1	BUILDING CODE AMENDMENTS					
2	2016 GENERAL SESSION					
3	STATE OF UTAH					
4	Chief Sponsor: Rebecca P. Edwards					
5	Senate Sponsor:					
6 7	LONG TITLE					
8	General Description:					
9	This bill amends provisions related to the State Construction Code.					
10	Highlighted Provisions:					
11	This bill:					
12	adopts, with amendments:					
13	• the 2015 International Building Code;					
14	• the 2015 International Residential Code;					
15	• the 2015 International Plumbing Code;					
16	• the 2015 International Mechanical Code;					
17	• the 2015 International Fuel Gas Code;					
18	• the 2014 National Electric Code;					
19	 the 2015 International Energy Conservation Code; and 					
20	 the 2015 International Existing Building Code; 					
21	 updates provisions to coordinate with the newly adopted international codes; 					
22	 amends provisions related to the amount of fireworks a person may store in a 					
23	building equipped with an approved sprinkler system;					
24	amends provisions related to carbon monoxide alarm installation;					
25	 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	None					
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			
94				
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	[(3)] (4) "IECC" means the edition of the International Energy Conservation Code			
109	adopted under Section 15A-2-103.			
110	[(4)] (5) "IFGC" means the edition of the International Fuel Gas Code adopted under			
111	Section 15A-2-103.			
112	[(5)] (6) "IMC" means the edition of the International Mechanical Code adopted under			
113	Section 15A-2-103.			
114	[(6)] (7) "IPC" means the edition of the International Plumbing Code adopted under			
115	Section 15A-2-103.			
116	[(7)] <u>(8)</u> "IRC" means the edition of the International Residential Code adopted under			
117	Section 15A-2-103.			
118	[(8)] <u>(9)</u> "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] <u>2015</u> 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	[(j)] (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.				

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

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

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

- (1) The following are the installation standards for manufactured housing for new installations or for existing manufactured or mobile homes that are subject to relocation, building alteration, remodeling, or rehabilitation in the state:
- (a) The manufacturer's installation instruction for the model being installed is the primary standard.
- (b) If the manufacturer's installation instruction for the model being installed is not available or is incomplete, the following standards apply:
- (i) Appendix E of the [2012] 2015 edition of the IRC, as issued by the International Code Council for installations defined in Section AE101 of Appendix E; or
- (ii) if an installation is beyond the scope of the [2012] 2015 edition of the IRC as defined in Section AE101 of Appendix E, the 2005 edition of the NFPA 225 Model Manufactured Home Installation Standard, issued by the National Fire Protection Association.
- (c) A manufacturer, dealer, or homeowner is permitted to design for unusual installation of a manufactured home not provided for in the manufacturer's standard installation instruction, Appendix E of the [2012] 2015 edition of the IRC, or the 2005 edition of the NFPA 225, if the design is approved in writing by a professional engineer or architect licensed in Utah.
- (d) For a mobile home built before June 15, 1976, the mobile home shall also comply with the additional installation and safety requirements specified in Chapter 3, Part 8, Installation and Safety Requirements for Mobile Homes Built Before June 15, 1976.
- (2) Pursuant to the HUD Code Section 604(d), a manufactured home may be installed in the state that does not meet the local snow load requirements as specified in Chapter 3, Part 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: "[110.3.5] <u>110.3.5.1</u> ,				
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)] <u>(12)</u> 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)] <u>(13)</u> 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	[(15)] (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

- without the assistance of another person.
- Occupancies. Limited capacity, type I assisted living facilities with two to five residents shall
- be classified as R-3 occupancies. Small, type I assisted living facilities with six to sixteen
- residents shall be classified as R-4 occupancies. Large, type I assisted living facilities with
- over sixteen residents shall be classified as I-1 occupancies.
- 251 TYPE II ASSISTED LIVING FACILITY. A residential facility licensed by the Utah
- Department of Health that provides an array of coordinated supportive personal and health care
- services to residents who meet the definition of semi-independent.
- 254 Semi-Independent. A person who is:
- A. Physically disabled but able to direct his or her own care; or
- B. Cognitively impaired or physically disabled but able to evacuate from the facility with the
- 257 physical assistance of one person.
- Occupancies. Limited capacity, type II assisted living facilities with two to five residents shall
- 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
- over sixteen residents shall be classified as I-2 occupancies.
- 262 RESIDENTIAL TREATMENT/SUPPORT ASSISTED LIVING FACILITY. A residential
- 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."
- [(16)] (17) In IBC, Section 308.3, the words "(see Section 308.2.1)" are added after the words "assisted living facilities["]."
- [(17)] (18) In IBC, Section [308.3.1] 308.3.4, all of the words after the first
- 270 International Residential Code are deleted.
- [(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."
- (b) The words "foster care facilities" are deleted and replaced with "child care
- 274 facilities."
- (c) The words "(both intermediate care facilities and skilled nursing facilities)" are

- added after "nursing homes."
- [(d) The words "Ambulatory Surgical Centers with five or more operating rooms" are added to the list.]
- [(19)] (20) In IBC, Section [308.4.1] 308.4.2, the word "five" is deleted and replaced with the word "three" in both places.
- [(20)] (21) In IBC, Section 308.6, the word "five" is deleted and replaced with the word "four[$^{\text{u}}$]."
- [(21)] (22) In IBC, Section 308.6.1, the following changes are made:
- (a) The word "five" is deleted and replaced with the word "four["]."
- 285 (b) The words "2-1/2 years or less of age" are deleted and replaced with "under the age of two["]."
- 287 (c) The following sentence is added at the end: "See Section [425] 427 for special requirements for Day Care."
- [(22)] (23) In IBC, Sections 308.6.3 and 308.6.4, the word "five" is deleted and replaced with the word "four" in both places and the following sentence is added at the end:

 "See Section [425] 427 for special requirements for Day Care."
- [(23)] (24) In IBC, Section 310.5, the words "and single family dwellings complying with the IRC" are added after "Residential occupancies["]."
- [(24)] (25) In IBC, Section 310.5.1, the words "other than Child Care" are inserted after the word "dwelling" in the first sentence and the following sentence is added at the end:

 "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 <u>310.5.3</u> Child Care. Areas used for child care purposes may be located in a residential
- dwelling unit under all of the following conditions and Section [425] 427:
- 1. Compliance with Utah Administrative Code, R710-8, Day Care Rules, as enacted under the
- 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:
- a. Utah Administrative Code, R430-50, Residential Certificate Child Care.
- 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			

