CONSTRUCTION CODE MODIFICATIONS

2019 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Mike Schultz

Senate Sponsor: Curtis S. Bramble

LONG TITLE

General Description:

This bill amends provisions related to the construction and fire codes.

Highlighted Provisions:

This bill:

- amends provisions related to building inspections;
- incorporates statewide amendments as part of the construction code;
- adopts Appendix Q of the 2018 International Residential Code;
- adopts, statewide with amendments:
  - the 2018 International Building Code, including Appendix J;
  - the 2018 International Plumbing Code;
  - the 2018 International Mechanical Code;
  - the 2018 International Fuel Gas Code;
  - the commercial provisions of the 2018 International Energy Conservation Code; and
  - the 2018 International Existing Building Code;
- amends statewide amendments to the International Residential Code; and
- amends local amendments to the International Building Code for Sandy City.

Money Appropriated in this Bill:

None

Other Special Clauses:

This bill provides a special effective date.

Utah Code Sections Affected:

AMENDS:

10-5-132, as last amended by Laws of Utah 2018, Chapter 236

15A-1-202, as enacted by Laws of Utah 2011, Chapter 14

15A-1-203, as enacted by Laws of Utah 2011, Chapter 14

15A-2-103, as last amended by Laws of Utah 2018, Chapter 186

15A-3-102, as last amended by Laws of Utah 2016, Chapter 249

15A-3-103, as last amended by Laws of Utah 2016, Chapter 249

15A-3-104, as last amended by Laws of Utah 2018, Chapter 361

15A-3-105, as last amended by Laws of Utah 2018, Chapter 158

15A-3-107, as last amended by Laws of Utah 2016, Chapter 249

15A-3-110, as last amended by Laws of Utah 2016, Chapter 249

15A-3-112, as last amended by Laws of Utah 2017, Chapter 257

15A-3-113, as last amended by Laws of Utah 2016, Chapter 249

15A-3-202, as last amended by Laws of Utah 2018, Chapter 361

15A-3-203, as last amended by Laws of Utah 2016, Chapter 249

15A-3-205, as last amended by Laws of Utah 2018, Chapter 186

15A-3-302, as last amended by Laws of Utah 2018, Chapter 186

15A-3-303, as last amended by Laws of Utah 2016, Chapter 249

15A-3-304, as last amended by Laws of Utah 2018, Chapter 186

15A-3-305, as last amended by Laws of Utah 2016, Chapter 249

15A-3-306, as last amended by Laws of Utah 2016, Chapter 249

15A-3-307, as last amended by Laws of Utah 2013, Chapter 297

15A-3-310, as last amended by Laws of Utah 2016, Chapter 249

15A-3-314, as last amended by Laws of Utah 2016, Chapter 249

15A-3-401, as last amended by Laws of Utah 2017, Chapter 14

15A-3-501, as last amended by Laws of Utah 2016, Chapter 249

15A-3-701, as last amended by Laws of Utah 2016, Chapter 249

15A-3-801, as last amended by Laws of Utah 2016, Chapter 249

15A-4-107, as last amended by Laws of Utah 2017, Chapter 341

17-36-55, as last amended by Laws of Utah 2018, Chapter 236

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

Section 1. Section **10-5-132** is amended to read:

10-5-132. Fees collected for construction approval -- Approval of plans.

(1) As used in this section:

(a) "Construction project" means the same as that term is defined in Section 38-1a-102.

(b) "Lodging establishment" means a place providing temporary sleeping accommodations to the public, including any of the following:

(i) a bed and breakfast establishment;

(ii) a boarding house;

(iii) a dormitory;

(iv) a hotel;

(v) an inn;

(vi) a lodging house;

(vii) a motel;

(viii) a resort; or

(ix) a rooming house.

(c) "Planning review" means a review to verify that a town has approved the following elements of a construction project:

(i) zoning;

(ii) lot sizes;

(iii) setbacks;

(iv) easements;

(v) curb and gutter elevations;

(vi) grades and slopes;

(vii) utilities;

(viii) street names;

(ix) defensible space provisions and elevations, if required by the Utah Wildland Urban Interface Code adopted under Section 15A-2-103; and

(x) subdivision.

(d) (i) " Plan review" means all of the reviews and approvals of a plan that a town requires to obtain a building permit from the town with a scope that may not exceed a review to verify:

(A) that the construction project complies with the provisions of the State Construction Code under Title 15A, State Construction and Fire Codes Act;

(B) that the construction project complies with the energy code adopted under Section 15A-2-103;

(C) that the construction project received a planning review;

(D) that the applicant paid any required fees;

(E) that the applicant obtained final approvals from any other required reviewing agencies;

(F) that the construction project complies with federal, state, and local storm water protection laws;

(G) that the construction project received a structural review;

(H) the total square footage for each building level of finished, garage, and unfinished space; and

(I) that the plans include a printed statement indicating that the actual construction will comply with applicable local ordinances and the state construction codes.

