).

1020 The building official may round the roof snow load to the nearest 5 psf. The ground snow
 1021 load, P_g , may be adjusted by the building official when a licensed engineer or architect submits
 1022 data substantiating the adjustments.

1023 Where the minimum roof live load in accordance with Table R301.6 is greater than the design
 1024 roof snow load, such roof live load shall be used for design, however, it shall not be reduced to
 1025 a load lower than the design roof snow load. Drifting need not be considered for roof snow
 1026 loads less than 20 psf."

1027 ~~[(11) In IRC, Section R302.2, the words "Exception: A" are deleted and replaced with~~
 1028 ~~the following:]~~

1029 [~~"Exceptions:~~

1030 [~~1. A common 2-hour fire-resistance-rated wall is permitted for townhouses if such walls do~~
 1031 ~~not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common~~
 1032 ~~wall. Electrical installation shall be installed in accordance with Chapters 34 through 43.~~
 1033 ~~Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.]~~

1034 [~~2. In buildings equipped with an automatic residential fire sprinkler system, a".]~~

1035 [~~(12) In IRC, Section R302.2.4, a new exception 6 is added as follows: "6.~~

1036 ~~Townhouses separated by a common 2-hour fire-resistance-rated wall as provided in Section~~
 1037 ~~R302.2."]~~

1038 [~~(13)~~ (11) In IRC, Section R302.5.1, the words "self-closing device" are deleted and
 1039 replaced with "self-latching hardware".

1040 (12) IRC, Section R302.13, is deleted.

1041 [~~(14)~~] (13) In IRC, Section R303.4, the number "5" is changed to "3" in the first
1042 sentence.

1043 [~~(15)~~] (14) IRC, Sections [~~R311.7.4~~] R311.7.5 through [~~R311.7.4.3~~] R311.7.5.3, are
1044 deleted and replaced with the following: [~~R311.7.4~~] "R311.7.5 Stair treads and risers.

1045 [~~R311.7.4.1~~] R311.7.5.1 Riser height. The maximum riser height shall be 8 inches (203 mm).
1046 The riser shall be measured vertically between leading edges of the adjacent treads. The
1047 greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8
1048 inch (9.5 mm).

1049 [~~R311.7.4.2~~] R311.7.5.2 Tread depth. The minimum tread depth shall be 9 inches (228 mm).

1050 The tread depth shall be measured horizontally between the vertical planes of the foremost
1051 projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread
1052 depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

1053 Winder treads shall have a minimum tread depth of 10 inches (254 mm) measured as above at
1054 a point 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall
1055 have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the
1056 greatest winder tread depth at the 12-inch (305 mm) walk line shall not exceed the smallest by
1057 more than 3/8 inch (9.5 mm).

1058 [~~R311.7.4.3~~] R311.7.5.3 Profile. The radius of curvature at the leading edge of the tread shall
1059 be no greater than 9/16 inch (14.3 mm). A nosing not less than 3/4 inch (19 mm) but not more
1060 than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing
1061 projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm)
1062 between two stories, including the nosing at the level of floors and landings. Beveling of
1063 nosing shall not exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped from the
1064 underside of the leading edge of the tread above at an angle not more than 30 degrees (0.51 rad)
1065 from the vertical. Open risers are permitted, provided that the opening between treads does not
1066 permit the passage of a 4-inch diameter (102 mm) sphere.

1067 Exceptions.

1068 1. A nosing is not required where the tread depth is a minimum of 10 inches (254 mm).

1069 2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches
1070 (762 mm) or less."

1071 [~~(16)~~ In IRC, Section R312.1.2, the words "adjacent fixed seating" are deleted.]

1072 [~~(17)~~] (15) IRC, Section R312.2, is deleted.

1073 [~~(18)~~] (16) IRC, Sections R313.1 through R313.2.1, are deleted and replaced with the
1074 following: "R313.1 Design and installation. When installed, automatic residential fire
1075 sprinkler systems for townhouses or one- and two-family dwellings shall be designed and
1076 installed in accordance with Section P2904 or NFPA 13D."

1077 (17) In IRC, Section 315.3, the following words are added to the first sentence after the
1078 word "installed": "on each level of the dwelling unit and".

1079 [~~(19)~~ A new] (18) In IRC, Section R315.5, a new exception, 3, is added as follows:

1080 [~~"R315.5 Power source. Carbon monoxide alarms shall receive their primary power from the~~
1081 ~~building wiring when such wiring is served from a commercial source, and when primary~~
1082 ~~power is interrupted, shall receive power from a battery. Wiring shall be permanent and~~
1083 ~~without a disconnecting switch other than those required for over-current protection.~~]

1084 [Exceptions:]

1085 [~~1. Carbon monoxide alarms shall be permitted to be battery operated when installed in~~
1086 ~~buildings without commercial power.~~]

1087 [2] "3. Hard wiring of carbon monoxide alarms in existing areas shall not be required where
1088 the alterations or repairs do not result in the removal of interior wall or ceiling finishes
1089 exposing the structure, unless there is an attic, crawl space or basement available which could
1090 provide access for hard wiring, without the removal of interior finishes."

1091 [~~(20)~~] (19) A new IRC, Section [~~R315.6~~] R315.7, is added as follows: "[~~R315.6~~]

1092 R315.7 Interconnection. Where more than one carbon monoxide alarm is required to be
1093 installed within an individual dwelling unit in accordance with Section R315.1, the alarm
1094 devices shall be interconnected in such a manner that the actuation of one alarm will activate
1095 all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be
1096 required where listed wireless alarms are installed and all alarms sound upon activation of one
1097 alarm.

1098 Exception: Interconnection of carbon monoxide alarms in existing areas shall not be required
1099 where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing
1100 the structure, unless there is an attic, crawl space or basement available which could provide
1101 access for interconnection without the removal of interior finishes."

1102 [~~(21)~~] (20) In IRC, Section R403.1.6, a new Exception [4] 3 is added as follows: "[4] 3.
 1103 When anchor bolt spacing does not exceed 32 inches (813 mm) apart, anchor bolts may be
 1104 placed with a minimum of two bolts per plate section located not less than 4 inches (102 mm)
 1105 from each end of each plate section at interior bearing walls, interior braced wall lines, and at
 1106 all exterior walls."

1107 [~~(22)~~] (21) In IRC, Section R403.1.6.1, a new exception is added at the end of Item 2
 1108 and Item 3 as follows: "Exception: When anchor bolt spacing does not exceed 32 inches (816
 1109 mm) apart, anchor bolts may be placed with a minimum of two bolts per plate section located
 1110 not less than 4 inches (102 mm) from each end of each plate section at interior bearing walls,
 1111 interior braced wall lines, and at all exterior walls."

1112 [~~(23)~~] (22) In IRC, Section R404.1, a new exception is added as follows: "Exception:
 1113 As an alternative to complying with Sections R404.1 through R404.1.5.3, concrete and
 1114 masonry foundation walls may be designed in accordance with IBC Sections 1807.1.5 and
 1115 1807.1.6 as amended in Section 1807.1.6.4 and Table 1807.1.6.4 under these rules."

1116 [~~(24) IRC, Section R501.3, is deleted.~~]

1117 Section 15. Section **15A-3-203** is amended to read:

1118 **15A-3-203. Amendments to Chapters 6 through 15 of IRC.**

1119 (1) In IRC, Section [~~N1101.8~~] N1101.5 (R103.2), all words after the words "herein
 1120 governed." are deleted and replaced with the following: "Construction documents include all
 1121 documentation required to be submitted in order to issue a building permit."

1122 (2) In IRC, Section [~~N1101.14~~] N1101.12 (R303.3), all wording after the first sentence
 1123 is deleted.

1124 (3) In IRC, Section N1101.13 (R401.2), add Exception as follows:

1125 "Exception: A project complies if the project demonstrates compliance with "10 percent better
 1126 than code" using the software RESCheck 2012 Utah Energy Conservation Code."

1127 [~~(3)~~] (4) In IRC, Table [~~N1102.1.1~~] (R402.1.1) and Table N1102.1.3 (R402.1.3), the
 1128 rows for "~~climate zone 3~~", "~~climate zone 5 and Marine 4~~", and "~~climate zone 6~~" are deleted and
 1129 ~~replaced and~~ N1102.2 (R402.1.2), in the column titled MASS WALL R-VALUE, a new
 1130 footnote j is added as follows:

1131 "j. Log walls complying with ICC400 and with a minimum average wall thickness of 5 inches
 1132 or greater shall be permitted in Zones 5 through 8 when overall window glazing has a .31

1133 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil),
 1134 and all other component requirements are met."

1135 [

"TABLE N1102.1.1 (R402.1.1)										
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT ^a										
CLIMATE ZONE	FENESTRATION U-FACTOR ^b	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^{c,m}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ⁿ	FLOOR R-VALUE	BASEMENT ^e WALL R-VALUE	SLAB ^f R-VALUE & DEPTH	CRAWL SPACE ^e WALL R-VALUE
3	0.65	0.65	0.40	30	15	5	19	0	0	5/13
5 and Marine 4	0.35	0.60	NR	38	19 or 13+ ^h	13	30 ^e	10/13	10, 2 ft	10/13
6	0.35	0.60	NR	49	19 or 13+ ^h	15	30 ^e	10/13	10, 4 ft	10/13

^hj. Log walls complying with ICC400 and with a minimum average wall thickness of 5" or greater shall be permitted in Zones 5-8 when overall window glazing is .31 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil), and all other component requirements are met.¹¹

1143

TABLE N1102.1.3 (R402.1.3)										
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1144

EQUIVALENT U-FACTORS ^a										
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1145

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR ^b	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
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1146

3	0.65	0.65	0.035	0.082	0.141	0.047	0.360	0.136
---	------	------	-------	-------	-------	-------	-------	-------

1147

5 and Marine 4	0.35	0.60	0.030	0.060	0.082	0.033	0.059	0.065
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1148

6	0.35	0.60	0.026	0.060	0.060	0.033	0.059	0.065
---	------	------	-------	-------	-------	-------	-------	-------

1149] [~~(4)~~ In IRC, Section N1102.2.1 (R402.2.1), the last sentence is deleted.]

1150 [~~(5)~~ In IRC, Section N1102.2.2 (R402.2.2), the last sentence is deleted.]

1151 [~~(6)~~ In IRC, Section N1102.3.3 (R402.3.3), the last sentence is deleted.]

1152 [~~(7)~~ In IRC, Section N1102.3.4 (R402.3.4), the last sentence is deleted.]

1153 [~~(8)~~ (5) In IRC, Section N1102.4.1 (R402.4.1), in the first sentence, the word "and" is
 1154 deleted and replaced with the word "or".

1155 [~~(9)~~ (6) In IRC, Section N1102.4.1.1 (R402.4.1.1), the last sentence is deleted and
 1156 replaced with the following: "Where allowed by the [building] code official, the builder may

1157 certify compliance to components criteria for items which may not be inspected during
1158 regularly scheduled inspections."

1159 ~~[(10)]~~ (7) In IRC, Section N1102.4.1.2 (R402.4.1.2), the following changes are made:

1160 (a) In the first sentence, the words "in Climate Zones 1 and 2, and ~~[3]~~ three air changes
1161 per hour in ~~[Zone]~~ Climate Zones 3 through 8" are deleted.

1162 (b) In the third sentence, ~~[the words "Where required by the building official," and]~~ the
1163 word "third" ~~[are]~~ is deleted.

1164 (c) The following sentence is inserted after the third sentence: "The following parties
1165 shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed
1166 contractors who have completed training provided by Blower Door Test equipment
1167 manufacturers or other comparable training."

1168 ~~[(11) In IRC, Section N1102.4.4 (R402.4.4), the last sentence is deleted.]~~

1169 ~~[(12) In IRC, Section N1103.2.2 (R403.2.2), the requirements for total leakage testing
1170 are deleted and replaced with the following:]~~

1171 ~~["1. Postconstruction test: Total leakage shall be less than or equal to 10 cfm (283
1172 L/min) per 100 square feet (9.29 m2) of conditioned floor space when tested at a pressure
1173 differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air
1174 handler enclosure. All register boots shall be taped or otherwise sealed during the test.]~~

1175 ~~[2. Rough-in test: Total leakage shall be less than or equal to 10 cfm (283 L/min) per
1176 100 square feet (9.29 m2) of conditioned floor area when tested at a pressure differential of at
1177 least 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler
1178 enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is
1179 not installed at the time of the test, total leakage shall be less than or equal to 7.5 cfm (212
1180 L/min) per 100 square feet (9.29 m2) of conditioned floor area."]~~

1181 ~~[(13)]~~ (8) In IRC, Section ~~[N1103.2.2 (R403.2.2)]~~ N1103.3.3 (R403.3.3), the exception
1182 for ~~[total]~~ duct air leakage testing is deleted and replaced with the following: "Exception: The
1183 ~~[total]~~ duct air leakage test is not required for systems with all air handlers and at least ~~[50%]~~
1184 65% of all ducts (measured by length) located entirely within the building thermal envelope."

1185 (9) In IRC, Section N1103.3.3 (R403.3.3), the following is added after the exception:
1186 "The following parties shall be approved to conduct testing: Parties certified by BPI or
1187 RESNET, or licensed contractors who have completed either training provided by Duct Test

1188 equipment manufacturers or other comparable training."

1189 (10) In IRC, Section N1103.3.4 (R403.3.4), in Subsection 1, the number 4 is changed
 1190 to 6, the number 113.3 is changed to 170, the number 3 is changed to 5, the number 85 is
 1191 changed to 114.6, and in Subsection 2, the number 4 is changed to 8 and the number 113.3 is
 1192 changed to 226.5.

1193 ~~[(14)]~~ (11) In IRC, Section ~~[N1103.2.3 (R403.2.3)]~~ N1103.3.5 (R403.3.5), the words
 1194 "or plenums" are deleted.