- 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
- 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,
- 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
- the home of the person cared for. This would also include Child Care Centers, Out of School
- 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
- 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
- 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
- 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
- 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
- shall be provided with two means of egress, one of which shall discharge directly to the
- 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
- 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

- 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
- 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
- stairs to the lower level and upper level are equal or nearly equal, may have clients housed on
- 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
- 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
- operating condition on each level occupied by clients. Battery operated smoke detectors shall
- 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,
- shall have at least one window or door approved for emergency escape.
- [425.3.9] 427.3.9 Fire drills shall be conducted in Family Day Care units quarterly and shall
- 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
- 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
- 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
- located on the second floor of buildings equipped with automatic fire protection throughout
- 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

- leading directly to the exterior, the room shall have an emergency escape and rescue window
- 402 complying with Section [1029] <u>1030</u>.
- 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
- 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]
- "504.4.1 Notwithstanding the exceptions to Section 504.2, Group I-2 Assisted Living Facilities
- 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:
- 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
- 3. All other provisions that apply in Section 407 have been provided."
- 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
- and riser room size. Fire pump and automatic sprinkler system riser rooms shall be designed
- with adequate space for all installed equipment necessary for the installation and to provide
- sufficient working space around the stationary equipment. Clearances around equipment shall
- 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
- 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

- 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
- removing such elements of permanent construction or disabling the function of a required
- 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
- room shall be clear and unobstructed, with doors swinging in the outward direction from the
- room and the opening providing a clear width of not less than 34-inches and a clear height of
- the door opening shall not be less than 80-inches.
- 901.8.5 Fire pump rooms shall be provided with a clear and unobstructed passageway to the
- fire pump room of not less than 72-inches, and openings into the room shall be clear,
- unobstructed and large enough to allow for the removal of the largest piece of equipment, with
- doors swinging in the outward direction from the room and the opening providing a clear width
- 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
- 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
- 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
- deleted and replaced with the following: "(F)903.2.8 Group R. An automatic sprinkler system
- installed in accordance with Section 903.3 shall be provided throughout all buildings with a
- 458 Group R fire area.
- 459 Exceptions:
- 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 s
- 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 <u>(F)903.2.8.1.1.</u>
- 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
- alarm system that is interconnected and receives its primary power from the building wiring
- 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
- 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 $\left[\frac{7}{(10)}\right]$ IBC, Section $\left[\frac{F}{904.11}\right]$ (F)904.12, is deleted and replaced with the
- 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
- protection of commercial cooking equipment and exhaust systems. Pre-engineered automatic
- extinguishing systems shall be tested in accordance with UL 300 and listed and labeled for the
- 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
- 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:
- "Open Parking Garages. Open parking garages shall be equipped with an approved
- 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 Prevention Board in Group E occupancies." 503 504 [(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 interconnected in such a manner that the activation of one alarm will activate all of the alarms. 513 514 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 clearly audible in all bedrooms over background noise levels with all intervening doors closed.] 516 517 [(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 system. Carbon monoxide alarms shall emit a signal when the batteries are low. Wiring shall 521 522 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	<u>720.</u>			
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	<u>(F)915.3.5 Power source.</u>			
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] $\underline{1010.1.9.6}$, a new number [8] $\underline{9}$ 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 $[1009.7.2]$ $\underline{1011.5.2}$, exception $\underline{5}$ $\underline{3}$ 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 $[1009.15]$ $\underline{1011.11}$, a new exception $\underline{[6]}$ $\underline{5}$ 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	$[\underbrace{(5)}]$ $[\underbrace{(4)}]$ In IBC, Section $[\underbrace{1011.5}]$ $[\underbrace{1013.5}]$, the words ", including when the building					
610	may not be fully occupied." are added at the end of the sentence.					
611	[69] (5) IBC, Section $[1024]$ 1025, is deleted.					
612	[(7)] <u>(6)</u> In IBC, Section [1028.12] <u>1029.14</u> , 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					

following: "1. The unit shall have a living room of not less than 165 square feet (15.3 m^2) of

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floor area. An additional 100 square feet (9.3 m²) of floor area shall be provided for each occupant of such unit in excess of two."

- Section 8. Section **15A-3-106** is amended to read:
- 620 **15A-3-106.** Amendments to Chapters 13, 14, and 15 of IBC.
- IBC, Chapters 13 [and], 14, and 15 are not amended.
- Section 9. Section **15A-3-107** is amended to read:
- 623 15A-3-107. Amendments to Chapter 16 of IBC.
- (1) In IBC, Table 1604.5, Risk Category III, in the sentence that begins "Group I-2," a
- new footnote c is added as follows: "c. Type II Assisted Living Facilities that are I-2
- 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
- "and 0.2 for other roof configurations" are deleted and replaced with the following: " $f_2 = 0.20 + 0.00$ "
- 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.
- 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
- 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
- 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
- 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:
- $W_s = Weight of snow to be included in seismic calculations$
- A = Elevation above sea level at the location of the structure (ft./1,000)
- $P_f = Design roof snow load, psf.$
- For the purpose of this section, snow load shall be assumed uniform on the roof footprint
- without including the effects of drift or sliding. The Importance Factor, I, used in calculating P_f
- 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.

- Except as modified in Sections 1608.1.1, 1608.1.2, and 1608.1.3, design snow loads shall be
- determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall not be less
- than that determined by Section 1607."
- (5) A new IBC, Section 1608.1.1, is added as follows: "1608.1.1 Section 7.4.5 of
- 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
- 75 psf, eaves shall be capable of sustaining a uniformly distributed load of 2p_f on all
- overhanging portions. No other loads except dead loads shall be present on the roof when this
- uniformly distributed load is applied. All building exits under down-slope eaves shall be
- protected from sliding snow and ice."
- (6) In IBC, Section 1608.1.2, a new section is added as follows: "1608.1.2 Utah Snow
- Loads. The snow loads specified in Table 1608.1.2(b) shall be used for the jurisdictions
- identified in that table. Otherwise, the ground snow load, P_o, to be used in the determination of
- design snow loads for buildings and other structures shall be determined by using the 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 than or equal to
- 663 A_o.
- 664 WHERE:
- 665 P_g = Ground snow load at a given elevation (psf);
- 666 P_0 = Base ground snow load (psf) from Table No. 1608.1.2(a);
- S = Change in ground snow load with elevation (psf/100 ft.) From Table No. 1608.1.2(a);
- A = Elevation above sea level at the site (ft./1,000);
- A_o = Base ground snow elevation from Table 1608.1.2(a) (ft./1,000).
- The building official may round the roof snow load to the nearest 5 psf. The ground snow
- load, P_g, may be adjusted by the building official when a licensed engineer or architect submits
- data substantiating the adjustments.
- Where the minimum roof live load in accordance with Section [1607.11] 1607.12 is greater
- than the design roof snow load, such roof live load shall be used for design, however, it shall
- 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."
- (7) IBC, Table 1608.1.2(a) and Table 1608.1.2(b), are added as follows:

678	"TABLE NO. 1608.1.2(a)					
679	STATE OF UTAH - REGIONAL SNOW LOAD FACTORS					
680	COUNTY	P _o	S	A_{o}		
681	Beaver	43	63	6.2		
682	Box Elder	43	63	5.2		
683	Cache	50	63	4.5		
684	Carbon	43	63	5.2		
685	Daggett	43	63	6.5		
686	Davis	43	63	4.5		
687	Duchesne	43	63	6.5		
688	Emery	43	63	6.0		
689	Garfield	43	63	6.0		
690	Grand	36	63	6.5		
691	Iron	43	63	5.8		
692	Juab	43	63	5.2		
693	Kane	36	63	5.7		
694	Millard	43	63	5.3		
695	Morgan	57	63	4.5		
696	Piute	43	63	6.2		
697	Rich	57	63	4.1		
698	Salt Lake	43	63	4.5		
699	San Juan	43	63	6.5		
700	Sanpete	43	63	5.2		
701	Sevier	43	63	6.0		
702	Summit	86	63	5.0		
703	Tooele	43	63	4.5		
704	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

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TABLE NO. 1608.1.2(B)

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.

713	County	City	Elevation	Ground Snow	Roof Snow
				Load (psf)	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	¹The IBC requ	aires a minimum live load - See	[1607.11.2] <u>Sectio</u>	on 1607.12.		
727	² This table is	informational only in that actual	site elevations ma	ny vary. Table is	only valid if	
	site elevation	is within 100 feet of the listed e	levation. Otherwi	se, contact the lo	cal 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 $I_s = 1.0$ "					

- (8) A new IBC, Section 1608.1.3, is added as follows: "1608.1.3 Thermal Factor. The value for the thermal factor, C_t , used in calculation of P_f shall be determined from Table 7.3 in ASCE 7.
- Exception: Except for unheated structures, the value of C_t need not exceed 1.0 when ground snow load, P_g is calculated using Section 1608.1.2 as amended."
 - (9) IBC, Section 1608.2, is deleted and replaced with the following: "1608.2 Ground Snow Loads. The ground snow loads to be used in determining the design snow loads for roofs in states other than Utah are given in Figure 1608.2 for the contiguous United States and Table 1608.2 for Alaska. Site-specific case studies shall be made in areas designated CS in figure 1608.2. Ground snow loads for sites at elevations above the limits indicated in Figure 1608.2 and for all sites within the CS areas shall be approved. Ground snow load determination for such sites shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2-percent annual probability of being exceeded (50-year mean recurrence interval). Snow loads are zero for Hawaii, except in mountainous regions as approved by the building official."
 - (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:
- 4. Where the flat roof snow load, P_p exceeds 30 psf, the snow load included in seismic design
- 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
- A = Elevation above sea level at the location of the structure (ft./1,000)
- 756 $P_f = Design roof snow load, psf.$
- For the purposes of this section, snow load shall be assumed uniform on the roof footprint
- vithout including the effects of drift or sliding. The Importance Factor, I, used in calculating P_f
- 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
- ASCE 7, Section 13.5.6.2.2 paragraph (e) is modified to read as follows: (e) Penetrations shall
- 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."
- 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
- concrete foundation design. Group R, Division 3 Occupancies three stories or less in height,
- and Group U Occupancies, which are constructed in accordance with Section 2308, or with
- other methods employing repetitive wood-frame construction or repetitive cold-formed steel
- structural member construction, shall be permitted to have concrete foundations constructed in
- 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)

(610 mm).

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'(2,7	'43 mm), Eı	ngineering	required	for each co	lumn		
786	Footnotes:							
787	(1) Based	on 3,000 ps	i (20.6 Mp	oa) concre	ete and 60,0	00 psi (414 Mpa	a) reinforcing	g steel.
788	(2) To be 1	placed in th	e center of	the wall,	and extend	ed from the foor	ting to within	n 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 ba	ır shall be lo	ocated in the	he top fou	ır inches (10	02 mm), one bar	in the botto	m four
	inches (102	2 mm) and t	he other b	ars equall	y spaced be	etween. Such ba	r placement	satisfies the
	requiremen	nts of Section	n 1805.9.	Corner re	einforcing s	hall be provided	l so as to lap	24 inches

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. Soi
	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)] <u>(3)</u> A new IBC, Section [1905.1.11] <u>1905.1.9</u> , 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 [eategories]
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	[1613.8] 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

shall conform to ANSI Z4.3."

846

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:]

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

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

[3. Where design occupant load increase is less than 25 occupants and the Risk Category does

not change."]

[(3)] (1) In IBC, Chapter 35, the referenced standard ICCA117.1-09, Section 606.2,

Exception 1 is modified to include the following sentence at the end of the exception:

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

[(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	907.9"
	Multiple-station Carbon Monoxide	
	Alarms	

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

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

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

906 including setback and window well requirements."