(ii) "Plan review" does not mean a review of a document:

(A) required to be re-submitted for additional modifications or substantive changes

identified by the plan review;

(B) submitted as part of a deferred submittal when requested by the applicant and approved by the building official; or

(C) that, due to the document's technical nature or on the request of the applicant, is reviewed by a third party.

(e) "State Construction Code" means the same as that term is defined in Section 15A-1-102.

(f) "State Fire Code" means the same as that term is defined in Section 15A-1-102.

[~~(e)~~] (g) "Structural review" means:

(i) a review that verifies that a construction project complies with the following:

(A) footing size and bar placement;

(B) foundation thickness and bar placement;

(C) beam and header sizes;

(D) nailing patterns;

(E) bearing points;

(F) structural member size and span; and

(G) sheathing; or

(ii) if the review exceeds the scope of the review described in Subsection (1)(e)(i), a review that a licensed engineer conducts.

[~~(f)~~] (h) "Technical nature" means a characteristic that places an item outside the training and expertise of an individual who regularly performs plan reviews.

(2) (a) If a town collects a fee for the inspection of a construction project, the town shall ensure that the construction project receives a prompt inspection.

(b) If a town cannot provide a building inspection within a reasonable time, the town shall promptly engage an independent inspector with fees collected from the applicant.

(c) If an inspector identifies one or more violations of the State Construction Code or State Fire Code during an inspection, on the day on which the inspection occurs, the inspector

shall give the permit holder written notification of each violation that:

(i) is delivered in hardcopy or by electronic means; and

(ii) upon request by the permit holder, includes a reference to each applicable provision of the State Construction Code or State Fire Code.

(3) (a) A town shall complete a plan review of a construction project for a one to two family dwelling or townhome by no later than 14 business days after the day on which the plan is submitted to the town.

(b) A town shall complete a plan review of a construction project for a residential structure built under the International Building Code, not including a lodging establishment, by no later than 21 business days after the day on which the plan is submitted to the town.

(c) (i) Subject to Subsection (3)(c)(ii), if a town does not complete a plan review before the time period described in Subsection (3)(a) or (b) expires, an applicant may request that the town complete the plan review.

(ii) If an applicant makes a request under Subsection (3)(c)(i), the town shall perform the plan review no later than:

(A) for a plan review described in Subsection (3)(a), 14 days from the day on which the applicant makes the request; or

(B) for a plan review described in Subsection (3)(b), 21 days from the day on which the applicant makes the request.

(d) An applicant may:

(i) waive the plan review time requirements described in this Subsection (3); or

(ii) with the town's consent, establish an alternative plan review time requirement.

(4) (a) A town may not enforce a requirement to have a plan review if:

(i) the town does not complete the plan review within the time period described in Subsection (3)(a) or (b); and

(ii) a licensed architect or structural engineer, or both when required by law, stamps the plan.

(b) A town may attach to a reviewed plan a list that includes:

(i) items with which the town is concerned and may enforce during construction; and

(ii) building code violations found in the plan.

(c) A town may not require an applicant to redraft a plan if the town requests minor changes to the plan that the list described in Subsection (4)(b) identifies.

Section 2. Section **15A-1-202** is amended to read:

15A-1-202. Definitions.

As used in this chapter:

(1) "Agricultural use" means a use that relates to the tilling of soil and raising of crops, or keeping or raising domestic animals.

(2) (a) "Approved code" means a code, including the standards and specifications contained in the code, approved by the division under Section 15A-1-204 for use by a compliance agency.

(b) "Approved code" does not include the State Construction Code.

(3) "Building" means a structure used or intended for supporting or sheltering any use or occupancy and any improvements attached to it.

(4) "Code" means:

(a) the State Construction Code; or

(b) an approved code.

(5) "Commission" means the Uniform Building Code Commission created in Section 15A-1-203.

(6) "Compliance agency" means:

(a) an agency of the state or any of its political subdivisions which issues permits for construction regulated under the codes;

(b) any other agency of the state or its political subdivisions specifically empowered to enforce compliance with the codes; or

(c) any other state agency which chooses to enforce codes adopted under this chapter

by authority given the agency under a title other than this part and Part 3, Factory Built Housing and Modular Units Administration Act.

(7) "Construction code" means standards and specifications published by a nationally recognized code authority for use in circumstances described in Subsection 15A-1-204(1), including:

(a) a building code;

(b) an electrical code;

(c) a residential one and two family dwelling code;

(d) a plumbing code;

(e) a mechanical code;

(f) a fuel gas code;

(g) an energy conservation code; and

(h) a manufactured housing installation standard code.