1195 ~~[(15) In IRC, Section N1103.4.2 (R403.4.2), the sentences for "3.", "9.", and the last~~
 1196 ~~sentence are deleted.]~~

1197 ~~[(16) In IRC, Section N1103.5 (R403.5), the first sentence is deleted.]~~

1198 ~~[(17) IRC, Section N1104.1 (R404.1) and the exception are deleted, and N1104.1.1~~
 1199 ~~(R404.1.1) becomes N1104.1 (R404.1).]~~

1200 ~~[(18) In IRC, Table N1105.5.2(1) (R405.5.2(1)), the following changes are made under~~
 1201 ~~the column STANDARD REFERENCE DESIGN:]~~

1202 ~~[(a) In the row "Air exchange rate", the words "in Zones 1 and 2, and 3 air changes per~~
 1203 ~~hour in Zones 3 through 8" are deleted.]~~

1204 ~~[(b) In the row "Heating systems^{f,g}", the standard reference design is deleted and~~
 1205 ~~replaced with the following:]~~

1206 ~~["Fuel Type: same as proposed design]~~

1207 ~~[Efficiencies:]~~

1208 ~~[Electric: air source heat pump with prevailing federal minimum efficiencies]~~

1209 ~~[Nonelectric furnaces: natural gas furnace with prevailing federal minimum~~
 1210 ~~efficiencies]~~

1211 ~~[Nonelectric boilers: natural gas boiler with prevailing federal minimum efficiencies]~~

1212 ~~[Capacity: sized in accordance with Section N1103.6"]~~

1213 ~~[(c) In the row "Cooling systems^{f,h}" the words "As proposed" are deleted and replaced~~
 1214 ~~with the following:]~~

1215 ~~["Fuel Type: Electric]~~

1216 ~~[Efficiency: in accordance with prevailing federal minimum standards"]~~

1217 ~~[(d) In the row "Service water heating^{f,g,h,i}", the words "As proposed" are deleted and~~
 1218 ~~replaced with the following:]~~

1219 [~~"Fuel Type: same as proposed design]~~
 1220 [~~Efficiency: in accordance with prevailing federal minimum standards]~~
 1221 [~~Tank Temperature: 120° F"]~~
 1222 [(e) In the row "Thermal distribution systems" the word "none" is deleted and replaced
 1223 with the following: "Thermal distribution system efficiency (DSE) of .080 shall be applied to
 1224 both the heating and cooling system efficiencies."
 1225 [(19) In Table N1105.5.2(2) (R405.5.2(2)), the number "0.80" is inserted under
 1226 "Forced air systems" for "Distribution system components located in unconditioned space".]
 1227 (12) In IRC, Section N1106.2 (R406.2), the last sentence and exception are deleted.
 1228 (13) In IRC, Section N1106.4 (R406.4), the table is deleted and replaced with the
 1229 following:

1230 TABLE N1106.4 (R406.4)

1231 MAXIMUM ENERGY RATING INDEX

<u>CLIMATE ZONE</u>	<u>ENERGY RATING INDEX</u>
1	59
2	59
3	65
4	63
5	69
6	68
7	60
8	60

1241 [(20)] (14) In IRC, Section M1307.2, the words "In Seismic Design Categories [~~D1~~ and
 1242 ~~D2~~]" D0, D1, and D2, and in townhouses in Seismic Design Category C", are deleted, and in
 1243 Subparagraph 1, the last sentence is deleted.

1244 [(21) ~~The RESCheck Software adopted by the United States Department of Energy and~~
 1245 ~~modified to meet the requirements of this section shall be used to verify compliance with this~~
 1246 ~~section. The software shall address the Total UA alternative approach and account for~~
 1247 ~~Equipment Efficiency Trade-offs when applicable per the standard reference design as~~
 1248 ~~amended.~~]

1249 [~~(22)~~] (15) IRC, Section [~~M1411.6~~] M1411.8, is deleted. Section 16. Section **15A-3-204**
1250 is amended to read:

1251 **15A-3-204. Amendments to Chapters 16 through 25 of IRC.**

1252 [~~(1) In IRC, Table M1601.1.1(2), in the section "Round ducts and enclosed rectangular~~
1253 ~~ducts", the word "enclosed" is deleted; the words "14 inches or less" are deleted and replaced~~
1254 ~~with "over 8 inches but less than 15 inches"; the wording "8 inches or less" under duct size,~~
1255 ~~"0.013" under minimum thickness (in.), "30" under equivalent gage no., and "0.0159" under~~
1256 ~~aluminum minimum thickness (in.), are added; and the section "Exposed rectangular ducts" is~~
1257 ~~deleted.]~~

1258 [~~(2) In IRC, Section M1901.3, the word "only" is inserted between the words "labeled"~~
1259 ~~and "for".]~~

1260 [(~~3~~)] A new IRC, Section G2401.2, is added as follows: "G2401.2 Meter Protection.
1261 Fuel gas services shall be in an approved location and/or provided with structures designed to
1262 protect the fuel gas meter and surrounding piping from physical damage, including falling,
1263 moving, or migrating ice and snow. If an added structure is used, it must provide access for
1264 service and comply with the IBC or the IRC."

1265 Section 17. Section **15A-3-205** is amended to read:

1266 **15A-3-205. Amendments to Chapters 26 through 35 of IRC.**

1267 (1) A new IRC, Section P2602.3, is added as follows: "P2602.3 Individual water
1268 supply. Where a potable public water supply is not available, individual sources of potable
1269 water supply shall be utilized, provided that the source has been developed in accordance with
1270 Utah Code, Sections [73-3-1](#) and [73-3-25](#), as administered by the Department of Natural
1271 Resources, Division of Water Rights. In addition, the quality of the water shall be approved by
1272 the local health department having jurisdiction."

1273 (2) A new IRC, Section P2602.4, is added as follows: "P2602.4 Sewer required. Every
1274 building in which plumbing fixtures are installed and all premises having drainage piping shall
1275 be connected to a public sewer where the sewer is accessible and is within 300 feet of the
1276 property line in accordance with Utah Code, Section [10-8-38](#); or an approved private sewage
1277 disposal system in accordance with Utah Administrative Code, Chapter 4, Rule R317, as
1278 administered by the Department of Environmental Quality, Division of Water Quality."

1279 (3) In IRC, Section [~~P2801.7~~] P2801.8, all words in the first sentence up to the word

1280 "water" are deleted.

1281 (4) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly
 1282 testing. The premise owner or ~~[his]~~ the premise owner's designee shall have backflow
 1283 prevention assemblies operation tested in accordance with administrative rules made by the
 1284 Drinking Water Board at the time of installation, repair, and relocation and at least on an
 1285 annual basis thereafter, or more frequently as required by the authority having jurisdiction.
 1286 Testing shall be performed by a Certified Backflow Preventer Assembly Tester. The
 1287 assemblies that are subject to this paragraph are the Spill Resistant Vacuum Breaker, the
 1288 Pressure Vacuum Breaker Assembly, the Double Check Backflow Prevention Assembly, the
 1289 Double Check Detector Assembly Backflow Preventer, the Reduced Pressure Principle
 1290 Backflow Preventer, and Reduced Pressure Detector Assembly. Third-party certification for
 1291 backflow prevention assemblies will consist of any combination of two certifications,
 1292 laboratory or field. Acceptable third-party laboratory certifying agencies are ASSE, IAPMO,
 1293 and USC-FCCCHR. USC-FCCCHR currently provides the only field testing of backflow
 1294 protection assemblies. Also see www.drinkingwater.utah.gov and rules made by the Drinking
 1295 Water Board."

1296 [~~(5) IRC, Table P2902.3, is deleted and replaced with the following:~~]

1297 [

"DEVICE	DEGREE OF HAZARD ^a	APPLICATION ^b	APPLICABLE STANDARDS
BACKFLOW PREVENTION ASSEMBLIES:			
Double check backflow prevention assembly and double check fire protection backflow prevention assembly	Low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1015, AWWA C510, CSA B64.5, CSA B64.5.1
Double check detector fire protection backflow prevention assemblies	Low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1048

1302	Pressure vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2" - 2"	ASSE 1020, CSA B64.1.2
1303	Reduced pressure principle backflow prevention assembly and reduced pressure principle fire protection backflow assembly	High or low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1013, AWWA C511, CSA B64.4, CSA B64.4.1
1304	Reduced pressure detector fire protection backflow prevention assemblies	High or low hazard	Backpressure or backsiphonage (Fire Sprinkler Systems)	ASSE 1047
1305	Spill-resistant vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2" - 2"	ASSE 1056
1306	BACKFLOW PREVENTER PLUMBING DEVICES:			
1307	Antisiphon-type fill valves for gravity water closet flush tanks	High hazard	Backsiphonage only	ASSE 1002, CSA B125.3
1308	Backflow preventer for carbonated beverage machines	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 3/8"	ASSE 1022
1309	Backflow preventer with intermediate atmospheric vents	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 3/8"	ASSE 1012, CSA B64.3
1310	Dual check valve type backflow preventers	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 1"	ASSE 1024, CSA B64.6
1311	Hose connection backflow preventer	High or low hazard	Backsiphonage only Sizes 1/2" - 1"	ASSE 1052, CSA B64.2, B64.2.1

1312	Hose connection vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/2", 3/4", 1"	ASSE 1011, CAN/CSA B64.1.1
1313	Atmospheric type vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/2" - 4"	ASSE 1001, CSA B64.1.1
1314	Vacuum breaker wall hydrants, frost resistant, automatic draining type	High or low hazard	Backsiphonage only Sizes 3/4", 1"	ASSE 1019, CSA B64.2.2
1315	OTHER MEANS or METHODS:			
1316	Air gap	High or low hazard	Backsiphonage only	ASME A112.1.2
1317	Air gap fittings for use with plumbing fixtures, appliances and appurtenances	High or low hazard	Backpressure or backsiphonage	ASME A112.1.3
1318	For SI: 1 inch = 25.4 mm			
1319	a. Low Hazard - See Pollution (Section 202), High Hazard - See Contamination (Section 202)			
1320	b. See Backpressure (Section 202), See Backpressure, low head (Section 202), See Backsiphonage Section 202)			
1321	Installation Guidelines: The above specialty devices shall be installed in accordance with their listing and the manufacturer's instructions and the specific provisions of this chapter."			

1322] [(6) In IRC, Section P3009.1, all words after the word "urinals" are deleted and the
 1323 following sentence is added at the end: "Gray water recycling systems for subsurface landscape
 1324 irrigation shall conform with UAC R317-401 Gray Water Systems."]

1325 [(7) A new IRC, Section P3009.1.1, is added as follows: "P3009.1.1 Recording. The
 1326 existence of a gray water recycling system shall be recorded on the deed of ownership for that
 1327 property. The certificate of occupancy shall not be issued until the documentation of the
 1328 recording required under this section is completed by the owner."]

1329 [(8) In IRC, Section P3009.2, the words "and systems for subsurface landscape
 1330 irrigation shall comply with Section P3009.14" are deleted.]

1331 [~~(9) IRC, Section P3009.6, is deleted and replaced with the following: "P3009.6~~
1332 ~~Potable water connections. The potable water supply to any building utilizing a gray water~~
1333 ~~recycling system shall be protected against backflow by a reduced pressure backflow~~
1334 ~~prevention assembly installed in accordance with Section P2902."]~~

1335 [~~(10) In IRC, Section P3009.7, the following is added at the end of the sentence: "and~~
1336 ~~other clear water wastes which have a pH of 6.0 to 9.0; are non-flammable, non-combustible;~~
1337 ~~without objectionable odor; non-highly pigmented; and will not interfere with the operation of~~
1338 ~~the sewer treatment facility."]~~

1339 [~~(11) In IRC, Section P3009.13.3, in the second sentence, the following is added~~
1340 ~~between the words "backflow" and "in": "by a reduced pressure backflow prevention assembly~~
1341 ~~or an air gap installed".]~~

1342 [~~(12) IRC, Section P3009.14, is deleted and replaced with the following: "Section~~
1343 ~~P3009.14 LANDSCAPE IRRIGATION SYSTEMS. Gray water recycling systems utilized for~~
1344 ~~subsurface irrigation for single family residences shall comply with the requirements of UAC~~
1345 ~~R317-401, Gray Water Systems. Gray water recycling systems utilized for subsurface~~
1346 ~~irrigation for other occupancies shall comply with UAC R317-3, Design Requirements for~~
1347 ~~Wastewater Collection, Treatment and Disposal and UAC R317-4, Onsite Waterwaste~~
1348 ~~Systems."]~~

1349 (5) In IRC, Section P2902.1, the following subsections are added as follows:

1350 "P2902.1.1 General Installation Criteria.

1351 Assemblies shall not be installed more than five feet above the floor unless a permanent
1352 platform is installed. The assembly owner, where necessary, shall provide devices or structures
1353 to facilitate testing, repair, and maintenance, and to insure the safety of the backflow
1354 technician.

1355 P2902.1.2 Specific Installation Criteria.

1356 P2902.1.2.1 Reduced Pressure Principle Blackflow Prevention Assembly.

1357 The reduced pressure principle backflow prevention assembly shall be installed as
1358 follows:

1359 a. The assembly may not be installed in a pit.

1360 b. The relief valve of the assembly shall not be directly connected to a waste disposal line,
1361 including a sanitary sewer, a storm drain, or a vent.

1362 c. The assembly shall be installed in a horizontal position only, unless listed or approved for
1363 vertical installation in accordance with Section 303.4.

1364 d. The bottom of the assembly shall be installed a minimum of 12 inches above the floor or
1365 ground.

1366 e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or
1367 obstacle, and shall be readily accessible for testing, repair, and maintenance.

1368 P2902.1.2.2 Double Check Valve Backflow Prevention Assembly.

1369 A double check valve backflow prevention assembly shall be installed as follows:

1370 a. The assembly shall be installed in a horizontal position only, unless listed or approved for
1371 vertical installation.

1372 b. The bottom of the assembly shall be a minimum of 12 inches above the ground or floor.

1373 c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or
1374 obstacle, and shall be readily accessible for testing, repair, and maintenance.

1375 d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance
1376 between all sides of the vault, including the floor and roof or ceiling, with adequate room for
1377 testing and maintenance.

1378 P2902.1.2.3 Pressure Vacuum Break Assembly and Spill Resistant Pressure Vacuum Breaker
1379 Assembly.

1380 A pressure vacuum break assembly or a spill resistant pressure vacuum breaker assembly shall
1381 be installed as follows:

1382 a. The assembly shall not be installed in an area that could be subject to backpressure or back
1383 drainage conditions.

1384 b. The assembly shall be installed a minimum of 12 inches above all downstream piping and
1385 the highest point of use.

1386 c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall
1387 be readily accessible for testing, repair, and maintenance.

1388 d. The assembly shall not be installed below ground, in a vault, or in a pit.

1389 e. The assembly shall be installed in a vertical position."