(2) In IRC, Section 109:

- (a) A new IRC, Section 109.1.5, is added as follows: "R109.1.5 Weather-resistant exterior wall envelope inspections. An inspection shall be made of the weather-resistant exterior wall envelope as required by Section R703.1 and flashings as required by Section R703.8 to prevent water from entering the weather-resistive barrier."
 - (b) The remaining sections are renumbered as follows: R109.1.6 Other inspections; R109.1.6.1 Fire- and smoke-resistance-rated construction inspection; R109.1.6.2 Reinforced masonry, insulating concrete form (ICF) and conventionally formed concrete wall inspection; and R109.1.7 Final inspection.
- (3) IRC, Section R114.1, is deleted and replaced with the following: "R114.1 Notice to owner. Upon notice from the building official that work on any building or structure is being prosecuted contrary to the provisions of this code or other pertinent laws or ordinances or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent or to the person doing the work; and shall state the conditions under which work will be permitted to resume."
- (4) In IRC, Section R202, the following definition is added: "CERTIFIED BACKFLOW PREVENTER ASSEMBLY TESTER: A person who has shown competence to test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction under Utah Code, Subsection 19-4-104(4)."
- (5) In IRC, Section R202, the definition for "CONDITIONED SPACE" is modified by deleting the words at the end of the sentence "being heated or cooled by any equipment or appliance" and replacing them with the following: "enclosed within the building thermal envelope that is directly heated or cooled, or indirectly heated or cooled by any of the following 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 with the following: "CROSS CONNECTION. Any physical connection or potential

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

- (7) In IRC, Section 202, in the definition for gray water a comma is inserted after the word "washers"; the word "and" is deleted; and the following is added to the end: "and clear water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without objectionable odors; non-highly pigmented; and will not interfere with the operation of the sewer treatment facility."
- (8) In IRC, Section R202, the definition of "Potable Water" is deleted and replaced with the following: "POTABLE WATER. Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the Utah Code, Title 19, [Chapters] Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and the regulations of the public health authority having jurisdiction."
- (9) IRC, Figure R301.2(5), is deleted and replaced with Table R301.2(5a) and Table R301.2(5b) as follows:

"TABLE NO. R301.2(5a)							
STATE OF U	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

986	TABLE NO. R301.2(5b)					
987	REQUIR	ED SNOW LOADS FOR SEI	LECTED UTAH (CITIES AND TO	WNS1,2	
988	The following jurisdictions require design snow load values that differ from the Equation in the Utah Snow Load Study.					
989	County	City	Elevation	Ground Snow Load (psf)	Roof Snow Load (psf) 6	
990	Carbon	Price3 All other county locations5	5550 	43	30	
991	Davis	Fruit Heights3	4500 - 4850	57	40	

_							
992	Emery	Green River3	4070	36	25		
993	Garfield	Panguitch3	6600	43	30		
994	Rich	Woodruff3	6315	57	40		
		Laketown4	6000	57	40		
		Garden City5					
		Randolph4	6300	57	40		
995	San Juan	Monticello3	6820	50	35		
996	Summit	Coalville3	5600	86	60		
		Kamas4	6500	114	80		
997	Tooele	Tooele3	5100	43	30		
998	Utah	Orem3	4650	43	30		
		Pleasant Grove4	5000	43	30		
		Provo5					
999	Wasatch	Heber5					
1000	Washington	Leeds3	3460	29	20		
		Santa Clara3	2850	21	15		
		St. George3	2750	21	15		
		All other county locations5					
1001	Wayne	Loa3	7080	43	30		
1002	1The IRC req	uires a minimum live load S	See R301.6.				
1003	2This table is	informational only in that actu	ual site elevations	may vary. Table	is only valid		
	if site elevation	on is within 100 feet of the list	ed elevation. Othe	erwise, contact th	ne local		
	Building Official.						
1004	3Values adopted from Table VII of the Utah Snow Load Study						
1005	4Values base	d on site-specific study. Conta	act local Building	Official for addit	ional		
	information.						
1006	5Contact loca	l Building Official.					
1007	6Based on Ce	e=1.0, Ct=1.0 and Is=1.0"					

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

1008

	H.B. 121 U2-12-16 1:45 PM
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, Pg, 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: $Pg = (Po2 + S2(A-Ao)2)0.5$ for A greater than Ao, and $Pg = Po$ for A less
1013	than or equal to Ao.
1014	WHERE:
1015	Pg = Ground snow load at a given elevation (psf);
1016	Po = 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	Ao = 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, Pg, 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.

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

Townhouses separated by a common 2-hour fire-resistance-rated wall as provided in Section

1036

1037

R302.2."]

- 1040 (12) IRC, Section R302.13, is deleted.
- 1041 $\left[\frac{(14)}{(13)}\right]$ In IRC, Section R303.4, the number "5" is changed to "3" in the first
- sentence.
- 1043 $[\frac{(15)}{(14)}]$ IRC, Sections $[\frac{R311.7.4}{R311.7.5}]$ through $[\frac{R311.7.4.3}{R311.7.5.3}]$ are
- 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).
- The riser shall be measured vertically between leading edges of the adjacent treads. The
- 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).
- The tread depth shall be measured horizontally between the vertical planes of the foremost
- projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread
- 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
- a point 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall
- have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the
- 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
- be no greater than 9/16 inch (14.3 mm). A nosing not less than 3/4 inch (19 mm) but not more
- than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing
- projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm)
- between two stories, including the nosing at the level of floors and landings. Beveling of
- nosing shall not exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped from the
- underside of the leading edge of the tread above at an angle not more than 30 degrees (0.51 rad)
- from the vertical. Open risers are permitted, provided that the opening between treads does not
- permit the passage of a 4-inch diameter (102 mm) sphere.
- 1067 Exceptions.
- 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)] <u>(15)</u> 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] $\underline{3}$ is added as follows: "[4] $\underline{3}$.
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 [$\frac{N1101.8}{1000}$] $\frac{N1101.5}{1000}$ (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 [$\frac{N1101.14}{N1101.12}$ (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)] <u>(4)</u> 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."

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H 36	"TABLE N1102.1.1 (R402.1.1)										
H 37	INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT*										
H 38	CLIMATE ZONE	FENESTRATION U-FACTOR*	SKYLIGHT.* U-FACTOR	GLAZED FENESTRATION SHGC ^{In}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ¹⁷	FLOOR R-VALUE	BASEMENT - WALL R-VALUE	SLAD-* R-VALUE & DEPTH	CRAWL SPACE * WALL R-VALUE
H 39	3	0.65	0.65	0.40	30	15	5	19	θ	θ	5/13
11	3 and	0.35	0.60	NR	38	19 or 13 + 5 *	13	30- ₹	10/13	10, 2 ft	10/13
H H	6	0.35	0.60	NR	49	19 or 13 + 5 †	15	30- ₹	10/13	10, 4 ft	10/13

⁺i. 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."

1143	- TABLE N1102.1.3 (R402.1.3)								
1144	- EQUIVALENT U-FACTORS*								
1145								CRAWL SPACE WALL U-FACTOR	
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
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.]

[(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.]