(8) "Executive director" means the executive director of the Department of Commerce.

[~~(8)~~] (9) "Legislative action" includes legislation that:

(a) adopts a new State Construction Code;

(b) amends the State Construction Code; or

(c) repeals one or more provisions of the State Construction Code.

[~~(9)~~] (10) "Local regulator" means a political subdivision of the state that is empowered to engage in the regulation of construction, alteration, remodeling, building, repair, and other activities subject to the codes.

[~~(10)~~] (11) "Not for human occupancy" means use of a structure for purposes other than protection or comfort of human beings, but allows people to enter the structure for:

(a) maintenance and repair; and

(b) the care of livestock, crops, or equipment intended for agricultural use which are kept there.

[~~(11)~~] (12) "Opinion" means a written, nonbinding, and advisory statement issued by

the commission concerning an interpretation of the meaning of the codes or the application of the codes in a specific circumstance issued in response to a specific request by a party to the issue.

[~~(12)~~] (13) "State regulator" means an agency of the state which is empowered to engage in the regulation of construction, alteration, remodeling, building, repair, and other activities subject to the codes adopted pursuant to this chapter.

Section 3. Section **15A-1-203** is amended to read:

15A-1-203. Uniform Building Code Commission -- Unified Code Analysis Council.

(1) There is created a Uniform Building Code Commission to advise the division with respect to the division's responsibilities in administering the codes.

(2) The commission shall consist of 11 members as follows:

(a) one member shall be from among candidates nominated by the Utah League of Cities and Towns and the Utah Association of Counties;

(b) one member shall be a licensed building inspector employed by a political subdivision of the state;

(c) one member shall be a licensed professional engineer;

(d) one member shall be a licensed architect;

(e) one member shall be a fire official;

(f) three members shall be contractors licensed by the state, of which one shall be a general contractor, one an electrical contractor, and one a plumbing contractor;

(g) two members shall be from the general public and have no affiliation with the construction industry or real estate development industry; and

(h) one member shall be from the Division of Facilities Construction and Management of the Department of Administrative Services.

(3) (a) The executive director shall appoint each commission member after submitting a nomination to the governor for confirmation or rejection.

(b) If the governor rejects a nominee, the executive director shall submit an alternative nominee until the governor confirms the nomination. An appointment is effective after the governor confirms the nomination.

(4) (a) Except as required by Subsection (4)(b), as terms of commission members expire, the executive director shall appoint each new commission member or reappointed commission member to a four-year term.

(b) Notwithstanding the requirements of Subsection (4)(a), the executive director shall, at the time of appointment or reappointment, adjust the length of terms to ensure that the terms of commission members are staggered so that approximately half of the commission is appointed every two years.

(5) When a vacancy occurs in the commission membership for any reason, the executive director shall appoint a replacement for the unexpired term.

(6) (a) A commission member may not serve more than two full terms.

(b) A commission member who ceases to serve may not again serve on the commission until after the expiration of two years from the date of cessation of service.

(7) A majority of the commission members constitute a quorum and may act on behalf of the commission.

(8) A commission member may not receive compensation or benefits for the commission member's service, but may receive per diem and travel expenses in accordance with:

(a) Section 63A-3-106;

(b) Section 63A-3-107; and

(c) rules made by the Division of Finance pursuant to Sections 63A-3-106 and 63A-3-107.

(9) (a) The commission shall annually designate one of its members to serve as chair of the commission.

(b) The division shall provide a secretary to facilitate the function of the commission

and to record the commission's actions and recommendations.

(10) The commission shall:

(a) in accordance with Section 15A-1-204, report to the Business and Labor Interim Committee;

(b) offer an opinion regarding the interpretation of or the application of a code if a person submits a request for an opinion;

(c) act as an appeals board as provided in Section 15A-1-207;

(d) establish advisory peer committees on either a standing or ad hoc basis to advise the commission with respect to matters related to a code, including a committee to advise the commission regarding health matters related to a plumbing code; and

(e) assist the division in overseeing code-related training in accordance with Section 15A-1-209.

(11) A person requesting an opinion under Subsection (10)(b) shall submit a formal request clearly stating:

(a) the facts in question;

(b) the specific citation at issue in a code; and

(c) the position taken by the persons involved in the facts in question.

(12) (a) In a manner consistent with Subsection (10)(d), the commission shall jointly create with the Utah Fire Prevention Board an advisory peer committee known as the "Unified Code Analysis Council" to review fire prevention and construction code issues that require definitive and specific analysis.

(b) The commission and Utah Fire Prevention Board shall jointly, by rule made in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, provide for:

(i) the appointment of members to the Unified Code Analysis Council; and

(ii) procedures followed by the Unified Code Analysis Council.