1390 (6) IRC, Section P2910.5, is deleted and replaced with the following:

1391 "P2910.5 Potable water connections.

1392 When a potable water system is connected to a nonpotable water system, the potable water

1393 system shall be protected against backflow by a reduced pressure backflow prevention
1394 assembly or an air gap installed in accordance with Section 2901."

1395 (7) IRC, Section P2910.9.5, is deleted and replaced with the following:

1396 "P2910.9.5 Makeup water.

1397 Where an uninterrupted nonpotable water supply is required for the intended application,
1398 potable or reclaimed water shall be provided as a source of makeup water for the storage tank.
1399 The makeup water supply shall be protected against backflow by means of an air gap not less
1400 than 4 inches (102 millimeters) above the overflow or by a reduced pressure backflow
1401 prevention assembly installed in accordance with Section 2902."

1402 (8) In IRC, Section P2911.12.4, the following words are deleted: "and backwater
1403 valves".

1404 (9) In IRC, Section P2912.15.6, the following words are deleted: "and backwater
1405 valves".

1406 (10) In IRC, Section P2913.4.2, the following words are deleted: "and backwater
1407 valves".

1408 (11) IRC, Section P3009, is deleted and replaced with the following:

1409 "P3009 Connected to nonpotable water from on-site water reuse systems.

1410 Nonpotable systems utilized for subsurface irrigation for single-family residences shall comply
1411 with the requirements of R317-401, UAC, Gray Water Systems."

1412 ~~[(13)]~~ (12) In IRC, Section P3103.6, the following sentence is added at the end of the
1413 paragraph: "Vents extending through the wall shall terminate not less than 12 inches from the
1414 wall with an elbow pointing downward."

1415 ~~[(14)]~~ (13) In IRC, Section P3104.4, the following sentence is added at the end of the
1416 paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain
1417 and floor sink installations when installed below grade in accordance with Chapter 30, and
1418 Sections P3104.2 and P3104.3. A wall cleanout shall be provided in the vertical vent."

1419 Section 18. Section **15A-3-206** is amended to read:

1420 **15A-3-206. Amendments to Chapters 36 and 44 of IRC.**

1421 (1) In IRC, Section E3901.9, the following exception is added:

1422 "Exception: Receptacles or other outlets adjacent to the exterior walls of the garage, outlets
1423 adjacent to an exterior wall of the garage, or outlets in a storage room with entry from the

1424 garage may be connected to the garage branch circuit."

1425 [(+) (2) In IRC, Section [~~E3902.12~~] E3902.16, the following words are deleted:

1426 "family rooms, dining rooms, living rooms, parlors, libraries, dens, sunrooms, recreation
1427 rooms, closets, hallways, and similar rooms or areas.

1428 Exception: This section does not apply for a simple move or an extension of a branch circuit or
1429 an outlet which does not significantly increase the existing electrical load. This exception does
1430 not include changes involving remodeling or additions to a residence."

1431 [(2)] (3) 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"

1434 Section 19. Section **15A-3-302** is amended to read:

1435 **15A-3-302. Amendments to Chapters 1 and 2 of IPC.**

1436 (1) A new IPC, Section [~~101.2~~] 101.2.1, is added as follows: "For clarification, the
1437 International Private Sewage Disposal Code is not part of the plumbing code even though it is
1438 in the same printed volume."

1439 (2) In IPC, Section 202, the definition for "Backflow Backpressure, Low Head" is
1440 deleted.

1441 (3) In IPC, Section 202, the following definition is added: "Certified Backflow
1442 Preventer Assembly Tester. A person who has shown competence to test Backflow prevention
1443 assemblies to the satisfaction of the authority having jurisdiction under Utah Code, Subsection
1444 19-4-104(4)."

1445 (4) In IPC, Section 202, the following definition is added: "Contamination (High
1446 Hazard). An impairment of the quality of the potable water that creates an actual hazard to the
1447 public health through poisoning or through the spread of disease by sewage, industrial fluids or
1448 waste."

1449 (5) In IPC, Section 202, the definition for "Cross Connection" is deleted and replaced

1450 with the following: "Cross Connection. Any physical connection or potential connection or
1451 arrangement between two otherwise separate piping systems, one of which contains potable
1452 water and the other either water of unknown or questionable safety or steam, gas, or chemical,
1453 whereby there exists the possibility for flow from one system to the other, with the direction of
1454 flow depending on the pressure differential between the two systems (see "Backflow")."

1455 (6) In IPC, Section 202, the following definition is added: "Deep Seal Trap. A
1456 manufactured or field fabricated trap with a liquid seal of 4" or larger."

1457 ~~[(7) In IPC, Section 202, in the definition for gray water a comma is inserted after the
1458 word "washers"; the word "and" is deleted, and the following is added to the end: "and clear
1459 water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without
1460 objectionable odors; non-highly pigmented; and will not interfere with the operation of the
1461 sewer treatment facility."]~~

1462 (7) In IPC, Section 202, the definition for "Essentially Nontoxic Transfer Fluid" is
1463 deleted and replaced with the following:

1464 "ESSENTIALLY NONTOXIC TRANSFER FLUID. Fluids having a Gosselin rating of 1,
1465 including propylene glycol; and mineral oil."

1466 (8) In IPC, Section 202, the definition for "Essentially Toxic Transfer Fluid" is deleted
1467 and replaced with the following:

1468 "ESSENTIALLY TOXIC TRANSFER FLUID. Soil, waste, or gray water; and any fluid that is
1469 not an essentially nontoxic transfer fluid under this code."

1470 ~~[(8)]~~ (9) In IPC, Section 202, the following definition is added: "High Hazard. See
1471 Contamination."

1472 ~~[(9)]~~ (10) In IPC, Section 202, the following definition is added: "Low Hazard. See
1473 Pollution."

1474 ~~[(10)]~~ (11) In IPC, Section 202, the following definition is added: "Pollution (Low
1475 Hazard). An impairment of the quality of the potable water to a degree that does not create a
1476 hazard to the public health but that does adversely and unreasonably affect the aesthetic
1477 qualities of such potable water for domestic use."

1478 ~~[(11)]~~ (12) In IPC, Section 202, the definition for "Potable Water" is deleted and
1479 replaced with the following: "Potable Water. Water free from impurities present in amounts
1480 sufficient to cause disease or harmful physiological effects and conforming to the Utah Code,

1481 Title 19, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and
1482 the regulations of the public health authority having jurisdiction."

1483 Section 20. Section **15A-3-303** is amended to read:

1484 **15A-3-303. Amendments to Chapter 3 of IPC.**

1485 (1) In IPC, Section 303.4, the following exception is added:

1486 "Exception: Third-party certification for backflow prevention assemblies will consist of any
1487 combination of two certifications, laboratory or field. Acceptable third party laboratory
1488 certifying agencies are ASSE, IAPMO, and USC-FCCCHR. USC-FCCCHR currently
1489 provides the only field testing of backflow protection assemblies. Also see
1490 www.drinkingwater.utah.gov and Division of Drinking Water Rule, Utah Administrative Code,
1491 R309-305-6."

1492 [~~(2) IPC, Section 304.3, Meter Boxes, is deleted.~~]

1493 (2) IPC, Section 307.5, Protection of footings, is deleted.

1494 (3) IPC, Section 311.1, is deleted.

1495 (4) In IPC, Section 312.3, the following is added at the end of the paragraph:

1496 "Where water is not available at the construction site or where freezing conditions limit
1497 the use of water on the construction site, plastic drainage and vent pipe may be permitted to be
1498 tested with air. The following procedures shall be followed:

1499 1. Contractor shall recognize that plastic is extremely brittle at lower temperatures and can
1500 explode, causing serious injury or death.

1501 2. Contractor assumes all liability for injury or death to persons or damage to property or for
1502 claims for labor and/or material arising from any alleged failure of the system during testing
1503 with air or compressed gasses.

1504 3. Proper personal protective equipment, including safety eyewear and protective headgear,
1505 should be worn by all individuals in any area where an air or gas test is being conducted.

1506 4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.

1507 5. No [~~water supply~~] drain and vent system shall be pressurized in excess of 6 psi as measured
1508 by accurate gauges graduated to no more than three times the test pressure.

1509 6. The pressure gauge shall be monitored during the test period, which should not exceed 15
1510 minutes.

1511 7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or

1512 gases should be vented, and test balls and plugs should be removed with caution."

1513 (5) In IPC, Section 312.5, the following is added at the end of the paragraph:

1514 "Where water is not available at the construction site or where freezing conditions limit the use
1515 of water on the construction site, plastic water pipes may be permitted to be tested with air.

1516 The following procedures shall be followed:

1517 1. Contractor shall recognize that plastic is extremely brittle at lower temperatures and can
1518 explode, causing serious injury or death.

1519 2. Contractor assumes all liability for injury or death to persons or damage to property or for
1520 claims for labor and/or material arising from any alleged failure of the system during testing
1521 with air or compressed gasses.

1522 3. Proper personal protective equipment, including safety eyewear and protective headgear,
1523 should be worn by all individuals in any area where an air or gas test is being conducted.

1524 4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.

1525 5. Water supply systems shall be pressure tested to a minimum of 50 psi but not more than 80
1526 psi as measured by accurate gauges graduated to no more than three times the test pressure.

1527 6. The pressure gauge shall be monitored during the test period, which should not exceed 15
1528 minutes.

1529 7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or
1530 gases should be vented, and test balls and plugs should be removed with caution."

1531 (6) A new IPC, Section 312.10.3, is added as follows: "312.10.3 Tester Qualifications.
1532 Testing shall be performed by a Utah Certified Backflow Preventer Assembly Tester in
1533 accordance with Utah Administrative Code, R309-305."

1534 Section 21. Section **15A-3-304** is amended to read:

1535 **15A-3-304. Amendments to Chapter 4 of IPC.**

1536 (1) In IPC, Table 403.1, the following changes are made:

1537 (a) The title for Table 403.1 is deleted and replaced with the following: "Table 403.1,
1538 Minimum Number of Required Plumbing [~~Facilities^{a, h}]~~ Fixtures_{a, h}";

1539 (b) In [~~the~~] row [~~for~~] number "3", for "E" occupancy₂ in the field for "OTHER"₂, a new
1540 footnote [*i*] g is added.

1541 (c) In [~~the~~] row number "5", for "I-4 Adult day care and child day care" occupancy₂ in
1542 the field for "OTHER"₂, a new footnote [*i*] g is added.

1543 (d) A new footnote [h] f is added as follows: "FOOTNOTE: [h] f. When provided, in
1544 public toilet facilities, there shall be an equal number of diaper changing facilities in male toilet
1545 rooms and female toilet rooms. Diaper changing facilities shall meet the requirements of
1546 ASTM F2285-04 (2010) Standard Consumer Safety Performance Specifications for Diaper
1547 Changing Tables for Commercial Use."

1548 (e) A new footnote [i] g is added to the table as follows: "FOOTNOTE [i] g:
1549 Non-residential child care facilities shall comply [~~with additional sink requirements of Utah~~
1550 ~~Administrative Code R430-100-4.~~] with the additional requirements for sinks in administrative
1551 rule made by the Department of Health."

1552 (2) A new IPC, Section 406.3, is added as follows: " 406.3 Automatic clothes washer
1553 safe pans. Safe pans, when installed under automatic clothes washers, shall be installed in
1554 accordance with Section 504.7."

1555 (3) A new IPC, Section 412.5, is added as follows: "412.5 Public toilet rooms. All
1556 public toilet rooms in A & E occupancies and M occupancies with restrooms having multiple
1557 water closets or urinals shall be equipped with at least one floor drain."

1558 (4) IPC, Section 423.3, is deleted.

1559 Section 22. Section **15A-3-305** is amended to read:

1560 **15A-3-305. Amendments to Chapter 5 of IPC.**

1561 (1) IPC, Section 502.4, is deleted and replaced with the following: "502.4 Seismic
1562 supports. [~~Appliances designed to be fixed in position shall be fastened or anchored in an~~
1563 ~~approved manner. Water]~~ As a minimum requirement, water heaters shall be anchored or
1564 strapped to resist horizontal displacement caused by earthquake motion. Strapping shall be at
1565 points within the upper one-third and lower one-third of the appliance's vertical dimensions.
1566 [~~At the lower point, the strapping shall maintain a minimum distance of 4 inches (102 mm)~~
1567 ~~above the controls.]"~~

1568 (2) In IPC, Section 504.7.2, the following is added at the end of the section: "When
1569 permitted by the code official, the pan drain may be directly connected to a soil stack, waste
1570 stack, or branch drain. The pan drain shall be individually trapped and vented as required in
1571 Section 907.1. The pan drain shall not be directly or indirectly connected to any vent. The trap
1572 shall be provided with a trap primer conforming to ASSE 1018 or ASSE 1044, a barrier type
1573 floor drain trap seal protection device meeting ASSE 1072, or a deep seal p-trap."

1574 (3) A new IPC, Section 504.7.3, is added as follows: "504.7.3 Pan Designation. A
1575 water heater pan shall be considered an emergency receptor designated to receive the discharge
1576 of water from the water heater only and shall not receive the discharge from any other fixtures,
1577 devises, or equipment."

1578 Section 23. Section **15A-3-306** is amended to read:

1579 **15A-3-306. Amendments to Chapter 6 of IPC.**

1580 (1) IPC, Section 602.3, is deleted and replaced with the following: "602.3 Individual
1581 water supply. Where a potable public water supply is not available, individual sources of
1582 potable water supply shall be utilized provided that the source has been developed in
1583 accordance with Utah Code, Sections [73-3-1](#), [73-3-3](#), and [73-3-25](#), as administered by the
1584 Department of Natural Resources, Division of Water Rights. In addition, the quality of the
1585 water shall be approved by the local health department having jurisdiction. The source shall
1586 supply sufficient quantity of water to comply with the requirements of this chapter."

1587 (2) IPC, Sections 602.3.1, 602.3.2, 602.3.3, 602.3.4, 602.3.5, and 602.3.5.1, are
1588 deleted.

1589 (3) A new IPC, Section 604.4.1, is added as follows: "604.4.1 Manually operated
1590 metering faucets for food service establishments. Self closing or manually operated metering
1591 faucets shall provide a flow of water for at least 15 seconds without the need to reactivate the
1592 faucet."

1593 (4) IPC, Section 606.5, is deleted and replaced with the following: "606.5 Water
1594 pressure booster systems. Water pressure booster systems shall be provided as required by
1595 Section 606.5.1 through 606.5.11."