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

[(9)] (6) In IRC, Section N1102.4.1.1 (R402.4.1.1), the last sentence is deleted and 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 per hour in [Zone] Climate Zones 3 through 8" are deleted. 1161 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 contractors who have completed training provided by Blower Door Test equipment 1166 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 are deleted and replaced with the following: 1170 ["1. Postconstruction test: Total leakage shall be less than or equal to 10 cfm (283) 1171 1172 L/min) per 100 square feet (9.29 m2) of conditioned floor space when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air 1173 handler enclosure. All register boots shall be taped or otherwise sealed during the test.] 1174 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 enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is 1178 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	$[\frac{(14)}{(11)}]$ In IRC, Section $[\frac{N1103.2.3}{(R403.2.3)}]$ $\underline{N1103.3.5}$ $(R403.3.5)$, 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

1232	CLIMATE ZONE	ENERGY RATING INDEX
1233	<u>1</u>	<u>59</u>
1234	<u>2</u>	<u>59</u>
1235	<u>3</u>	<u>65</u>
1236	<u>4</u>	<u>63</u>
1237	<u>5</u>	<u>69</u>
1238	<u>6</u>	<u>68</u>
1239	<u>7</u>	<u>60</u>
1240	<u>8</u>	<u>60</u>

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

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

1249 [(22)] (15) IRC, Section [M1411.6] M1411.8, is deleted. 1250 Section 16. Section 15A-3-204 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".] [(3)] A new IRC, Section G2401.2, is added as follows: "G2401.2 Meter Protection. 1260 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, moving, or migrating ice and snow. If an added structure is used, it must provide access for 1263 service and comply with the IBC or the IRC." 1264 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 Resources, Division of Water Rights. In addition, the quality of the water shall be approved by 1271 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

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

disposal system in accordance with Utah Administrative Code, Chapter 4, Rule R317, as

administered by the Department of Environmental Quality, Division of Water Quality,"

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1280 "water" are deleted.

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

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

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1298	- "DEVICE	DEGREE OF	APPLICATION ^b	APPLICABLE
1298	DEVICE	DEUKEE OF	APPLICATION	APPLICABLE
		HAZARD [™]		STANDARDS
1299	BACKFLOW PREVENT	FION ASSEMBLIES:		
1300	Double check backflow	Low hazard	Backpressure or	ASSE 1015, AWWA
	prevention assembly		backsiphonage	C510, CSA B64.5,
	and double check fire		Sizes 3/8" - 16"	CSA B64.5.1
	protection backflow			
	prevention assembly			
1301	Double check detector	Low hazard	Backpressure or	ASSE 1048
	fire protection		backsiphonage	
	backflow prevention		Sizes 3/8" - 16"	
	assemblies			

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

1312	- Hose connection	High or low hazard	Backsiphonage only	ASSE 1011,			
	vacuum breaker		Sizes 1/2", 3/4", 1"	CAN/CSA B64.1.1			
1313	Atmospheric type	High or low hazard	Backsiphonage only	ASSE 1001, CSA			
	vacuum breaker		Sizes 1/2" - 4"	B64.1.1			
1314	Vacuum breaker wall	High or low hazard	Backsiphonage only	ASSE 1019, CSA			
	hydrants, frost		Sizes 3/4", 1"	B64.2.2			
	resistant, automatic						
	draining type						
1315	OTHER MEANS or METHODS:						
1316	- Air gap	High or low hazard	Backsiphonage only	ASME A112.1.2			
1317	Air gap fittings for use	High or low hazard	Backpressure or	ASME A112.1.3			
	with plumbing fixtures,		backsiphonage				
	appliances and						
	appurtenances						
1318	For SI: 1 inch = 25.4 mm	ì					
1319	a. Low Hazard - See Pol	lution (Section 202), I	High Hazard - See Conta	nmination (Section			
	202)						
1320	b. See Backpressure (Se	ction 202), See Backpr	ressure, low head (Secti	on 202), See			
	Backsiphonage Section 2	202)					
1321	Installation Guidelines: 1	The above specialty dev	vices shall be installed i	n accordance with			
	their listing and the man	ufacturer's instructions	and the specific provisi	ons of this chapter."			
1322] [(6) In IRC, Section	n P3009.1, all words at	fter the word "urinals" a	re deleted and the			
1323	following sentence is added	d at the end: "Gray wat	er recycling systems for	subsurface landscape			
1324	irrigation shall conform with UAC R317-401 Gray Water Systems."]						

- [(7) A new IRC, Section P3009.1.1, is added as follows: "P3009.1.1 Recording. The existence of a gray water recycling system shall be recorded on the deed of ownership for that property. The certificate of occupancy shall not be issued until the documentation of the recording required under this section is completed by the owner."]
- [(8) In IRC, Section P3009.2, the words "and systems for subsurface landscape irrigation shall comply with Section P3009.14" are deleted.]

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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	y shall be installed	l in a horizontal	position only.	unless listed	or approved for

- vertical installation in accordance with Section 303.4.
- d. The bottom of the assembly shall be installed a minimum of 12 inches above the floor or
- 1365 ground.
- e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or
- obstacle, and shall be readily accessible for testing, repair, and maintenance.
- 1368 P2902.1.2.2 Double Check Valve Backflow Prevention Assembly.
- A double check valve backflow prevention assembly shall be installed as follows:
- a. The assembly shall be installed in a horizontal position only, unless listed or approved for
- vertical installation.
- 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
- obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance
- between all sides of the vault, including the floor and roof or ceiling, with adequate room for
- testing and maintenance.
- 1378 P2902.1.2.3 Pressure Vacuum Break Assembly and Spill Resistant Pressure Vacuum Breaker
- 1379 Assembly.
- A pressure vacuum break assembly or a spill resistant pressure vacuum breaker assembly shall
- be installed as follows:
- a. The assembly shall not be installed in an area that could be subject to backpressure or back
- drainage conditions.
- b. The assembly shall be installed a minimum of 12 inches above all downstream piping and
- the highest point of use.
- 1386 c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall
- be readily accessible for testing, repair, and maintenance.
- d. The assembly shall not be installed below ground, in a vault, or in a pit.
- e. The assembly shall be installed in a vertical position."
- 1390 (6) IRC, Section P2910.5, is deleted and replaced with the following:
- "P2910.5 Potable water connections."
- 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	<u>"P2910.9.5 Makeup water.</u>
1397	Where an uninterrupeted 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

garage may be connected to the garage branch circuit."