Section 4. Section **15A-2-103** is amended to read:

15A-2-103. Specific editions adopted of construction code of a nationally

recognized code authority.

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

(a) the [~~2015~~] 2018 edition of the International Building Code, including Appendix J, issued by the International Code Council;

(b) the 2015 edition of the International Residential Code, issued by the International Code Council;

(c) Appendix Q of the 2018 edition of the International Residential Code, issued by the International Code Council;

[~~(c)~~] (d) the [~~2015~~] 2018 edition of the International Plumbing Code, issued by the International Code Council;

[~~(d)~~] (e) the [~~2015~~] 2018 edition of the International Mechanical Code, issued by the International Code Council;

[~~(e)~~] (f) the [~~2015~~] 2018 edition of the International Fuel Gas Code, issued by the International Code Council;

[~~(f)~~] (g) the 2017 edition of the National Electrical Code, issued by the National Fire Protection Association;

(h) the residential provisions of the 2015 edition of the International Energy Conservation Code, issued by the International Code Council;

[~~(g)~~] (i) the [~~2015~~] commercial provisions of the 2018 edition of the International Energy Conservation Code, issued by the International Code Council;

[~~(h)~~] (j) the [~~2015~~] 2018 edition of the International Existing Building Code, issued by

the International Code Council;

[~~(i)~~] (k) subject to Subsection 15A-2-104(2), the HUD Code;

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

[~~(k)~~] (m) subject to Subsection 15A-2-104(1), the 2005 edition of the NFPA 225 Model 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 5. Section **15A-3-102** is amended to read:

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

(1) IBC, Section 106, is deleted.

(2) In IBC, Section 110, a new section is added as follows: " 110.3.5.1, Weather-resistant exterior wall envelope. An inspection shall be made of the weather-resistant exterior wall envelope as required by Section [~~1403.2~~] 1404.2, and flashing as required by Section [~~1405.4~~] 1404.4 to prevent water from entering the weather-resistive barrier."

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

(4) In IBC, Section 202, the following definition is added for Ambulatory Surgical Center: "AMBULATORY SURGICAL CENTER. A building or portion of a building licensed by the Utah Department of Health where procedures are performed that may render patients

incapable of self preservation where care is less than 24 hours. See Utah Administrative Code R432-13."

(5) In IBC, Section 202, the following definition is added for Assisted Living Facility: "ASSISTED LIVING FACILITY. See Residential Treatment/Support Assisted Living Facility, Type I Assisted Living Facility, and Type II Assisted Living Facility."

[~~(5)~~] (6) In IBC, Section 202, the definition for Foster Care Facilities is modified by [~~changing~~] deleting the word "Foster" [~~to~~] and replacing it with the word "Child."

[~~(6)~~] (7) In IBC, Section 202, the definition for "[F]Record Drawings" is modified by deleting the words "a fire alarm system" and replacing them with "any fire protection system."[~~.~~]

[~~(7)~~] (8) In IBC, Section 202, the following definition is added for Residential Treatment/Support Assisted Living Facility: "RESIDENTIAL TREATMENT/SUPPORT ASSISTED LIVING FACILITY. [~~See Section 308.1.2~~] A residential facility that provides a group living environment for four or more residents licensed by the Department of Human Services, and provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the physical assistance of another person."

[~~(8)~~] (9) In IBC, Section 202, the following definition is added for Type I Assisted Living Facility: "TYPE I ASSISTED LIVING FACILITY. [~~See Section 308.1.2~~] A residential facility licensed by the Department of Health that provides a protected living arrangement, assistance with activities of daily living and social care to two or more ambulatory, non-restrained persons who are capable of mobility sufficient to exit the facility without the assistance of another person. Subcategories are:

Limited Capacity: two to five residents;

Small: six to sixteen residents; and

Large: over sixteen residents."

[~~(9)~~] (10) In IBC, Section 202, the following definition is added for Type II Assisted

Living Facility: "TYPE II ASSISTED LIVING FACILITY. [~~See Section 308.1.2~~] A residential facility licensed by the Department of Health that provides an array of coordinated supportive personal and health care services to two or more residents who are:

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, or to a zone or area of safety, with the physical assistance of one person. Subcategories are:

Limited Capacity: two to five residents;

Small: six to sixteen residents; and

Large: over sixteen residents."

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

(a) delete the words "more than five children older than 2 1/2 years of age" and replace with the words "five or more children 2 years of age or older";

(b) after the word "supervision" insert the words "child care services"; and

(c) add the following sentence at the end of the paragraph: "See Section 429, Day Care, for special requirements for day care."