1596 (5) A new IPC, Section 606.5.11, is added as follows: "606.5.11 Prohibited
1597 installation. In no case shall a booster pump be allowed that will lower the pressure in the
1598 public main to less than the minimum water pressure specified in Utah Administrative Code
1599 R309-105-9."

1600 (6) In IPC, Section 608.1, the words "and pollution" are added after the word
1601 "contamination."

1602 [~~(7) IPC, Table 608.1, is deleted and replaced with the following:~~]

1603 [

1604	"TABLE 608.1			
1605	Application of Back Flow Preventers			
1606	DEVICE	DEGREE OF HAZARD ^a	APPLICATION ^b	APPLICABLE STANDARDS
1607	BACKFLOW PREVENTION ASSEMBLIES:			
1608	Double check backflow prevention assembly and double check fire protection backflow prevention assembly	Low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1015, AWWA C510, CSA B64.5, CSA B64.5.1
1609	Double check detector fire protection backflow prevention assemblies	Low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1048
1610	Pressure vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2" - 2"	ASSE 1020, CSA B64.1.2
1611	Reduced pressure principle backflow prevention assembly and reduced pressure principle fire protection backflow assembly	High or low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1013, AWWA C511, CSA B64.4, CSA B64.4.1
1612	Reduced pressure detector fire protection backflow prevention assemblies	High or low hazard	Backpressure or backsiphonage (Fire Sprinkler Systems)	ASSE 1047
1613	Spill-resistant vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2" - 2"	ASSE 1056
1614	BACKFLOW PREVENTER PLUMBING DEVICES:			

1615	Antisiphon-type fill valves for gravity water closet flush tanks	High hazard	Backsiphonage only	ASSE 1002, CSA B125.3
1616	Backflow preventer for carbonated beverage machines	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 3/8"	ASSE 1022
1617	Backflow preventer with intermediate atmospheric vents	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 3/8"	ASSE 1012, CSA B64.3
1618	Dual check valve type backflow preventers	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 1"	ASSE 1024, CSA B64.6
1619	Hose connection backflow preventer	High or low hazard	Backsiphonage only Sizes 1/2" - 1"	ASSE 1052, CSA B64.2, B64.2.1
1620	Hose connection vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/2", 3/4", 1"	ASSE 1011, CAN/CSA B64.1.1
1621	Atmospheric type vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/2" - 4"	ASSE 1001, CSA B64.1.1
1622	Vacuum breaker wall hydrants, frost resistant, automatic draining type	High or low hazard	Backsiphonage only Sizes 3/4", 1"	ASSE 1019, CSA B64.2.2
1623	OTHER MEANS or METHODS:			
1624	Air gap	High or low hazard	Backsiphonage only	ASME A112.1.2
1625	Air gap fittings for use with plumbing fixtures, appliances and appurtenances	High or low hazard	Backpressure or backsiphonage	ASME A112.1.3
1626	For SI: 1 inch = 25.4 mm			

1627 ~~a. Low Hazard - See Pollution (Section 202), High Hazard - See Contamination (Section 202)~~

1628 ~~b. See Backpressure (Section 202), See Backpressure, low head (Section 202), See Backsiphonage (Section 202)~~

1629 ~~Installation Guidelines: The above specialty devices shall be installed in accordance with their listing and the manufacturer's instructions and the specific provisions of this chapter."~~

1630] (7) In IPC, Section 608.1, the following subsections are added as follows:

1631 "608.1.1 General Installation Criteria.

1632 An assembly shall not be installed more than five feet above the floor unless a permanent
1633 platform is installed. The assembly owner, where necessary, shall provide devices or structures
1634 to facilitate testing, repair, and maintenance and to insure the safety of the backflow technician.

1635 608.1.2 Specific Installation Criteria.

1636 608.1.2.1 Reduced Pressure Principle Backflow Prevention Assembly.

1637 A reduced pressure principle backflow prevention assembly shall be installed as follows:

1638 a. The assembly shall not be installed in a pit.

1639 b. The relief valve of the assembly shall not be directly connected to a waste disposal line,
1640 including a sanitary sewer, storm drain, or vent.

1641 c. The assembly shall be installed in a horizontal position, unless the assembly is listed or
1642 approved for vertical installation in accordance with Section 303.4.

1643 d. The bottom of each assembly shall be installed a minimum of 12 inches above the ground or
1644 the floor.

1645 e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or
1646 obstacle, and shall be readily accessible for testing, repair, and maintenance.

1647 608.1.2.2 Double Check Valve Backflow Prevention Assembly.

1648 A double check valve backflow prevention assembly shall be installed as follows:

1649 a. The assembly shall be installed in a horizontal position unless the assembly is listed or
1650 approved for vertical installation.

1651 b. The bottom of the assembly shall be a minimum of 12 inches above the ground or the floor.

1652 c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or
1653 obstacle, and shall be readily accessible for testing, repair, and maintenance.

1654 d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance

1655 around all sides of the vault, including the floor and roof or ceiling, with adequate room for
1656 testing and maintenance.

1657 608.1.2.3 Pressure Vacuum Break Assembly and Spill Resistant Pressure Vacuum Breaker
1658 Assembly.

1659 A pressure vacuum break assembly and spill resistant pressure vacuum breaker assembly shall
1660 be installed as follows:

1661 a. The assembly shall not be installed in an area that could be subject to backpressure or back
1662 drainage conditions.

1663 b. The assembly shall be installed a minimum of 12 inches above all downstream piping and
1664 the highest point of use.

1665 c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall
1666 be readily accessible for testing, repair, and maintenance.

1667 d. The assembly shall not be installed below ground or in a vault or pit.

1668 e. The assembly shall be installed in a vertical position."

1669 (8) In IPC, Section 608.3, the word "and" after the word "contamination" is deleted and
1670 replaced with a comma and the words "and pollution" are added after the word "contamination"
1671 in the first sentence.

1672 (9) In IPC, Section 608.5, the words "with the potential to create a condition of either
1673 contamination or pollution or" are added after the word "substances".

1674 (10) In IPC, Section 608.6, the following sentence is added at the end of the paragraph:
1675 "Any connection between potable water piping and sewer-connected waste shall be protected
1676 by an air gap in accordance with Section 608.13.1."

1677 (11) IPC, Section 608.7, is deleted and replaced with the following: "608.7 Stop and
1678 Waste Valves installed below grade. Combination stop-and-waste valves shall be permitted to
1679 be installed underground or below grade. Freeze proof yard hydrants that drain the riser into
1680 the ground are considered to be stop-and-waste valves and shall be permitted. A
1681 stop-and-waste valve shall be installed in accordance with a manufacturer's recommended
1682 installation instructions."

1683 (12) In IPC, Section 608.11, the following sentence is added at the end of the
1684 paragraph: "The coating and installation shall conform to NSF Standard 61 and application of
1685 the coating shall comply with the manufacturer's instructions."

1686 (13) IPC, Section 608.13.3, is deleted and replaced with the following: "608.13.3
1687 Backflow preventer with intermediate atmospheric vent. Backflow preventers with
1688 intermediate atmospheric vents shall conform to ASSE 1012 or CSA CAN/CSA-B64.3. These
1689 devices shall be permitted to be installed on residential boilers only, without chemical
1690 treatment, where subject to continuous pressure conditions. The relief opening shall discharge
1691 by air gap and shall be prevented from being submerged."

1692 (14) IPC, Section 608.13.4, is deleted.

1693 (15) IPC, Section 608.13.9, is deleted and replaced with the following: "608.13.9
1694 Chemical dispenser backflow devices. Backflow devices for chemical dispensers shall comply
1695 with Section 608.16.7."

1696 (16) IPC, Section 608.15.3, is deleted and replaced with the following: "608.15.3
1697 Protection by a backflow preventer with intermediate atmospheric vent. Connections to
1698 residential boilers only, without chemical treatment, shall be protected by a backflow preventer
1699 with an intermediate atmospheric vent."

1700 (17) IPC, Section 608.15.4, is deleted and replaced with the following: "608.15.4
1701 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type
1702 or pressure-type vacuum breakers. Vacuum breakers shall not be installed under exhaust hoods
1703 or similar locations that will contain toxic fumes or vapors. Fill valves shall be set in
1704 accordance with Section 425.3.1. Atmospheric Vacuum Breakers - The critical level of the
1705 atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above the flood
1706 level rim of the fixture or device. Pipe-applied vacuum breakers shall be installed not less than
1707 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served. No
1708 valves shall be installed downstream of the atmospheric vacuum breaker. Pressure Vacuum
1709 Breaker - The critical level of the pressure vacuum breaker shall be set a minimum of 12 inches
1710 (304 mm) above the flood level of the fixture or device."

1711 (18) In IPC, Section 608.15.4.2, the following is added after the first sentence:
1712 "Add-on-backflow prevention devices shall be non-removable. In climates where freezing
1713 temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow
1714 preventer shall be used."

1715 (19) IPC, Section 608.16.2, is deleted and replaced as follows: "608.16.2 Connections
1716 to boilers. The potable supply to a boiler shall be protected by an air gap or a reduced pressure

1717 principle backflow preventer, complying with ASSE 1013, CSA B64.4 or AWWA C511.
1718 Exception: The potable supply to a residential boiler without chemical treatment may be
1719 equipped with a backflow preventer with an intermediate atmospheric vent complying with
1720 ASSE 1012 or CSA CAN/CSA-B64.3."

1721 ~~[(20) IPC, Section 608.16.3, is deleted and replaced with the following: "608.16.3 Heat~~
1722 ~~exchangers. Heat exchangers shall be separated from potable water by double-wall~~
1723 ~~construction. An air gap open to the atmosphere shall be provided between the two walls.]~~

1724 [Exceptions:]

1725 [1. ~~Single wall heat exchangers shall be permitted when all of the following conditions are~~
1726 ~~met:]~~

1727 [a. ~~It utilizes a heat transfer medium of potable water or contains only substances which are~~
1728 ~~recognized as safe by the United States Food and Drug Administration (FDA);]~~

1729 [b. ~~The pressure of the heat transfer medium is maintained less than the normal minimum~~
1730 ~~operating pressure of the potable water system; and]~~

1731 [c. ~~The equipment is permanently labeled to indicate only additives recognized as safe by the~~
1732 ~~FDA shall be used.;~~

1733 [2. ~~Steam systems that comply with paragraph 1 above.;~~

1734 [3. ~~Approved listed electrical drinking water coolers."]~~

1735 [(21)] (20) In IPC, Section 608.16.4.1, a new exception is added as follows:

1736 "Exception: All class 1 and 2 systems containing chemical additives consisting of strictly
1737 glycerine (C.P. or U.S.P. 96.5 percent grade) or propylene glycol shall be protected against
1738 backflow with a double check valve assembly. Such systems shall include written certification
1739 of the chemical additives at the time of original installation and service or maintenance."

1740 [(22)] (21) IPC, Section 608.16.7, is deleted and replaced with the following: "608.16.7
1741 Chemical dispensers. Where chemical dispensers connect to the water distribution system, the
1742 water supply system shall be protected against backflow in accordance with Section 608.13.1,
1743 Section 608.13.2, Section 608.13.5, Section 608.13.6 or Section 608.13.8. Installation shall be
1744 in accordance with Section 608.1.2. Chemical dispensers shall connect to a separate dedicated
1745 water supply [separate from any] line, and not a sink faucet."

1746 [(23)] (22) IPC, Section 608.16.8, is deleted and replaced with the following: "608.16.8
1747 Portable cleaning equipment. Where the portable cleaning equipment connects to the water

1748 distribution system, the water supply system shall be protected against backflow in accordance
 1749 with Section 608.13.1[;] or Section 608.13.2 [~~or Section 608.13.8~~]."

1750 [~~(24)~~] (23) A new IPC, Section 608.16.11, is added as follows: "608.16.11 Automatic
 1751 and coin operated car washes. The water supply to an automatic or coin operated car wash
 1752 shall be protected in accordance with Section 608.13.1 or Section 608.13.2."

1753 [~~(25)~~] (24) IPC, Section 608.17, is deleted and replaced with the following: "608.17
 1754 Protection of individual water supplies. See Section 602.3 for requirements."

1755 Section 24. Section **15A-3-308** is amended to read:

1756 **15A-3-308. Amendments to Chapter 8 of IPC.**

1757 [~~IPC, Chapter 8, is not amended.~~]

1758 In IPC, Section 802.1.1, the last sentence is deleted.

1759 Section 25. Section **15A-3-310** is amended to read:

1760 **15A-3-310. Amendments to Chapter 10 of IPC.**

1761 [~~In IPC, Section 1002.4, the following is added at the end of the paragraph: "Approved
 1762 Means of Maintaining Trap Seals. Approved means of maintaining trap seals include the
 1763 following, but are not limited to the methods cited:]~~

1764 [~~1. A listed trap seal primer conforming to ASSE 1018 and ASSE 1044.]~~

1765 [~~2. A hose bibb or bibbs within the same room.]~~

1766 [~~3. Drainage from an untrapped lavatory discharging to the tailpiece of those fixture
 1767 traps which require priming. All fixtures shall be in the same room and on the same floor level
 1768 as the trap primer.]~~

1769 [~~4. Barrier type floor drain trap seal protection device meeting ASSE Standard 1072.]~~

1770 [~~5. Deep seal p-trap".]~~

1771 IPC, Chapter 10, is not amended.

1772 Section 26. Section **15A-3-311** is amended to read:

1773 **15A-3-311. Amendments to Chapter 11 of IPC.**

1774 [~~(1) IPC, Section 1104.2, is deleted and replaced with the following: "1104.2~~

1775 ~~Combining storm and sanitary drainage prohibited. The combining of sanitary and storm
 1776 drainage systems is prohibited."~~

1777 (1) A new IPC, Section 1106.1.1, is added as follows:

1778 "1106.1.1 Alternate Methods.

1779 An approved alternate storm drain sizing method may be allowed."

1780 (2) IPC, Section 1109, is deleted.