1425 [(1)] (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

rooms, closets, hallways, and similar rooms or areas.

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Exception: This section does not apply for a simple move or an extension of a branch circuit or an outlet which does not significantly increase the existing electrical load. This exception does

not include changes involving remodeling or additions to a residence."

[(2)] (3) IRC, Chapter 44, is amended by adding the following reference standard:

1432	"Standard reference number	Title	Referenced in code section number
1433	USC-FCCCHR 10th	Foundation for Cross-Connection Control	Table P2902.3"
	Edition Manual of	and Hydraulic Research University of	
	Cross Connection	Southern California Kaprielian Hall 300	
	Control	Los Angeles CA 90089-2531	

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

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

- (1) A new IPC, Section [101.2] 101.2.1, is added as follows: "For clarification, the International Private Sewage Disposal Code is not part of the plumbing code even though it is in the same printed volume."
- (2) In IPC, Section 202, the definition for "Backflow Backpressure, Low Head" is deleted.
- (3) In IPC, Section 202, the following definition is added: "Certified Backflow Preventer Assembly Tester. A person who has shown competence to test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction under Utah Code, Subsection 19-4-104(4)."
- (4) In IPC, Section 202, the following definition is added: "Contamination (High Hazard). An impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or 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 <u>Title 19</u>, Chapter 5, Water Quality Act, and

- the regulations of the public health authority having jurisdiction."
- 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
- 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:
- "Where water is not available at the construction site or where freezing conditions limit
- the use of water on the construction site, plastic drainage and vent pipe may be permitted to be
- tested with air. The following procedures shall be followed:
- 1. Contractor shall recognize that plastic is extremely brittle at lower temperatures and can
- explode, causing serious injury or death.
- 2. Contractor assumes all liability for injury or death to persons or damage to property or for
- claims for labor and/or material arising from any alleged failure of the system during testing
- with air or compressed gasses.
- 3. Proper personal protective equipment, including safety eyewear and protective headgear,
- should be worn by all individuals in any area where an air or gas test is being conducted.
- 4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.
- 5. No [water supply] drain and vent system shall be pressurized in excess of 6 psi as measured
- 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
- minutes.
- 7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or

- 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
- 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
- explode, causing serious injury or death.
- 2. Contractor assumes all liability for injury or death to persons or damage to property or for
- claims for labor and/or material arising from any alleged failure of the system during testing
- with air or compressed gasses.
- 1522 3. Proper personal protective equipment, including safety eyewear and protective headgear,
- should be worn by all individuals in any area where an air or gas test is being conducted.
- 4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.
- 5. Water supply systems shall be pressure tested to a minimum of 50 psi but not more than 80
- 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
- minutes.
- 7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or
- 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
- accordance with Utah Administrative Code, R309-305."
- 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}";
- (b) In [the] row [for] number "3", for "E" occupancy, in the field for "OTHER", a new
- 1540 footnote [i] g is added.
- (c) In [the] row number "5", for "I-4 Adult day care and child day care" occupancy, in
- the field for "OTHER", a new footnote [i] g is added.

1543	(d) A new footnote $[h] \underline{f}$ is added as follows: "FOOTNOTE: $[h] \underline{f}$. When provided, in		
1544	public toilet facilities, there shall be an equal number of diaper changing facilities in male toile		
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."		

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

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

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

- (1) IPC, Section 602.3, is deleted and replaced with the following: "602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized provided that the source has been developed in accordance with Utah Code, Sections 73-3-1, 73-3-3, and 73-3-25, as administered by the Department of Natural Resources, Division of Water Rights. In addition, the quality of the water shall be approved by the local health department having jurisdiction. The source shall supply sufficient quantity of water to comply with the requirements of this chapter."
- (2) IPC, Sections 602.3.1, 602.3.2, 602.3.3, 602.3.4, 602.3.5, and 602.3.5.1, are deleted.
- (3) A new IPC, Section 604.4.1, is added as follows: "604.4.1 Manually operated metering faucets for food service establishments. Self closing or manually operated metering faucets shall provide a flow of water for at least 15 seconds without the need to reactivate the faucet."
- (4) IPC, Section 606.5, is deleted and replaced with the following: "606.5 Water pressure booster systems. Water pressure booster systems shall be provided as required by Section 606.5.1 through 606.5.11."
- (5) A new IPC, Section 606.5.11, is added as follows: "606.5.11 Prohibited installation. In no case shall a booster pump be allowed that will lower the pressure in the public main to less than the minimum water pressure specified in Utah Administrative Code R309-105-9."
- 1600 (6) In IPC, Section 608.1, the words "and pollution" are added after the word 1601 "contamination."
- [(7) IPC, Table 608.1, is deleted and replaced with the following:]

"TABLE 608.1			
Application of Back Flow Preventers			
- DEVICE	DEGREE OF	APPLICATION ^b	APPLICABLE
	HAZARD ^a		STANDARDS
BACKFLOW PREVI	ENTION ASSEMBLIES:		
Double check backflo	w Low hazard	Backpressure or	ASSE 1015, AWWA
prevention assembly		backsiphonage	C510, CSA B64.5,
and double check fire		Sizes 3/8" - 16"	CSA B64.5.1
protection backflow			
prevention assembly			
Double check detecto	r Low hazard	Backpressure or	ASSE 1048
fire protection		backsiphonage	
backflow prevention		Sizes 3/8" - 16"	
assemblies			
Pressure vacuum	High or low hazard	Backsiphonage only	ASSE 1020, CSA
breaker assembly		Sizes 1/2" - 2"	B64.1.2
Reduced pressure	High or low hazard	Backpressure or	ASSE 1013, AWWA
principle backflow		backsiphonage	C511, CSA B64.4,
prevention assembly		Sizes 3/8" - 16"	CSA B64.4.1
and reduced pressure			
principle fire			
protection backflow			
assembly			
Reduced pressure	High or low hazard	Backpressure or	ASSE 1047
detector fire protectio	n	backsiphonage (Fire	
backflow prevention		Sprinkler Systems)	
assemblies			
Spill-resistant vacuun	High or low hazard	Backsiphonage only	ASSE 1056
breaker assembly		Sizes 1/2" - 2"	
BACKFLOW PREVI	ENTER PLUMBING DE	VICES:	

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 ME	THODS:		
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	Ī		

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 Blackflow 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. A pressure vacuum break assembly and spill resistant pressure vacuum breaker assembly shall 1659 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 vard hydrants that drain the riser into 1680 the ground are considered to be stop-and-waste valves and shall be permitted. A stop-and-waste valve shall be installed in accordance with a manufacturer's recommended 1681 1682 installation instructions."