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

[~~(12)~~] (13) A new IBC Section 305.2.4 is added as follows: "305.2.4 Child [~~Day Care -- Residential Certificate or a Family License~~] day care -- residential child care certificate or a license. Areas used for child day care purposes with a [~~Residential Certificate~~] residential child care certificate, as described in Utah Administrative Code, R430-50, Residential Certificate Child Care, or a [~~Family License~~] residential child care license, as [~~defined~~] described in Utah Administrative Code, R430-90, Licensed Family Child Care, may be located in a Group R-2 or R-3 occupancy as provided in [~~Section 310.5 or shall~~] Sections 310.3 and 310.4 comply with the International Residential Code in accordance with Section R101.2."

[~~(13)~~] (14) A new IBC Section 305.2.5 is added as follows: "305.2.5 [~~Child Care Centers. Areas used for Hourly Child Care Centers, as defined in Utah Administrative Code, R430-60, Child Care Center as defined in Utah Administrative Code, R430-100, or Out of School Time Programs, as defined in Utah Administrative Code, R430-70, may be classified as accessory occupancies."~~] Child care centers. Each of the following areas may be classified as accessory occupancies, if the area complies with Section 508.2:

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

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

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

[~~(14)~~] (15) In IBC, Table 307.1(1), footnote "d" is added to the row for [~~Consumer fireworks~~] Explosives, Division 1.4G in the column titled STORAGE - Solid Pounds (cubic feet).

[~~(15) In IBC, Section 308.2, the word "FOSTER" is deleted and replaced with "CHILD."~~]

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

[~~TYPE I ASSISTED LIVING FACILITY. A residential facility licensed by the Utah Department of Health that provides a protected living arrangement for ambulatory, 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.~~]

[~~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.~~]

[~~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 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 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.~~]

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

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

(16) In IBC, Section 308.2, in the list of items under "This group shall include," the words "Type-I Large and Type-II Small, see Section 308.2.5" are added after "Assisted living facilities."

[~~(18)~~] (17) In IBC, Section [~~308.3.4~~] 308.2.4, all of the words after the first International Residential Code are deleted.

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

[~~(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~~

~~facilities."~~]

[~~(c) The words "(both intermediate care facilities and skilled nursing facilities)" are added after "nursing homes."~~]

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

(18) A new IBC, Section 308.2.5 is added as follows:

"308.2.5 Group I-1 assisted living facility occupancy groups. The following occupancy groups shall apply to assisted living facilities:

Type I assisted living facilities with seventeen or more residents are Large Facilities classified as an Institutional Group I-1, Condition 1 occupancy.

Type II assisted living facilities with six to sixteen residents are Small Facilities classified as an Institutional Group I-1, Condition 2 occupancy. See Section 202 for definitions."

(19) In IBC, Section 308.3 Institutional Group I-2, the following changes are made:

(a) The words "more than five" are deleted and replaced with "four or more";

(b) The group "Assisted living facilities, Type-II Large" is added to the list of groups;

(c) The words "Foster care facilities" are deleted and replaced with the words "Child care facilities"; and

(d) The words "(both intermediate care facilities and skilled nursing facilities)" are added after "Nursing homes."

(20) In IBC, Section 308.3.2, the number "five" is deleted and replaced with the number "four" in each location.

(21) A new IBC, Section 308.3.3 is added as follows:

"308.3.3 Group I-2 assisted living facilities. Type II assisted living facilities with seventeen or more residents are Large Facilities classified as an Institutional Group I-2, Condition 1 occupancy. See Section 202 for definitions."

[~~(21)~~] (22) In IBC, Section [~~308.6~~] 308.5, the [~~word "five" is~~] words "more than five"

are deleted and replaced with the [~~word "four."~~] words "five or more."

[~~(22)~~] (23) In IBC, Section [~~308.6.1~~] 308.5.1, the following changes are made:

(a) [~~The word "five" is~~] The words "more than five" are deleted and replaced with the [~~word "four."~~] words "five or more."

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

(c) The following sentence is added at the end: "See Section [~~427~~] 429 for special requirements for Day Care."

[~~(23)~~] (24) In IBC, Sections [~~308.6.3~~] 308.5.3 and [~~308.6.4~~] 308.5.4, the [~~word "five" is~~] words "five or fewer" are deleted and replaced with the [~~word "four"~~] words "four or fewer" in both places and the following sentence is added at the end: "See Section [~~427~~] 429 for special requirements for Day Care."

[~~(24)~~] (25) In IBC, Section [~~310.5,~~] 310.4, the following changes are made:

(a) [~~the~~] The words "and single family dwellings complying with the IRC" are added after "Residential Group-3 occupancies."

(b) The words "Assisted Living Facilities, limited capacity" are added to the list of occupancies.