1781 Section 27. Section **15A-3-313** is amended to read:

1782 **15A-3-313. Amendments to Chapter 13 of IPC.**

1783 [~~(1) In IPC, Section 1301.1, all words after the word "urinals" are deleted and the~~
1784 ~~following sentence is added at the end: "Gray water recycling systems for subsurface landscape~~
1785 ~~irrigation shall conform with UAC R317-401 Gray Water Systems."~~]

1786 [~~(2) A new IPC, Section 1301.1.1, is added as follows: "1301.1.1 Recording. The~~
1787 ~~existence of a gray water recycling system shall be recorded on the deed of ownership for that~~
1788 ~~property. The certificate of occupancy shall not be issued until the documentation of the~~
1789 ~~recording required under this section is completed by the owner."~~]

1790 [~~(3) In IPC, Section 1301.2, the words "and systems for subsurface landscape irrigation~~
1791 ~~shall comply with Section 1303" are deleted.]~~

1792 [~~(4) IPC, Section 1301.6, is deleted and replaced with the following: "1301.6 Potable~~
1793 ~~water connections. The potable water supply to any building utilizing a gray water recycling~~
1794 ~~system shall be protected against backflow by a reduced pressure backflow prevention~~
1795 ~~assembly installed in accordance with Section 608."~~]

1796 [~~(5) In IPC, Section 1301.7, the following is added at the end of the sentence: "and~~
1797 ~~other clear water wastes which have a pH of 6.0 to 9.0; are non-flammable, non-combustible;~~
1798 ~~without objectionable odor; non-highly pigmented; and will not interfere with the operation of~~
1799 ~~the sewer treatment facility."~~]

1800 [~~(6) In IPC, Section 1302.3, in the second sentence, the following is added between the~~
1801 ~~words "backflow" and "in": "by a reduced pressure backflow prevention assembly or an air gap~~
1802 ~~installed".]~~

1803 [~~(7) IPC, Section 1303, is deleted and replaced with the following: "Section 1303~~
1804 ~~SUBSURFACE LANDSCAPE IRRIGATION SYSTEMS. Gray water recycling systems~~
1805 ~~utilized for subsurface irrigation for single family residences shall comply with the~~
1806 ~~requirements of UAC R317-401, Gray Water Systems. Gray water recycling systems utilized~~
1807 ~~for subsurface irrigation for other occupancies shall comply with UAC R317-3, Design~~
1808 ~~Requirements for Wastewater Collection, Treatment and Disposal and UAC R317-4, Onsite~~
1809 ~~Waterwaste Systems."~~]

1810 (1) A new IPC, Section 1301.4.1, is added as follows:

1811 "1301.4.1 Recording.

1812 The existence of a nonpotable water system shall be recorded on the deed of ownership for the
1813 property. The certificate of occupancy shall not be issued until the documentation for the
1814 recording required under this section is completed by the property owner."

1815 (2) IPC, Section 1301.5, is deleted and replaced with the following:

1816 "1301.5 Potable water connections.

1817 Where a potable water system is connected to a nonpotable water system, the potable water
1818 supply shall be protected against backflow by a reduced pressure backflow prevention
1819 assembly or an air gap installed in accordance with Section 608."

1820 (3) IPC, Section 1301.9.5, is deleted and replaced with the following:

1821 "1301.9.5 Makeup water.

1822 Where an uninterrupted supply is required for the intended application, potable or reclaimed
1823 water shall be provided as a source of makeup water for the storage tank. The makeup water
1824 supply shall be protected against backflow by a reduced pressure backflow prevention
1825 assembly or an air gap installed in accordance with Section 608. A full-open valve located on
1826 the makeup water supply line to the storage tank shall be provided. Inlets to the storage tank
1827 shall be controlled by fill valves or other automatic supply valves installed to prevent the tank
1828 from overflowing and to prevent the water level from dropping below a predetermined point.
1829 Where makeup water is provided, the water level shall not be permitted to drop below the
1830 source water inlet or the intake of any attached pump."

1831 (4) IPC, Section 1302.12.4, is deleted and replaced with the following:

1832 "1302.12.4 Inspection and testing of backflow prevention assemblies.

1833 Testing of a backflow preventer shall be conducted in accordance with Sections 312.10.1,
1834 312.10.2, and 312.10.3."

1835 (5) IPC, Section 1303.15.6, is deleted and replaced with the following:

1836 "1303.15.6 Inspection and testing of backflow prevention assemblies.

1837 Testing of a backflow prevention assembly shall be conducted in accordance with Sections
1838 312.10.1, 312.10.2, and 312.10.3."

1839 (6) IPC, Section 1304.4.2, is deleted and replaced with the following:

1840 "1304.4.2 Inspection and testing of backflow prevention assemblies.

1841 Testing of a backflow preventer or backwater valve shall be conducted in accordance with
 1842 Sections 312.10.1, 312.10.2, and 312.10.3."

1843 Section 28. Section **15A-3-314** is amended to read:

1844 **15A-3-314. Amendments to Chapter 14 of IPC.**

1845 [~~(1) In IPC, Chapter 14, the following referenced standard is added under ASSE:]~~

1846 [

"Standard reference number	Title	Referenced in code section number
1072-2007	Performance Requirements for Barrier Type Floor Drain Trap Seal Protection Devices	1004.2"

1849] [~~(2) In IPC, Chapter 14, the following referenced standard is added:]~~

1850 [

"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 608.1"

1853] IPC, Chapter 14, is deleted and replaced with the following:

1854 "1401. Subsurface Landscape Irrigation Systems.

1855 Gray water recycling systems utilized for subsurface irrigation for single-family residences

1856 shall comply with the requirements of UAC R317-401, Gray Water Systems. Gray water

1857 recycling systems utilized for subsurface irrigation for other occupancies shall comply with

1858 UAC R317-3, Design Requirements for Wastewater Collection, Treatment, and Disposal, and

1859 UAC R317-4, Onsite Waterwaste Systems."

1860 Section 29. Section **15A-3-315** is enacted to read:

1861 **15A-3-315. Amendments to Chapter 15 of IPC.**

1862 In IPC, Chapter 15, the following referenced standard is added:

1863	<u>"Standard reference number</u>	<u>Title</u>	<u>Referenced in code section number</u>
1864	<u>USC-FCCCHR 10th Edition Manual of Cross Connection Control</u>	<u>Foundation for Cross-Connection Control and Hydraulic Research University of Southern California Kaprielian Hall 300 Los Angeles CA 90089-2531</u>	<u>Table 608.1"</u>

1865 Section 30. Section **15A-3-401** is amended to read:

1866 **15A-3-401. General provisions.**

1867 The following are adopted as amendments to the IMC to be applicable statewide:

1868 [~~(1) In IMC, Section 202, the definition for "CONDITIONED SPACE" is deleted and~~
 1869 ~~replaced with the following: "CONDITIONED SPACE. An area, room, or space enclosed~~
 1870 ~~within the building thermal envelope that is directly heated or cooled, or indirectly heated or~~
 1871 ~~cooled by any of the following means:]~~

1872 [~~1. Openings directly into an adjacent conditioned space.]~~

1873 [~~2. An un-insulated floor, ceiling or wall adjacent to a conditioned space.]~~

1874 [~~3. Un-insulated duct, piping or other heat or cooling source within the space."]~~

1875 [(2) In IMC, Section 403.2.1, Item 3, is deleted and replaced with the following:

1876 "Except as provided in Table 403.3, Note h, where mechanical exhaust is required by Note b in
 1877 Table 403.3, recirculation of air from such spaces is prohibited. All air supplied to such spaces
 1878 shall be exhausted, including any air in excess of that required by Table 403.3."

1879 [(3) In IMC, Table 403.3, Note b, is deleted and replaced with the following: "Except
 1880 as provided in Note h, mechanical exhaust required and the recirculation of air from such
 1881 spaces is prohibited (see Section 403.2.1, Item 3)."]

1882 [(4) In IMC, Table 403.3, Note h is deleted and replaced with the following:]

1883 ["1. For a nail salon where a nail technician files or shapes an acrylic nail, as defined
 1884 by rule by the Division of Occupational and Professional Licensing, in accordance with Title
 1885 63G, Chapter 3, Utah Administrative Rulemaking Act, each nail station where a nail technician
 1886 files or shapes an acrylic nail shall be provided with:]

1887 [a. a source capture system capable of filtering and recirculating air to inside space not

1888 less than 50 cfm per station; or]

1889 [b. a source capture system capable of exhausting not less than 50 cfm per station."]

1890 [2. Except as provided in paragraph 3, the requirements described in paragraph 1 apply
1891 beginning on July 1, 2020.]

1892 [3. The requirements described in paragraph 1 apply beginning on July 1, 2014 if the
1893 nail salon is under or begins new construction or remodeling on or after July 1, 2014.]

1894 [(5) In IMC, Section 403, a new Section 403.8 is added as follows: "Retrospective
1895 effect. Removal, alteration, or abandonment shall not be required, and continued use and
1896 maintenance shall be allowed, for a ventilation system within an existing installation that
1897 complies with the requirements of this Section 403 regardless of whether the ventilation system
1898 satisfied the minimum ventilation rate requirements of prior law."]

1899 [(6) In IMC, Table 603.4, in the section "Round ducts and enclosed rectangular ducts",
1900 the word "enclosed" is deleted; the words "14 inches or less" are deleted and replaced with
1901 "over 8 inches but less than 15 inches"; the wording "8 inches or less" under duct size, "0.013"
1902 under minimum thickness (in.), "30" under equivalent gage no., and "0.0159" under aluminum
1903 minimum thickness (in.), are added; and the section "Exposed rectangular ducts" is deleted.]

1904 [(7)] (1) In IMC, Section 1004.2, the first sentence is deleted and replaced with the
1905 following: "[Boilers] In accordance with Title 34A, Chapter 7, Safety, and requirements made
1906 by rule by the Labor Commission, boilers and pressure vessels in Utah are regulated by the
1907 Utah Labor Commission, Division of Boiler, Elevator and Coal Mine Safety, except those
1908 located in private residences or in apartment houses of less than five family units. Boilers shall
1909 be installed in accordance with their listing and labeling, with minimum clearances as
1910 prescribed by the manufacturer's installation instructions and the state boiler code, whichever is
1911 greater."

1912 [(8)] (2) In IMC, Section 1004.3.1, the word "unlisted" is inserted before the word
1913 "boilers".

1914 [(9)] (3) IMC, Section 1101.10, is deleted.

1915 (4) In IMC, Section 1209.3, the following words are added at the end of the section:
1916 "or other methods approved for the application."

1917 Section 31. Section 15A-3-501 is amended to read:

1918 **15A-3-501. General provisions.**

1919 The following are adopted as an amendment to the IFGC to be applicable statewide:

1920 (1) In IFGC, Section 404.9, a new Section 404.9.1, is added as follows: "404.9.1 Meter
1921 protection. Fuel gas services shall be in an approved location and/or provided with structures
1922 designed to protect the fuel gas meter and surrounding piping from physical damage, including
1923 falling, moving, or migrating ice and snow. If an added structure is used, it must still provide
1924 access for service and comply with the IBC or the IRC."

1925 (2) IFGC, Section 409.5.3, is deleted.

1926 (3) In IFGC, Section 631.2, the following sentence is inserted before the first sentence:
1927 "[~~Boilers~~] In accordance with Title 34A, Chapter 7, Safety, and requirements made by rule by
1928 the Labor Commission, boilers and pressure vessels in Utah are regulated by the Utah Labor
1929 Commission, Division of Boiler, Elevator and Coal Mine Safety, except those located in
1930 private residences or in apartment houses of less than five family units. Boilers shall be
1931 installed in accordance with their listing and labeling, with minimum clearances as prescribed
1932 by the manufacturer's installation instructions and the state boiler code, whichever is greater."

1933 Section 32. Section **15A-3-601** is amended to read:

1934 **15A-3-601. General provision.**

1935 The following are adopted as amendments to the NEC to be applicable statewide:

1936 (1) The IRC provisions are adopted as the residential electrical standards applicable to
1937 installations applicable under the IRC. All other installations shall comply with the adopted
1938 NEC.

1939 [~~(2) In NEC, Section 310.15(B)(7), the second sentence is deleted and replaced with~~
1940 ~~the following: "For application of this section, the main power feeder shall be the feeder(s)~~
1941 ~~between the main disconnect and the panelboard(s)."~~]

1942 (2) NEC, Section 240.87(B), is modified to add the following as an additional
1943 approved equivalent means:

1944 "6. An instantaneous trip function set at or below the available fault current."

1945 Section 33. Section **15A-3-701** is amended to read:

1946 **15A-3-701. General provisions.**

1947 The following is adopted as an amendment to the IECC to be applicable statewide:

1948 [~~(1) In IECC, Section C202, the definition for "CONDITIONED SPACE" is deleted~~
1949 ~~and replaced with the following: "CONDITIONED SPACE. An area, room or space enclosed~~

1950 within the building thermal envelope that is directly heated or cooled, or indirectly heated or
1951 cooled by any of the following means:]

1952 [1. ~~Openings directly into an adjacent conditioned space.~~]

1953 [2. ~~An un-insulated floor, ceiling or wall adjacent to a conditioned space.~~]

1954 [3. ~~Un-insulated duct, piping or other heat or cooling source within the space.~~"]

1955 [(2) ~~In IECC, Section C404.4, a new exception is added as follows: "Exception: Heat~~
1956 ~~traps, other than the arrangement of piping and fittings, shall be prohibited unless a means of~~
1957 ~~controlling thermal expansion can be ensured as required in the IPC Section 607.3."~~]

1958 (1) In IECC, Section C403.2.9.1.3, the words "by the designer" are deleted.

1959 [(3)] (2) In IECC, Section R103.2, all words after the words "herein governed." are
1960 deleted and replaced with the following: "Construction documents include all documentation
1961 required to be submitted in order to issue a building permit."

1962 [(4) ~~In IECC, Section R202, the definition for "CONDITIONED SPACE" is deleted~~
1963 ~~and replaced with the following: "CONDITIONED SPACE. An area, room or space enclosed~~
1964 ~~within the building thermal envelope that is directly heated or cooled, or indirectly heated or~~
1965 ~~cooled by any of the following means:]~~

1966 [1. ~~Openings directly into an adjacent conditioned space.~~]

1967 [2. ~~An un-insulated floor, ceiling or wall adjacent to a conditioned space.~~]

1968 [3. ~~Un-insulated duct, piping or other heat or cooling source within the space.~~"]

1969 [(5)] (3) In IECC, Section R303.3, all wording after the first sentence is deleted.

1970 (4) In IECC, Section R401.2, a new number 4 is added as follows:

1971 "4. Compliance may be shown by demonstrating a result of "10 percent better than code" using
1972 the RESCheck "2012 Utah Energy Conservation Code.""