(12) In IPC, Section 608.11, the following sentence is added at the end of the

paragraph: "The coating and installation shall conform to NSF Standard 61 and application of

the coating shall comply with the manufacturer's instructions."

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

(14) IPC, Section 608.13.4, is deleted.

- (15) IPC, Section 608.13.9, is deleted and replaced with the following: "608.13.9 Chemical dispenser backflow devices. Backflow devices for chemical dispensers shall comply with Section 608.16.7."
- (16) IPC, Section 608.15.3, is deleted and replaced with the following: "608.15.3 Protection by a backflow preventer with intermediate atmospheric vent. Connections to residential boilers only, without chemical treatment, shall be protected by a backflow preventer with an intermediate atmospheric vent."
- (17) IPC, Section 608.15.4, is deleted and replaced with the following: "608.15.4 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type or pressure-type vacuum breakers. Vacuum breakers shall not be installed under exhaust hoods or similar locations that will contain toxic fumes or vapors. Fill valves shall be set in accordance with Section 425.3.1. Atmospheric Vacuum Breakers The critical level of the atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above the flood level rim of the fixture or device. Pipe-applied vacuum breakers shall be installed not less than 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served. No valves shall be installed downstream of the atmospheric vacuum breaker. Pressure Vacuum Breaker The critical level of the pressure vacuum breaker shall be set a minimum of 12 inches (304 mm) above the flood level of the fixture or device."
- (18) In IPC, Section 608.15.4.2, the following is added after the first sentence: "Add-on-backflow prevention devices shall be non-removable. In climates where freezing temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow preventer shall be used."
- 1715 (19) IPC, Section 608.16.2, is deleted and replaced as follows: "608.16.2 Connections 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. <u>Installation shall be</u>
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)] <u>(23)</u> 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.

1//9	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." Section 28. Section 15A-3-314 is amended to read: 1843 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 1847 "Standard **Title** Referenced in code section reference number number 1848 1072-2007 Performance Requirements for Barrier 1004.2" Type Floor Drain Trap Seal Protection **Devices** 1849 [(2) In IPC, Chapter 14, the following referenced standard is added:] 1850 1851 "Standard **Title** Referenced in code section reference number number 1852 **USC-FCCCHR** Foundation for Cross-Connection Table 608.1" 10th Edition Control and Hydraulic Research Manual of Cross University of Southern California Connection Kaprielian Hall 300 Los Angeles CA Control 90089-2531 1853 IPC, Chapter 14, is deleted and replaced with the following: "1401. Subsurface Landscape Irrigation Systems. 1854 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 UAC R317-3, Design Requirements for Wastewater Collection, Treatment, and Disposal, and 1858 1859 UAC R317-4, Onsite Waterwaste Systems." Section 29. Section 15A-3-315 is enacted to read: 1860 15A-3-315. Amendments to Chapter 15 of IPC. 1861 In IPC, Chapter 15, the following referenced standard is added: 1862

1885

1886 1887

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

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 replaced with the following: "CONDITIONED SPACE. An area, room, or space enclosed 1869 1870 within the building thermal envelope that is directly heated or cooled, or indirectly heated or cooled by any of the following means: 1871 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

63G, Chapter 3, Utah Administrative Rulemaking Act, each nail station where a nail technician

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

files or shapes an acrylic nail shall be provided with:

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	$[\frac{7}{2}]$ (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)] <u>(3)</u> 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

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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)] <u>(5)</u> 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:
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1977	- "TABLE R402.1.1
1978	INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

- 70 -

1989 1**990**

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1979	=										CRAWL
1777				GLAZED		WOOD	MASS		BASEMENT -	SLAB [⊎]	SPACE [™]
	CLIMATE	FENESTRATION	SKYLIGHT b	FENESTRATION	CEILING	FRAME WALL	WALL	FLOOR	WALL	R-VALUE	WALL
	ZONE	U-FACTOR b	U-FACTOR	SHGC bie	R-VALUE	R-VALUE	R-VALUE 155	R-VALUE	R-VALUE	& DEPTH	R-VALUE
1980	- 3	0.65	0.65	0.40	30	15	5	19	0	θ	5/13
1981	- 5 and	0.35	0.60	NR	38	19 or 13 + 5^h	13	30 ਵ	10/13	10, 2 ft	10/13
	Marine 4										
1982	- 6	0.35	0.60	NR	49	19 or 13 + 5 ^h	15	30 ਵ	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							nes			

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 [®]								
1985	CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR-	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

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

U-factor or lower, minimum heating equipment efficiency is, for gas, 90 AFUE, or, for oil, 84

AFUE, and all other component requirements are met."

- [(7) In IECC, Section R402.2.1, the last sentence is deleted.]
- [(8) In IECC, Section R402.2.2, the last sentence is deleted.]
- [(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.]
 - [(11)] (6) In IECC, Section R402.4.1, in the first sentence, the word "and" is deleted and replaced with the word "or".

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

- [(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

number 113.3 is changed to 170, the number 3 is changed to 5, and the number 85 is changed

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2036	to 114.6, and in Subsection 2, the number 4 is changed to 8 and the number 113.3 is changed to
2037	<u>226.5.</u>
2038	$[\frac{(17)}]$ (12) In IECC, Section [$\frac{R403.2.3}]$ $\frac{R403.3.5}$, 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} " 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

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

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

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

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

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

<u>TABLE R406.4</u>

MAXIMUM ENERGY RATING INDEX

2080	<u>CLIMATE ZONE</u>	ENERGY RATING INDEX
2081	<u>1</u>	<u>59</u>
2082	<u>2</u>	<u>59</u>
2083	<u>3</u>	<u>65</u>
2084	<u>4</u>	<u>63</u>
2085	<u>5</u>	<u>69</u>
2086	<u>6</u>	<u>68</u>
2087	<u>7</u>	<u>60</u>
2088	<u>8</u>	<u>60</u>

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

Part 8. Statewide Amendments to International Existing Building Code 15A-3-801. General provisions.