[~~(25)~~] (26) In IBC, Section [~~310.5.1,~~] 310.4.1, the following changes are made:

(a) [~~the~~] The words "other than Child Care" are inserted after the [~~word "dwelling"~~] words "Care facilities" in the first sentence [~~and~~].

(b) All of the words after the first "International Residential Code" are deleted.

(c) [~~the~~] The following sentence is added at the end of the last sentence: "See Section [~~427~~] 429 for special requirements for Child Day Care."

[~~(26)~~] (27) A new IBC Section [~~310.5.3~~] 310.4.3 is added as follows: "[~~310.5.3~~] 310.4.3 Child Care. Areas used for child care purposes may be located in a residential dwelling unit under all of the following conditions and Section [~~427~~] 429:

1. Compliance with Utah Administrative Code, R710-8, Day Care Rules, as enacted under the

authority of the Utah Fire Prevention Board.

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

a. Utah Administrative Code, R430-50, Residential Certificate Child Care.

b. Utah Administrative Code, R430-90, Licensed Family Child Care.

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

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

(28) A new IBC, Section 310.4.4 is added as follows: "310.4.4 Assisted living facilities. Type I assisted living facilities with two to five residents are Limited Capacity facilities classified as a Residential Group R-3 occupancy or are permitted to comply with the International Residential Code. See Section 202 for definitions."

(29) In IBC, Section 310.5, the words "Type II Limited Capacity and Type I Small, see Section 310.5.3" are added after the words "assisted living facilities."

(30) A new IBC, Section 310.5.3, is added as follows: "310.5.3 Group R-4 Assisted living facility occupancy groups. The following occupancy groups shall apply to Assisted Living Facilities: Type II Assisted Living Facilities with two to five residents are Limited Capacity Facilities classified as a Residential Group R-4, Condition 2 occupancy. Type I assisted living facilities with six to sixteen residents are Small Facilities classified as Residential Group R-4, Condition 1 occupancies. See Section 202 for definitions."

Section 6. Section **15A-3-103** is amended to read:

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

(1) IBC Section 403.5.5 is deleted.

(2) In IBC, Section 407.2.5, the words "and assisted living facility" are added in the title and first sentence after the words "nursing home."

(3) In IBC, Section 407.2.6, the words "and assisted living facility" are added in the

title after the words "nursing home."

(4) In IBC, Section 407.11, a new exception is added as follows: "Exception: An essential electrical system is not required in assisted living facilities."

[~~(2) In~~] (5) A new IBC, Section [~~422.2, a new paragraph~~] 422.2.1 is added as follows: "[~~422.2~~] 422.2.1 Separations: Ambulatory care facilities licensed by the [~~Utah~~] Department of Health shall be separated from adjacent tenants with a fire partition having a minimum one hour fire-resistance rating. Any level below the level of exit discharge shall be separated from the level of exit discharge by a horizontal assembly having a minimum one hour fire-resistance rating.

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

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

2. Any hazardous spaces are separated by horizontal assembly having a minimum one hour fire-resistance rating."

[~~(3)~~] (6) A new IBC Section [~~427~~] 429, Day Care, is added as follows: "[~~427.1~~] 429.1 Detailed Requirements. In addition to the occupancy and construction 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.

[~~427.2~~] 429.2 Definitions.

[~~427.2.1~~] 429.2.1 Authority Having Jurisdiction (AHJ): State Fire Marshal, his duly authorized deputies, or the local fire enforcement authority code official.

[~~427.2.2~~] 429.2.2 Day Care Facility: Any building or structure occupied by clients of any age who receive custodial care for less than 24 hours by individuals other than parents, guardians, relatives by blood, marriage or adoption.

[~~427.2.3~~] 429.2.3 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.

[~~427.2.4~~] 429.2.4 Family Day Care: Providing care for clients listed in the following two

groups:

[~~427.2.4.1~~] 429.2.4.1 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 Child Care or licensed as Family Child Care.

[~~427.2.4.2~~] 429.2.4.2 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 Health as Family Child Care.

[~~427.2.5~~] 429.2.5 R710-8: Utah Administrative Code, R710-8, Day Care Rules, as enacted under the authority of the Utah Fire Prevention Board.

[~~427.3 ~~] 429.3 Family Day Care.

[~~427.3.1~~] 429.3.1 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.

[~~427.3.2~~] 429.3.2 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.

[~~427.3.2.1~~] 429.3.2.1 Residential Certificate Child Care and Licensed Family Child Care with 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 1030.

[~~427.3.3~~] 429.3.3 Family Day Care units shall not be located above the second story.

[~~427.3.4~~] 429.3.4 In Family Day Care units, clients under the age of two shall not be located above or below the first story.

[~~427.3.4.1~~] 429.3.4.1 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 1011 or Section 1012 or Section 1027.