1973 [(6)] (5) In IECC, Table [R402.1.1 and Table R402.1.3, the rows for "climate zone 3",
1974 "climate zone 5 and Marine 4, and climate zone 6" are deleted and replaced and] R402.2, in the
1975 column entitled MASS WALL R-VALUE, a new footnote j is added as follows:

1976 [

"TABLE R402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT ^a

1977

1978

1979	CLIMATE ZONE	FENESTRATION U-FACTOR ⁷	SKYLIGHT ⁸ U-FACTOR	GLAZED FENESTRATION SHGC ^{7a}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ^{7b}	FLOOR R-VALUE	BASEMENT ^c WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE ^e WALL R-VALUE
1980	3	0.65	0.65	0.40	30	15	5	19	0	0	5/13
1981	5 and Marine 4	0.35	0.60	NR	38	19 or 13 + 5 ^{7b}	13	30 ^{7c}	10/13	10, 2 ft	10/13
1982	6	0.35	0.60	NR	49	19 or 13 + 5 ^{7b}	15	30 ^{7c}	10/13	10, 4 ft	10/13
1983	j. Log walls complying with ICC400 and with a minimum average wall thickness of 5" or greater shall be permitted in Zones 5-8 when overall window glazing is .31 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil), and all other component requirements are met.										

1984

TABLE R402.1.3 EQUIVALENT U-FACTORS^a

1985	CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR ⁷	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
1986	3	0.65	0.65	0.035	0.082	0.141	0.047	0.360	0.136
1987	5 and Marine 4	0.35	0.60	0.030	0.060	0.082	0.033	0.059	0.065
1988	6	0.35	0.60	0.026	0.060	0.060	0.033	0.059	0.065

1989 "]j. Log walls complying with ICC400 and with a minimum average wall thickness of 5 inches
 1990 or greater shall be permitted in Zones 5 through 8 when overall window glazing has a .31
 1991 U-factor or lower, minimum heating equipment efficiency is, for gas, 90 AFUE, or, for oil, 84
 1992 AFUE, and all other component requirements are met."

1993 [~~(7)~~ In IECC, Section R402.2.1, the last sentence is deleted.]

1994 [~~(8)~~ In IECC, Section R402.2.2, the last sentence is deleted.]

1995 [~~(9)~~ In IECC, Section R402.3.3, the last sentence is deleted.]

1996 [~~(10)~~ In IECC, Section R402.3.4, the last sentence is deleted.]

1997 [(H)] (6) In IECC, Section R402.4.1, in the first sentence, the word "and" is deleted
 1998 and replaced with the word "or".

1999 [(12)] (7) In IECC, Section R402.4.1.1, the last sentence is deleted and replaced with
 2000 the following: "Where allowed by the [building] code official, the builder may certify
 2001 compliance to components criteria for items which may not be inspected during regularly
 2002 scheduled inspections."

2003 [(13)] (8) In IECC, Section R402.4.1.2, the following changes are made:

2004 (a) In the first sentence, the words "in Climate Zones 1 and 2, and [3] three air changes

2005 per hour in [~~Zone~~] Climate Zones 3 through 8" are deleted.

2006 (b) In the third sentence, the [~~words "Where required by the building official," and the~~
2007 word "third" ~~[are]~~ is deleted.

2008 (c) The following sentence is inserted after the third sentence: "The following parties
2009 shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed
2010 contractors who have completed training provided by Blower Door Test equipment
2011 manufacturers or other comparable training."

2012 [~~(14) In IECC, Section R402.4.4, the last sentence is deleted.]~~

2013 [~~(15) In IECC, Section R403.2.2, the requirements for duct tightness testing are deleted
2014 and replaced with the following:]~~

2015 [~~"1. Postconstruction test: Total leakage shall be less than or equal to 10 cfm (283
2016 L/min) per 100 square feet (9.29 m2) of conditioned floor space when tested at a pressure
2017 differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air
2018 handler enclosure. All register boots shall be taped or otherwise sealed during the test.]~~

2019 [~~2. Rough-in test: Total leakage shall be less than or equal to 10 cfm (283 L/min) per
2020 100 square feet (9.29 m2) of conditioned floor area when tested at a pressure differential of at
2021 least 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler
2022 enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is
2023 not installed at the time of the test, total leakage shall be less than or equal to 7.5 cfm (212
2024 L/min) per 100 square feet (9.29 m2) of conditioned floor area."]~~

2025 [~~(16)~~] (9) In IECC, Section [~~R403.2.2~~] R403.3.3, the exception for [~~total~~] duct air
2026 leakage testing is deleted and replaced with the following: "Exception: The total leakage test is
2027 not required for systems with all air handlers and at least [~~50%~~] 65% of all ducts (measured by
2028 length) located entirely within the building thermal envelope."

2029 (10) In IECC, Section R403.3.3, the following is added after the exception:

2030 "The following parties shall be approved to conduct testing:

2031 1. Parties certified by BPI or RESNET.

2032 2. Licensed contractors who have completed training provided by Duct Test equipment
2033 manufacturers or other comparable training."

2034 (11) In IECC, Section R403.3.4, in Subsection 1, the number 4 is changed to 6, the
2035 number 113.3 is changed to 170, the number 3 is changed to 5, and the number 85 is changed

2036 to 114.6, and in Subsection 2, the number 4 is changed to 8 and the number 113.3 is changed to
 2037 226.5.

2038 ~~[(17)] (12)~~ In IECC, Section ~~[R403.2.3]~~ R403.3.5, the words "or plenums" are deleted.

2039 ~~[(18) In IECC, Section R403.4.2, the sentences for "3." and "9." and the last sentence~~
 2040 ~~are deleted.]~~

2041 ~~[(19) In IECC, Section R403.5, the first sentence is deleted.]~~

2042 ~~[(20) IECC, Section R404.1 and the exception are deleted, and R404.1.1 becomes~~
 2043 ~~R404.1.]~~

2044 ~~[(21) In IECC, Table R405.5.2(1), the following changes are made under the column~~
 2045 ~~STANDARD REFERENCE DESIGN:]~~

2046 ~~[(a) In the row "Air exchange rate", the words "in Zones 1 and 2, and 3 air changes per~~
 2047 ~~hour in Zones 3 through 8" are deleted.]~~

2048 ~~[(b) In the row "Heating systems^{f,g}", the standard reference design is deleted and~~
 2049 ~~replaced with the following:]~~

2050 ~~["Fuel Type: same as proposed design]~~

2051 ~~[Efficiencies:]~~

2052 ~~[Electric: air source heat pump with prevailing federal minimum efficiencies]~~

2053 ~~[Nonelectric furnaces: natural gas furnace with prevailing federal minimum~~
 2054 ~~efficiencies]~~

2055 ~~[Nonelectric boilers: natural gas boiler with prevailing federal minimum efficiencies]~~

2056 ~~[Capacity: sized in accordance with Section N1103.6"]~~

2057 ~~[(c) In the row "Cooling systems^{f,h,i}" the words "As proposed" are deleted and replaced~~
 2058 ~~with the following:]~~

2059 ~~["Fuel Type: Electric]~~

2060 ~~[Efficiency: in accordance with prevailing federal minimum standards"]~~

2061 ~~[(d) In the row "Service water heating^{f,g,h,i}", the words "As proposed" are deleted and~~
 2062 ~~replaced with the following:]~~

2063 ~~["Fuel Type: same as proposed design]~~

2064 ~~[Efficiency: in accordance with prevailing federal minimum standards]~~

2065 ~~[Tank Temperature: 120° F"]~~

2066 ~~[(e) In the row "Thermal distribution systems" the word "none" is deleted and replaced~~

2067 with the following: "Thermal distribution system efficiency (DSE) of .080 shall be applied to
 2068 both the heating and cooling system efficiencies."

2069 [(22) In IECC, Table R405.5.2(2), the number "0.80" is inserted under "Forced air
 2070 systems" for "Distribution system components located in unconditioned space".]

2071 [(23) The RESCheck Software adopted by the United States Department of Energy and
 2072 modified to meet the requirements of this section shall be used to verify compliance with this
 2073 section. The software shall address the Total UA alternative approach and account for
 2074 Equipment Efficiency Trade-offs when applicable per the standard reference design as
 2075 amended:]

2076 (13) In IECC, Section R406.2, the last sentence and exception are deleted.

2077 (14) In IECC, Section R406.4, the table is deleted and replaced with the following:

2078 TABLE R406.4

2079 MAXIMUM ENERGY RATING INDEX

<u>CLIMATE ZONE</u>	<u>ENERGY RATING INDEX</u>
1	59
2	59
3	65
4	63
5	69
6	68
7	60
8	60

2089 Section 34. Section 15A-3-801 is amended to read:

2090 **Part 8. Statewide Amendments to International Existing Building Code**

2091 **15A-3-801. General provisions.**

2092 [Mobile homes built before June 15, 1976 that are subject to relocation, building
 2093 alteration, remodeling, or rehabilitation shall comply with the following:]

2094 [(1) Related to exits and egress windows:]

2095 [(a) Egress windows. The home has at least one egress window in each bedroom, or a

2096 window that meets the minimum specifications of the U.S. Department of Housing and Urban
2097 Development's (HUD) Manufactured Homes Construction and Safety Standards (MHCSS)
2098 program as set forth in 24 C.F.R. Parts 3280 and 3282, MHCSS 3280.106 and 3280.404 for
2099 manufactured homes. These standards require the window to be at least 22 inches in the
2100 horizontal or vertical position in its least dimension and at least five square feet in area. The
2101 bottom of the window opening shall be no more than 36 inches above the floor, and the locks
2102 and latches and any window screen or storm window devices that need to be operated to permit
2103 exiting shall not be located more than 54 inches above the finished floor.]

2104 [(b) Exits. The home is required to have two exterior exit doors, located remotely from
2105 each other, as required in MHCSS 3280.105. This standard requires that single-section homes
2106 have the doors no less than 12 feet, center-to-center, from each other, and multisection home
2107 doors no less than 20 feet center-to-center from each other when measured in a straight line,
2108 regardless of the length of the path of travel between the doors. One of the required exit doors
2109 must be accessible from the doorway of each bedroom and no more than 35 feet away from any
2110 bedroom doorway. An exterior swing door shall have a 28-inch-wide by 74-inch-high clear
2111 opening and sliding glass doors shall have a 28-inch-wide by 72-inch-high clear opening. Each
2112 exterior door other than screen/storm doors shall have a key-operated lock that has a passage
2113 latch; locks shall not require the use of a key or special tool for operation from the inside of the
2114 home.]

2115 [(2) Related to flame spread:]

2116 [(a) Walls, ceilings, and doors. Walls and ceilings adjacent to or enclosing a furnace or
2117 water heater shall have an interior finish with a flame-spread rating not exceeding 25. Sealants
2118 and other trim materials two inches or less in width used to finish adjacent surfaces within
2119 these spaces are exempt from this provision, provided all joints are supported by framing
2120 members or materials with a flame-spread rating of 25 or less. Combustible doors providing
2121 interior or exterior access to furnace and water heater spaces shall be covered with materials of
2122 limited combustibility (i.e., 5/16-inch gypsum board, etc.), with the surface allowed to be
2123 interrupted for louvers ventilating the space. However, the louvers shall not be of materials of
2124 greater combustibility than the door itself (i.e., plastic louvers on a wooden door). Reference
2125 MHCSS 3280.203.]

2126 [(b) Exposed interior finishes. Exposed interior finishes adjacent to the cooking range

2127 ~~(surfaces include vertical surfaces between the range top and overhead cabinets, the ceiling, or~~
2128 ~~both) shall have a flame-spread rating not exceeding 50, as required by MHCSS 3280.203.~~
2129 ~~Backsplashes not exceeding six inches in height are exempted. Ranges shall have a vertical~~
2130 ~~clearance above the cooking top of not less than 24 inches to the bottom of combustible~~
2131 ~~cabinets, as required by MHCSS 3280.204(e).]~~

2132 ~~[(3) Related to smoke detectors:]~~

2133 ~~[(a) Location. A smoke detector shall be installed on any ceiling or wall in the hallway~~
2134 ~~or space communicating with each bedroom area between the living area and the first bedroom~~
2135 ~~door, unless a door separates the living area from that bedroom area, in which case the detector~~
2136 ~~shall be installed on the living-area side, as close to the door as practicable, as required by~~
2137 ~~MHCSS 3280.208. Homes with bedroom areas separated by anyone or combination of~~
2138 ~~common-use areas such as a kitchen, dining room, living room, or family room (but not a~~
2139 ~~bathroom or utility room) shall be required to have one detector for each bedroom area. When~~
2140 ~~located in the hallways, the detector shall be between the return air intake and the living areas.]~~

2141 ~~[(b) Switches and electrical connections. Smoke detectors shall have no switches in~~
2142 ~~the circuit to the detector between the over-current protection device protecting the branch~~
2143 ~~circuit and the detector. The detector shall be attached to an electrical outlet box and connected~~
2144 ~~by a permanent wiring method to a general electrical circuit. The detector shall not be placed~~
2145 ~~on the same branch circuit or any circuit protected by a ground-fault circuit interrupter.]~~

2146 ~~[(4) Related to solid-fuel-burning stoves/fireplaces:]~~

2147 ~~[(a) Solid-fuel-burning fireplaces and fireplace stoves. Solid-fuel-burning,~~
2148 ~~factory-built fireplaces, and fireplace stoves may be used in manufactured homes, provided that~~
2149 ~~they are listed for use in manufactured homes and installed according to their~~
2150 ~~listing/manufacture's instructions and the minimum requirements of MHCSS 3280.709(g).]~~

2151 ~~[(b) Equipment. A solid-fuel-burning fireplace or fireplace stove shall be equipped~~
2152 ~~with an integral door or shutters designed to close the fire chamber opening and shall include~~
2153 ~~complete means for venting through the roof, a combustion air inlet, a hearth extension, and~~
2154 ~~means to securely attach the unit to the manufactured home structure.]~~

2155 ~~[(i) Chimney. A listed, factory-built chimney designed to be attached directly to the~~
2156 ~~fireplace/fireplace stove and equipped with, in accordance with the listing, a termination device~~
2157 ~~and spark arrester, shall be required. The chimney shall extend at least three feet above the part~~

2158 of the roof through which it passes and at least two feet above the highest elevation of any part
2159 of the manufactured home that is within 10 feet of the chimney.]