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

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

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

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

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

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

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

[(3) Related to smoke detectors:]

- [(a) Location. A smoke detector shall be installed on any ceiling or wall in the hallway or space communicating with each bedroom area between the living area and the first bedroom door, unless a door separates the living area from that bedroom area, in which case the detector shall be installed on the living-area side, as close to the door as practicable, as required by MHCSS 3280.208. Homes with bedroom areas separated by anyone or combination of common-use areas such as a kitchen, dining room, living room, or family room (but not a bathroom or utility room) shall be required to have one detector for each bedroom area. When located in the hallways, the detector shall be between the return air intake and the living areas.
- [(b) Switches and electrical connections. Smoke detectors shall have no switches in the circuit to the detector between the over-current protection device protecting the branch circuit and the detector. The detector shall be attached to an electrical outlet box and connected by a permanent wiring method to a general electrical circuit. The detector shall not be placed on the same branch circuit or any circuit protected by a ground-fault circuit interrupter.]
 - [(4) Related to solid-fuel-burning stoves/fireplaces:]
- [(a) Solid-fuel-burning fireplaces and fireplace stoves. Solid-fuel-burning, factory-built fireplaces, and fireplace stoves may be used in manufactured homes, provided that they are listed for use in manufactured homes and installed according to their listing/manufacturer's instructions and the minimum requirements of MHCSS 3280.709(g).]
- [(b) Equipment. A solid-fuel-burning fireplace or fireplace stove shall be equipped with an integral door or shutters designed to close the fire chamber opening and shall include complete means for venting through the roof, a combustion air inlet, a hearth extension, and means to securely attach the unit to the manufactured home structure.]
- [(i) Chimney. A listed, factory-built chimney designed to be attached directly to the fireplace/fireplace stove and equipped with, in accordance with the listing, a termination device 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 of the manufactured home that is within 10 feet of the chimney.] 2159 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. [(iii) Hearth. The hearth extension shall be of noncombustible material that is a 2164 minimum of 3/8-inch thick and shall extend a minimum of 16 inches in front and eight inches 2165 2166 beyond each side of the fireplace/fireplace stove opening. The hearth shall also extend over the entire surface beneath a fireplace stove and beneath an elevated and overhanging fireplace. 2167 2168 [(5) Related to electrical wiring systems:] [(a) Testing. All electrical systems shall be tested for continuity in accordance with 2169 2170 MHCSS 3280.810, to ensure that metallic parts are properly bonded; tested for operation, to demonstrate that all equipment is connected and in working order; and given a polarity check, 2171 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 rated at 20 amperes or less that are directly connected to the aluminum conductors shall be 2175 2176 marked CO/ALA. Exterior receptacles, other than heat tape receptacles, shall be of the ground-fault circuit interrupter (GFI) type. Conductors of dissimilar metals (copper/aluminum 2177 2178 or copper-clad aluminum) must be connected in accordance with NEC, Section 110-14.] [(6) Related to replacement furnaces and water heaters:] 2179 2180 (a) Listing. Replacement furnaces or water heaters shall be listed for use in a manufactured home. Vents, roof jacks, and chimneys necessary for the installation shall be 2181 listed for use with the furnace or water heater.] 2182 (b) Securement and accessibility. The furnace and water heater shall be secured in 2183 place to avoid displacement. Every furnace and water heater shall be accessible for servicing, 2184 for replacement, or both as required by MHCSS 3280.709(a).1 2185 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,

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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 and Urban Development's (HUD) Manufactured Homes Construction and Safety Standards 2257 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 area. The bottom of the window opening shall be no more than 36 inches above the floor, and 2261 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 have the doors no less than 12 feet, center-to-center, from each other, and a multisection home 2266 have the doors no less than 20 feet, center-to-center, from each other, when measured in a 2267 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 74-inch-high clear opening and sliding glass doors shall have a 28-inch-wide by 72-inch-high 2271 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

members or materials with a flame spread rating of 25 or less. Combustible doors providing

interior or exterior access to furnace and water heater spaces shall be covered with materials of

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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).

(b) Equipment. A solid-fuel-burning fireplace or fireplace stove shall be equipped with

an integral door or shutters designed to close the fire chamber opening and shall include

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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: (a) Testing. All electrical systems shall be tested for continuity in accordance with 2329 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 marked CO/ALA. Exterior receptacles, other than heat tape receptacles, shall be of the 2336 ground-fault circuit interrupter (GFCI) type. Conductors of dissimilar metals 2337 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: (a) Listing. Replacement furnaces or water heaters shall be listed for use in a 2341 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 eves 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. Amendment	s to IRC applicable to City of Farmington.
2438	[The following amendmen	ts are adopted as amendments to the IRC for the City of
2439	Farmington:]	
2440	[(1) In IRC, R324 Automa	atic Sprinkler Systems, new IRC, Sections R324.1 and
2441	R324.2 are added as follows: "R32	24.1 When required. An automatic sprinkler system shall be
2442	installed throughout every dwellin	g in accordance with NFPA 13D, when any of the following
2443	conditions are present:]	
2444	[1. the structure is over two storic	es high, as defined by the building code;]
2445	[2. the nearest point of structure i	s more than 150 feet from the public way;]
2446	[3. the total floor area of all storic	es is over 5,000 square feet (excluding from the calculation
2447	the area of the basement and/or ga	rage); or]
2448	[4. the structure is located on a str	reet constructed after March 1, 2000 that has a gradient over
2449	12% and, during fire department r	esponse, 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 crite	ria shall not apply).]
2452	[R324.2 Installation requirements	and standards. Such sprinkler system shall be installed in
2453	basements, but need not be install	ed in garages, under eves or in enclosed attic spaces, unless
2454	required by the Chief. Such system	m shall be installed in accordance with NFPA 13D."]
2455	[(2) In IRC, Chapter 44, tl	ne following NFPA referenced standards are added as
2456	follows:]	
2457	[
2458	-	"TABLE
2459	- ADD	
2460	- 13D-07	Installation of Sprinkler Systems in One- and Two-family
		Dwellings and Manufactured Homes, as amended by
		these rules
2461	- 13R-07	Installation of Sprinkler Systems in Residential
		Occupancies Up to and Including Four Stories in Height"
2462] [(2) In NEDA Section 12]	2.07 new sections are added as follows: "1.15 Reference to

- 86 -

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 methacrylete 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:

Legislative Review Note Office of Legislative Research and General Counsel

2544

Section 15A-3-106.5, Amendments to Chapter 15 of IBC.