[~~427.3.5~~] 429.3.5 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.

[~~427.3.6~~] 429.3.6 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 serviced in accordance with NFPA, Standard 10, Standard for Portable Fire Extinguishers.

[~~427.3.7~~] 429.3.7 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 continued operation of the smoke detectors.

[~~427.3.8~~] 429.3.8 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.

[~~427.3.9~~] 429.3.9 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 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.

[~~427.4~~] 429.4 Day Care Centers.

[~~427.4.1~~] 429.4.1 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.

[~~427.4.2~~] 429.4.2 Emergency Evacuation Drills shall be completed as required in IFC, Chapter 4, Section 405.

[~~427.4.3~~] 429.4.3 Location at grade. Group E child day care centers shall be located at the level of exit discharge.

[~~427.4.3.1~~] 429.4.3.1 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.

[~~427.4.4~~] 429.4.4 Egress. All Group E child day care spaces with an occupant load of more 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 complying with Section 1030.

[~~427.4.5~~] 429.4.5 All Group E Child Day Care Centers shall comply with Utah Administrative Code, R430-100 Child Care Centers, R430-60 Hourly Child Care Centers, and R430-70 Out of School Time.

[~~427.5~~] 429.5 Requirements for all Day Care.

[~~427.5.1~~] 429.5.1 Heating equipment in spaces occupied by children shall be provided with partitions, screens, or other means to protect children from hot surfaces and open flames.

[~~427.5.2~~] 429.5.2 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."

[~~(4)~~] (7) In IBC, Section 504.4, a new section is added as follows: "504.4.1 Notwithstanding the exceptions to Section 504.2, Group I-2 Assisted Living Facilities shall be allowed on each level of a two-story building of Type V-A construction when all of the following apply:

1. All secured units are located at the level of exit discharge in compliance with Section 1010.1.9.3 as amended;

2. The total combined area of both stories shall not exceed the total allowable area for a one-story building; and

3. All other provisions that apply in Section 407 have been provided."

(8) In IBC, Section 504.4, a new section is added as follows: "504.4.2 Group I-2 Assisted Living Facilities. Notwithstanding the allowable number of stories permitted by Table 504.4 Group I-2 Assisted Living Facilities of type VA, construction shall be allowed on each level of a two-story building when all of the following apply:

1. The total combined area of both stories does not exceed the total allowable area for a one-story, above grade plane building equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. All other provisions that apply in Section 407 have been provided.

(9) A new IBC, Section 504.5, is added as follows: "504.5 Group 1-2 Secured areas in Assisted Living Facilities. In Type IIIB, IV, and V construction, all areas for the use and care of

residents required to be secured shall be located on the level of exit discharge with door operations in compliance with Section 1010.1.9.7, as amended."

Section 7. Section **15A-3-104** is amended to read:

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

(1) In IBC, Section 704.13.2, the following sentence is added to the end of the section: "An individual spraying fire-resistant materials may obtain a certificate that demonstrates that the individual has undergone training on how to spray fire-resistant materials to manufacturer's specifications."

(2) IBC, Section (F)[~~901.8~~] 902.1, is deleted and replaced with the following:

"(F)[~~901.8~~] 902.1 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 elements:

[~~901.8.1~~] 902.1.5 A minimum clear and unobstructed distance of 12-inches shall be provided from the installed equipment to the elements of permanent construction.

[~~901.8.2~~] 902.1.6 A minimum clear and unobstructed distance of 12-inches shall be provided between all other installed equipment and appliances.

[~~901.8.3~~] 902.1.7 A clear and unobstructed width of 36-inches shall be provided in front of all installed 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.

[~~901.8.4~~] 902.1.8 Automatic sprinkler system riser rooms shall be provided with a clear and 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~~] 902.1.9 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 80-inches."

(3) 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.

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

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

(6) 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 Group R fire area.

Exceptions:

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

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

(7) IBC, [~~Sections~~] Section (F)903.2.8.3 [~~and (F)903.2.8.3.1, are~~] is renumbered to (F)903.2.8.1 [~~and (F)903.2.8.1.1.~~] and the following exception is added:

[~~(8) IBC, Section (F)903.2.8.3.2, is renumbered to (F)903.2.8.1.2 and the following exception is added:~~]

"Exception: Group R-4 fire areas not more than 4,500 gross square feet and not containing 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."

[~~(9)~~] (8) IBC, Section (F)903.2.8.4, is deleted.

[~~(10)~~] (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 of fire department vehicle access."

[~~(11)~~] (10) IBC, Section (F)904.12, is deleted and replaced with the following: "(F)904.12 Commercial cooking systems. The automatic 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 the manufacturer's installation instructions.

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 the International Mechanical Code."