2160 ~~[(ii) Air-intake assembly and combustion-air inlet. An air-intake assembly shall be~~
2161 ~~installed in accordance with the terms of listings and the manufacturer's instruction. A~~
2162 ~~combustion-air inlet shall conduct the air directly into the fire chamber and shall be designed to~~
2163 ~~prevent material from the hearth from dropping on the area beneath the manufactured home.]~~

2164 ~~[(iii) Hearth. The hearth extension shall be of noncombustible material that is a~~
2165 ~~minimum of 3/8-inch thick and shall extend a minimum of 16 inches in front and eight inches~~
2166 ~~beyond each side of the fireplace/fireplace stove opening. The hearth shall also extend over the~~
2167 ~~entire surface beneath a fireplace stove and beneath an elevated and overhanging fireplace.]~~

2168 ~~[(5) Related to electrical wiring systems:]~~

2169 ~~[(a) Testing. All electrical systems shall be tested for continuity in accordance with~~
2170 ~~MHCSS 3280.810, to ensure that metallic parts are properly bonded; tested for operation, to~~
2171 ~~demonstrate that all equipment is connected and in working order; and given a polarity check,~~
2172 ~~to determine that connections are proper.]~~

2173 ~~[(b) 5.2 Protection. The electrical system shall be properly protected for the required~~
2174 ~~amperage load. If the unit wiring employs aluminum conductors, all receptacles and switches~~
2175 ~~rated at 20 amperes or less that are directly connected to the aluminum conductors shall be~~
2176 ~~marked CO/ALA. Exterior receptacles, other than heat tape receptacles, shall be of the~~
2177 ~~ground-fault circuit interrupter (GFI) type. Conductors of dissimilar metals (copper/aluminum~~
2178 ~~or copper-clad aluminum) must be connected in accordance with NEC, Section 110-14.]~~

2179 ~~[(6) Related to replacement furnaces and water heaters:]~~

2180 ~~[(a) Listing. Replacement furnaces or water heaters shall be listed for use in a~~
2181 ~~manufactured home. Vents, roof jacks, and chimneys necessary for the installation shall be~~
2182 ~~listed for use with the furnace or water heater.]~~

2183 ~~[(b) Securement and accessibility. The furnace and water heater shall be secured in~~
2184 ~~place to avoid displacement. Every furnace and water heater shall be accessible for servicing,~~
2185 ~~for replacement, or both as required by MHCSS 3280.709(a).]~~

2186 ~~[(c) Installation. Furnaces and water heaters shall be installed to provide complete~~
2187 ~~separation of the combustion system from the interior atmosphere of the manufactured home,~~
2188 ~~as required by MHCSS.]~~

2189 ~~[(i) Separation. The required separation may be achieved by the installation of a~~
2190 ~~direct-vent system (sealed combustion system) furnace or water heater or the installation of a~~
2191 ~~furnace and water heater venting and combustion systems from the interior atmosphere of the~~
2192 ~~home. There shall be no doors, grills, removable access panels, or other openings into the~~
2193 ~~enclosure from the inside of the manufactured home. All openings for ducts, piping, wiring,~~
2194 ~~etc., shall be sealed.]~~

2195 ~~[(ii) Water heater. The floor area in the area of the water heater shall be free from~~
2196 ~~damage from moisture to ensure that the floor will support the weight of the water heater.]~~

2197 The following are adopted as amendments to the IEBC and are applicable statewide:

2198 (1) In Section 202, the following definition is added: "BUILDING OFFICIAL. See
2199 Code Official."

2200 (2) In Section 202, the definition for "code official" is deleted and replaced with the
2201 following:

2202 "CODE OFFICIAL. The officer or other designated authority having jurisdiction (AHJ)
2203 charged with the administration and enforcement of this code."

2204 (3) In Section 202, the definition for existing buildings is deleted and replaced with the
2205 following:

2206 "EXISTING BUILDING. A building that is not a dangerous building and that was either
2207 lawfully erected under a prior adopted code, or deemed a legal non-conforming building by the
2208 code official."

2209 (4) In Section 301.1, the exception is deleted.

2210 (5) Section 403.5 is deleted and replaced with the following:

2211 "403.5 Bracing for unreinforced masonry parapets and other appendages upon reroofing.

2212 Where the intended alteration requires a permit for reroofing and involves removal of roofing

2213 materials from more than 25 percent of the roof area of a building assigned to Seismic Design

2214 Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such

2215 as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of

2216 bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of

2217 such items. For purposes of this section, design seismic forces need not be taken greater than

2218 75 percent of those that would be required for the design of similar nonstructural components

2219 in new buildings of similar purpose and location."

2220 (6) In Section 705.1, Exception number 3, the following is added at the end of the
2221 exception:

2222 "This exception does not apply if the existing facility is undergoing a change of occupancy
2223 classification."

2224 (7) Section 707.3.1 is deleted and replaced with the following:

2225 "707.3.1 Bracing for unreinforced masonry bearing wall parapets and other appendages.
2226 Where a permit is issued for reroofing more than 25 percent of the roof area of a building
2227 assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced
2228 masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work
2229 shall include installation of bracing to resist the reduced International Building Code level
2230 seismic forces as specified in Section 301.1.4.2 of this code, unless an evaluation demonstrates
2231 compliance of such items."

2232 (8) (a) Section 1007.3.1 is deleted and replaced with the following:

2233 "1007.3.1 Compliance with the International Building Code Level Seismic Forces.
2234 When a building or portion thereof is subject to a change of occupancy such that a change in
2235 the nature of the occupancy results in a higher risk category based on Table 1604.5 of the
2236 International Building Code or when such change of occupancy results in a design occupant
2237 load increase of 100% or more, the building shall conform to the seismic requirements of the
2238 International Building Code for the new risk category."

2239 (b) Section 1007.3.1, exceptions 1- 3 remain unchanged.

2240 (c) In Section 1007.3.1, add a new exception 4 as follows:

2241 "4. Where the design occupant load increase is less than 25 occupants and the occupancy
2242 category does not change."

2243 (9) In Section 1012.7.3, exception 2 is deleted.

2244 (10) In Section 1012.8.2, number 7 is added as follows:

2245 "7. When a change of occupancy in a building or portion of a building results in a Group R-2
2246 occupancy, not less than 20 percent of the dwelling or sleeping units shall be Type B dwelling
2247 or sleeping units. These dwelling or sleeping units may be located on any floor of the building
2248 provided with an accessible route. Two percent, but not less than one unit, of the dwelling or
2249 sleeping units shall be Type A dwelling units."

2250 Section 35. Section **15A-3-901** is enacted to read:

2251 15A-3-901. General provisions.

2252 Mobile homes built before June 15, 1976, that are subject to relocation, building
2253 alteration, remodeling, or rehabilitation shall comply with the following:

2254 (1) Related to exits and egress windows:

2255 (a) Egress windows. The home has at least one egress window in each bedroom, or a
2256 window that meets the minimum specifications of the United States Department of Housing
2257 and Urban Development's (HUD) Manufactured Homes Construction and Safety Standards
2258 (MHCSS) program as set forth in 24 C.F.R. Parts 3280 and 3282, MHCSS 3280.106 and
2259 3280.404 for manufactured homes. These standards require the window to be at least 22
2260 inches in the horizontal or vertical position in its least dimension and at least five square feet in
2261 area. The bottom of the window opening shall be no more than 36 inches above the floor, and
2262 the locks and latches and any window screen or storm window devices that need to be operated
2263 to permit exiting shall not be located more than 54 inches above the finished floor.

2264 (b) Exits. The home is required to have two exterior exit doors, located remotely from
2265 each other, as required in MHCSS 3280.105. This standard requires that a single-section home
2266 have the doors no less than 12 feet, center-to-center, from each other, and a multisection home
2267 have the doors no less than 20 feet, center-to-center, from each other, when measured in a
2268 straight line, regardless of the length of the path of travel between the doors. One of the
2269 required exit doors must be accessible from the doorway of each bedroom and no more than 35
2270 feet away from any bedroom doorway. An exterior swing door shall have a 28-inch-wide by
2271 74-inch-high clear opening and sliding glass doors shall have a 28-inch-wide by 72-inch-high
2272 clear opening. Each exterior door other than screen/storm doors shall have a key-operated lock
2273 that has a passage latch; locks shall not require the use of a key or special tool for operation
2274 from the inside of the home.

2275 (2) Related to flame spread:

2276 (a) Walls, ceilings, and doors. Walls and ceilings adjacent to or enclosing a furnace or
2277 water heater shall have an interior finish with a flame-spread rating not exceeding 25. Sealants
2278 and other trim materials two inches or less in width used to finish adjacent surfaces within
2279 these spaces are exempt from this provision, provided all joints are supported by framing
2280 members or materials with a flame spread rating of 25 or less. Combustible doors providing
2281 interior or exterior access to furnace and water heater spaces shall be covered with materials of

2282 limited combustibility (i.e., 5/16-inch gypsum board, etc.), with the surface allowed to be
2283 interrupted for louvers ventilating the space. However, the louvers shall not be of materials of
2284 greater combustibility than the door itself (i.e., plastic louvers on a wooden door). Reference
2285 MHCSS 3280.203.

2286 (b) Exposed interior finishes. Exposed interior finishes adjacent to the cooking range
2287 (surfaces include vertical surfaces between the range top and overhead cabinets, the ceiling, or
2288 both) shall have a flame-spread rating not exceeding 50, as required by MHCSS 3280.203.
2289 Backsplashes not exceeding six inches in height are exempted. Ranges shall have a vertical
2290 clearance above the cooking top of not less than 24 inches to the bottom of combustible
2291 cabinets, as required by MHCSS 3280.204(e).

2292 (3) Related to smoke detectors:

2293 (a) Location. A smoke detector shall be installed on any ceiling or wall in the hallway
2294 or space communicating with each bedroom area between the living area and the first bedroom
2295 door, unless a door separates the living area from that bedroom area, in which case the detector
2296 shall be installed on the living-area side, as close to the door as practicable, as required by
2297 MHCSS 3280.208. Homes with bedroom areas separated by any one or combination of
2298 common-use areas such as a kitchen, dining room, living room, or family room (but not a
2299 bathroom or utility room) shall be required to have one detector for each bedroom area. When
2300 located in the hallways, the detector shall be between the return air intake and the living areas.

2301 (b) Switches and electrical connections. Smoke detectors shall have no switches in the
2302 circuit to the detector between the over-current protection device protecting the branch circuit
2303 and the detector. The detector shall be attached to an electrical outlet box and connected by a
2304 permanent wiring method to a general electrical circuit. The detector shall not be placed on the
2305 same branch circuit or any circuit protected by a ground-fault circuit interrupter.

2306 (4) Related to solid-fuel-burning stoves/fireplaces:

2307 (a) Solid-fuel-burning fireplaces and fireplace stoves. Solid-fuel-burning, factory-built
2308 fireplaces, and fireplace stoves may be used in manufactured homes, provided that they are
2309 listed for use in manufactured homes and installed according to their listing/manufacturer's
2310 instructions and the minimum requirements of MHCSS 3280.709(g).

2311 (b) Equipment. A solid-fuel-burning fireplace or fireplace stove shall be equipped with
2312 an integral door or shutters designed to close the fire chamber opening and shall include

2313 complete means for venting through the roof, a combustion air inlet, a hearth extension, and
2314 means to securely attach the unit to the manufactured home structure.

2315 (i) Chimney. A listed, factory-built chimney designed to be attached directly to the
2316 fireplace/fireplace stove and equipped with, in accordance with the listing, a termination device
2317 and spark arrester shall be required. The chimney shall extend at least three feet above the part
2318 of the roof through which it passes and at least two feet above the highest elevation of any part
2319 of the manufactured home that is within 10 feet of the chimney.

2320 (ii) Air-intake assembly and combustion-air inlet. An air-intake assembly shall be
2321 installed in accordance with the terms of listings and the manufacturer's instruction. A
2322 combustion-air inlet shall conduct the air directly into the fire chamber and shall be designed to
2323 prevent material from the hearth from dropping on the area beneath the manufactured home.

2324 (iii) Hearth. The hearth extension shall be of noncombustible material that is a
2325 minimum of 3/8-inch thick and shall extend a minimum of 16 inches in front and eight inches
2326 beyond each side of the fireplace/fireplace stove opening. The hearth shall also extend over the
2327 entire surface beneath a fireplace stove and beneath an elevated and overhanging fireplace.

2328 (5) Related to electrical wiring systems:

2329 (a) Testing. All electrical systems shall be tested for continuity in accordance with
2330 MHCSS 3280.810, to ensure that metallic parts are properly bonded; tested for operation, to
2331 demonstrate that all equipment is connected and in working order; and given a polarity check,
2332 to determine that connections are proper.

2333 (b) 5.2 Protection. The electrical system shall be properly protected for the required
2334 amperage load. If the unit wiring employs aluminum conductors, all receptacles and switches
2335 rated at 20 amperes or less that are directly connected to the aluminum conductors shall be
2336 marked CO/ALA. Exterior receptacles, other than heat tape receptacles, shall be of the
2337 ground-fault circuit interrupter (GFCI) type. Conductors of dissimilar metals
2338 (copper/aluminum or copper-clad aluminum) must be connected in accordance with NEC,
2339 Section 110-14.

2340 (6) Related to replacement furnaces and water heaters:

2341 (a) Listing. Replacement furnaces or water heaters shall be listed for use in a
2342 manufactured home. Vents, roof jacks, and chimneys necessary for the installation shall be
2343 listed for use with the furnace or water heater.

2344 (b) Securement and accessibility. The furnace and water heater shall be secured in
 2345 place to avoid displacement. Every furnace and water heater shall be accessible for servicing,
 2346 for replacement, or both as required by MHCSS 3280.709(a).

2347 (c) Installation. Furnaces and water heaters shall be installed to provide complete
 2348 separation of the combustion system from the interior atmosphere of the manufactured home,
 2349 as required by MHCSS.

2350 (i) Separation. The required separation may be achieved by the installation of a
 2351 direct-vent system (sealed combustion system) furnace or water heater or the installation of
 2352 furnace and water heater venting and combustion systems from the interior atmosphere of the
 2353 home. There shall be no doors, grills, removable access panels, or other openings into the
 2354 enclosure from the inside of the manufactured home. All openings for ducts, piping, wiring,
 2355 etc., shall be sealed.

2356 (ii) Water heater. The floor area in the area of the water heater shall be free from
 2357 damage from moisture to ensure that the floor will support the weight of the water heater.

2358 Section 36. Section **15A-4-103** is amended to read:

2359 **15A-4-103. Amendments to IBC applicable to City of Farmington.**

2360 [~~The following amendments are adopted as amendments to the IBC for the City of~~
 2361 ~~Farmington:]~~

2362 [~~(1) A new IBC, Section (F) 903.2.13, is added as follows: "(F) 903.2.13 Group R;~~
 2363 ~~Division 3 Occupancies. An automatic sprinkler system shall be installed throughout every~~
 2364 ~~dwelling in accordance with NFPA 13D, when any of the following conditions are present:]~~

2365 [~~1. The structure is over two stories high, as defined by the building code;]~~

2366 [~~2. The nearest point of structure is more than 150 feet from the public way;]~~

2367 [~~3. The total floor area of all stories is over 5,000 square feet (excluding from the calculation~~
 2368 ~~the area of the basement and/or garage); or]~~

2369 [~~4. The structure is located on a street constructed after March 1, 2000, that has a gradient over~~
 2370 ~~12% and, during fire department response, access to the structure will be gained by using such~~
 2371 ~~street. (If the access is intended to be from a direction where the steep gradient is not used, as~~
 2372 ~~determined by the Chief, this criteria shall not apply).]~~

2373 [~~Such sprinkler system shall be installed in basements, but need not be installed in garages,~~
 2374 ~~under eaves or in enclosed attic spaces, unless required by the Chief."]~~

2375 ~~[(2) A new IBC, Section 907.9, is added as follows: "907.9 Alarm Circuit Supervision:~~
2376 ~~Alarm circuits in alarm systems provided for commercial uses (defined as other than one- and~~
2377 ~~two-family dwellings and townhouses) shall have Class "A" type of supervision. Specifically,~~
2378 ~~Type "B" or End-of-line resistor and horn supervised systems are not allowed."]~~

2379 ~~[(3) In NFPA Section 13-07, new sections are added as follows: "6.8.6 FDC Security~~
2380 ~~Locks Required. All Fire Department connections installed for fire sprinkler and standpipe~~
2381 ~~systems shall have approved security locks.]~~

2382 ~~[6.10 Fire Pump Disconnect Signs. When installing a fire pump, red plastic laminate signs~~
2383 ~~shall be installed in the electrical service panel, if the pump is wired separately from the main~~
2384 ~~disconnect. These signs shall state: "Fire Pump Disconnect ONLY" and "Main Breaker DOES~~
2385 ~~NOT Shut Off Fire Pump".]~~

2386 ~~[22.1.6 Plan Preparation Identification. All plans for fire sprinkler systems, except for~~
2387 ~~manufacturer's cut sheets of equipment shall include the full name of the person who prepared~~
2388 ~~the drawings. When the drawings are prepared by a registered professional engineer, the~~
2389 ~~engineer's signature shall also be included.]~~

2390 ~~[22.2.2.3 Verification of Water Supply:]~~

2391 ~~[22.2.2.3.1 Fire Flow Tests. Fire flow tests for verification of water supply shall be conducted~~
2392 ~~and witnessed for all applications other than residential unless directed otherwise by the Chief.~~
2393 ~~For residential water supply, verification shall be determined by administrative procedure.]~~

2394 ~~[22.2.2.3.2 Accurate and Verifiable Criteria. The design calculations and criteria shall include~~
2395 ~~an accurate and verifiable water supply.]~~

2396 ~~[24.2.3.7 Testing and Inspection of Systems. Testing and inspection of sprinkler systems shall~~
2397 ~~include, but are not limited to:]~~

2398 ~~[Commercial:]~~

2399 ~~[FLUSH-Witness Underground Supply Flush;]~~

2400 ~~[ROUGH Inspection-Installation of Riser, System Piping, Head Locations and all Components,~~
2401 ~~Hydrostatic Pressure Test;]~~

2402 ~~[FINAL Inspection-Head Installation and Escutcheons, Inspectors Test Location and Flow,~~
2403 ~~Main Drain Flow, FDC Location and Escutcheon, Alarm Function, Spare Parts, Labeling of~~
2404 ~~Components and Signage, System Completeness, Water Supply Pressure Verification,~~
2405 ~~Evaluation of Any Unusual Parameter."]~~

2406 Except as otherwise provided in this title, there are no amendments to the IBC that apply only
2407 to the city of Farmington.

2408 Section 37. Section **15A-4-107** is amended to read:

2409 **15A-4-107. Amendments to IBC applicable to Sandy City.**

2410 The following amendments are adopted as amendments to the IBC for Sandy City:

2411 (1) A new IBC, Section (F)903.2.13, is added as follows: "(F)903.2.13 An automatic
2412 sprinkler system shall be installed in accordance with NFPA 13 throughout buildings
2413 containing all occupancies where fire flow exceeds 2,000 gallons per minute, based on Table
2414 B105.1 of the [~~2009~~] 2015 International Fire Code. Exempt locations as indicated in Section
2415 903.3.1.1.1 are allowed.

2416 Exception: Automatic fire sprinklers are not required in buildings used solely for worship,
2417 Group R Division 3, Group U occupancies and buildings complying with the International
2418 Residential Code unless otherwise required by the International Fire Code.

2419 (2) A new IBC, Appendix L, is added and adopted as follows: "Appendix L
2420 BUILDINGS AND STRUCTURES CONSTRUCTED IN AREAS DESIGNATED AS
2421 WILDLAND-URBAN INTERFACE AREAS
2422 AL 101.1 General. Buildings and structures constructed in areas designated as Wildland-Urban
2423 Interface Areas by Sandy City shall be constructed using ignition resistant construction as
2424 determined by the Fire Marshal. Section 502 of the 2006 International Wildland-Urban
2425 Interface Code (IWUIC), as promulgated by the International Code Council, shall be used to
2426 determine Fire Hazard Severity. The provisions listed in Chapter 5 of the 2006 International
2427 Wildland-Urban Interface Code, as modified herein, shall be used to determine the
2428 requirements for Ignition Resistant Construction.

2429 (i) In Section 504 of the IWUIC Class I IGNITION-RESISTANT CONSTRUCTION a new
2430 Section 504.1.1 is added as follows: "504.1.1 General. Subsections 504.5, 504.6, and 504.7
2431 shall only be required on the exposure side of the structure, as determined by the Fire Marshal,
2432 where defensible space is less than 50 feet as defined in Section 603 of the 2006 International
2433 Wildland-Urban Interface Code.

2434 (ii) In Section 505 of the IWUIC Class 2 IGNITION-RESISTANT CONSTRUCTION
2435 Subsections 505.5 and 505.7 are deleted."

2436 Section 38. Section **15A-4-203** is amended to read:

2437 **15A-4-203. Amendments to IRC applicable to City of Farmington.**

2438 [~~The following amendments are adopted as amendments to the IRC for the City of~~
 2439 ~~Farmington:]~~

2440 [~~(1) In IRC, R324 Automatic Sprinkler Systems, new IRC, Sections R324.1 and~~
 2441 ~~R324.2 are added as follows: "R324.1 When required. An automatic sprinkler system shall be~~
 2442 ~~installed throughout every dwelling in accordance with NFPA 13D, when any of the following~~
 2443 ~~conditions are present:]~~

2444 [~~1. the structure is over two stories high, as defined by the building code;]~~

2445 [~~2. the nearest point of structure is more than 150 feet from the public way;]~~

2446 [~~3. the total floor area of all stories is over 5,000 square feet (excluding from the calculation~~
 2447 ~~the area of the basement and/or garage); or]~~

2448 [~~4. the structure is located on a street constructed after March 1, 2000 that has a gradient over~~
 2449 ~~12% and, during fire department response, access to the structure will be gained by using such~~
 2450 ~~street. (If the access is intended to be from a direction where the steep gradient is not used, as~~
 2451 ~~determined by the Chief, this criteria shall not apply).]~~

2452 [~~R324.2 Installation requirements and standards. Such sprinkler system shall be installed in~~
 2453 ~~basements, but need not be installed in garages, under eaves or in enclosed attic spaces, unless~~
 2454 ~~required by the Chief. Such system shall be installed in accordance with NFPA 13D."]~~

2455 [(2) In IRC, Chapter 44, the following NFPA referenced standards are added as
 2456 follows:]

2457 [

	_____	"TABLE
	ADD	
	13D-07	Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes, as amended by these rules
	13R-07	Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height"

2462] [(3) In NFPA, Section 13D-07, new sections are added as follows: "1.15 Reference to
 2463 NFPA 13D. All references to NFPA 13D in the codes, ordinances, rules, or regulations

2464 governing NFPA 13D systems shall be read to refer to "modified NFPA 13D" to reference the
2465 NFPA 13D as amended by additional regulations adopted by Farmington City.]
2466 [4.9 Testing and Inspection of Systems. Testing and inspection of sprinkler systems shall
2467 include, but are not limited to:]
2468 [Residential:]
2469 [ROUGH Inspection-Verify Water Supply Piping Size and Materials, Installation of Riser,
2470 System Piping, Head Locations and all Components, Hydrostatic Pressure Test.]
2471 [FINAL Inspection-Inspectors Test Flow, System Completeness, Spare Parts, Labeling of
2472 Components and Signage, Alarm Function, Water Supply Pressure Verification.]
2473 [5.2.2.3 Exposed Piping of Metal. Exposed Sprinkler Piping material in rooms of dwellings
2474 shall be of Metal.]
2475 [EXCEPTIONS:]
2476 [a. CPVC Piping is allowed in unfinished mechanical and storage rooms only when
2477 specifically listed for the application as installed.]
2478 [b. CPVC Piping is allowed in finished, occupied rooms used for sports courts or similar uses
2479 only when the ceiling/floor framing above is constructed entirely of non-combustible materials,
2480 such as a concrete garage floor on metal decking.]
2481 [5.2.2.4 Water Supply Piping Material. Water Supply Piping from where the water line enters
2482 the dwelling adjacent to and inside the foundation to the fire sprinkler contractor
2483 point-of-connection shall be metal, suitable for potable plumbing systems. See Section 7.1.4
2484 for valve prohibition in such piping. Piping down stream from the point-of-connection used in
2485 the fire sprinkler system, including the riser, shall conform to NFPA 13D standards.]
2486 [5.4 Fire Pump Disconnect Signs. When installing a Fire Pump, Red Plastic Laminate Signs
2487 shall be installed in the electrical service panel, if the pump is wired separately from the main
2488 disconnect. These signs shall state: "Fire Pump Disconnect ONLY" and "Main Breaker DOES
2489 NOT Shut Off Fire Pump".]
2490 [7.1.4 Valve Prohibition. NFPA 13D, Section 7.1 is hereby modified such that NO VALVE is
2491 permitted from the City Water Meter to the Fire Sprinkler Riser Control.]
2492 [7.6.1 Mandatory Exterior Alarm. Every dwelling that has a fire sprinkler system shall have an
2493 exterior alarm, installed in an approved location. The alarm shall be of the combination
2494 horn/strobe or electric bell/strobe type, approved for outdoor use.]

2495 ~~[8.1.05 Plan Preparation Identification. All plans for fire sprinkler systems, except for~~
2496 ~~manufacturer's cut sheets of equipment, shall include the full name of the person who prepared~~
2497 ~~the drawings. When the drawings are prepared by a registered professional engineer, the~~
2498 ~~engineer's signature shall also be included.]~~

2499 ~~[8.7 Verification of Water Supply:]~~

2500 ~~[8.7.1 Fire Flow Tests: Fire Flow Tests for verification of Water Supply shall be conducted and~~
2501 ~~witnesses for all applications other than residential, unless directed otherwise by the Chief. For~~
2502 ~~residential Water Supply, verification shall be determined by administrative procedure.]~~

2503 ~~[8.7.2 Accurate and Verifiable Criteria. The design calculations and criteria shall include an~~
2504 ~~accurate and verifiable Water Supply.]~~

2505 Except as otherwise provided in this title, there are no amendments to the IRC that apply only
2506 to the city of Farmington.

2507 Section 39. Section **58-11a-502** is amended to read:

2508 **58-11a-502. Unlawful conduct.**

2509 Unlawful conduct includes:

2510 (1) practicing or engaging in, or attempting to practice or engage in activity for which a
2511 license is required under this chapter unless:

2512 (a) the person holds the appropriate license under this chapter; or

2513 (b) an exemption in Section [58-1-307](#) or [58-11a-304](#) applies;

2514 (2) knowingly employing any other person to engage in or practice or attempt to
2515 engage in or practice any occupation or profession licensed under this chapter if the employee
2516 is not licensed to do so under this chapter or exempt from licensure;

2517 (3) touching, or applying an instrument or device to the following areas of a client's
2518 body:

2519 (a) the genitals or the anus, except in cases where the patron states to a licensee that the
2520 patron requests a hair removal procedure and signs a written consent form, which must also
2521 include the witnessed signature of a legal guardian if the patron is a minor, authorizing the
2522 licensee to perform a hair removal procedure; or

2523 (b) the breast of a female patron, except in cases in which the female patron states to a
2524 licensee that the patron requests breast skin procedures and signs a written consent form, which
2525 must also include the witnessed signature of a parent or legal guardian if the patron is a minor,

2526 authorizing the licensee to perform breast skin procedures;

2527 (4) using or possessing a solution composed of at least 10% methyl methacrylate on a
2528 client;

2529 (5) performing an ablative procedure as defined in Section [58-67-102](#);

2530 (6) when acting as an instructor regarding a service requiring licensure under this
2531 chapter, for a class or education program where attendees are not licensed under this chapter,
2532 failing to inform each attendee in writing that:

2533 (a) taking the class or program without completing the requirements for licensure under
2534 this chapter is insufficient to certify or qualify the attendee to perform a service for
2535 compensation that requires licensure under this chapter; and

2536 (b) the attendee is required to obtain licensure under this chapter before performing the
2537 service for compensation; or

2538 (7) failing as a salon or school where nail technology is practiced or taught to maintain
2539 a source capture system required under [~~Section [15A-3-401](#)~~] Title 15A, State Construction and
2540 Fire Codes Act, including failing to maintain and clean a source capture system's air filter
2541 according to the manufacturer's instructions.

2542 **Section 40. Repealer.**

2543 This bill repeals:

2544 Section [15A-3-106.5](#), **Amendments to Chapter 15 of IBC.**

2545 **Section 41. Effective date.**

2546 This bill takes effect on July 1, 2016.