[~~(12)~~] (11) IBC, Sections (F)904.12.3, (F)904.12.3.1, (F)904.12.4, and (F)904.12.4.1, are deleted.

[~~(13)~~] (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 operations to within 150 feet of all portions of the open parking garage as measured from the

approved fire department vehicle access. Class 1 manual standpipe shall be accessible throughout the parking garage such that all portions of the parking structure are protected within 150 feet of a hose connection."

[~~(14)~~] (13) In IBC, Section (F)905.8, the exception is deleted and replaced with the following:

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

[~~(15)~~] (14) In IBC, Section (F)907.2.3 Group E[~~, the first sentence~~] is deleted and rewritten as follows: "A manual fire alarm system that [~~activates~~] initiates the occupant notification signal using an emergency voice/alarm communication system [~~in accordance with~~] that meets the requirements of Section (F)[~~907.5 shall be~~] 907.5.2.2, or a manual fire alarm system that initiates an approved audible and visual occupant notification signal that meets the requirements of Sections (F)907.5.2.1, (F)907.5.2.1.1, (F)907.5.2.2, and (F)907.5.2.3, and is installed[;] in accordance with Section (F)907.6 [~~and administrative rules made by the State Fire Prevention Board in Group E occupancies."~~] shall be installed in Group E occupancies. Where automatic sprinkler systems or detectors are installed, the systems or detectors shall be connected to the building fire alarm system."

[~~(16)~~] (15) IBC, Sections (F)915 through (F)915.6, are deleted and replaced with the following:

"(F)915 Where required.

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

(F)915.1 Interconnection.

Where more than one carbon monoxide alarm is required to be installed within Group I-1, I-2, I-4, or R occupancies, the carbon monoxide alarm shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms. Physical interconnection of carbon monoxide alarms shall not be required where listed wireless 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.

(F)915.2 Power source.

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

Exceptions.

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

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

(F)915.3 Group E.

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

(F)915.3.1 Where required.

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

(F)915.3.2 Detection equipment.

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

(F)915.3.3 Locations.

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

(F)915.3.4 Combination detectors.

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

(F)915.3.5 Power source.

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

(F)915.3.6 Maintenance.

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

Section 8. Section **15A-3-105** is amended to read:

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

(1) In IBC, Section 1010.1.9, an exception is added as follows: "Exception: Group E occupancies for purposes of a lockdown or a lockdown drill in accordance with Section 1010.1.9.5 Exception 5."

(2) In IBC, Section 1010.1.9.2, "Exception:" is deleted and replaced with "Exceptions: 1."

(3) In IBC, Section 1010.1.9.2, a new exception 2 is added as follows: "2. Group E occupancies for purposes of a lockdown or a lockdown drill may have one lock below 34 inches in accordance with Section 1010.1.9.5 Exception 5."

(4) In IBC, Section [~~1010.1.9.3~~] 1010.1.9.4, a new number [~~6~~] 7 is added as follows: "[~~6~~] 7. Group E occupancies for purposes of a lockdown or a lockdown drill in accordance with Section 1010.1.9.5 Exception 5."

(5) In IBC, Section [~~1010.1.9.4~~] 1010.1.9.5, a new exception 6 is added as follows: "6. Group E occupancies for purposes of a lockdown or a lockdown drill in accordance with Section 1010.1.9.5 Exception 5."

(6) In IBC, Section [~~1010.1.9.5~~] 1010.1.9.6, a new exception 5 is added as follows: "5. Group E occupancies may have a second lock on classrooms for purposes of a lockdown or lockdown drill, if:

5.1 The application of the lock is approved by the code official.

5.2 The unlatching of any door or leaf does not require more than two operations.

5.3 The lock can be released from the opposite side of the door on which it is installed.

5.4 The lock is only applied during lockdown or during a lockdown drill.

5.5 The lock complies with all other state and federal regulations, including the Americans with Disabilities Act of 1990, 42 U.S.C. Sec. 12101 et seq."

(7) In IBC, Section [~~1010.1.9.6~~] 1010.1.9.7, a new number 9 is added as follows: " 9. The secure area or unit with special egress locks shall be located at the level of exit discharge in Type IIIB, IV, and V construction."

(8) In IBC, Section 1011.5.2, exception 3 is deleted and replaced with the following: " 3. In Group R-3 occupancies, within dwelling units in Group R-2 occupancies, and in Group U occupancies that are accessory to a Group R-3 occupancy, or accessory to individual dwelling units in Group R-2 occupancies, the maximum riser height shall be 8 inches (203 mm) and the

minimum tread depth shall be 9 inches (229 mm). The minimum winder tread depth at the walk line shall be 10 inches (254 mm), and the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 10 inches (254 mm)."

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

(10) In IBC, Section 1013.5, the words ", including when the building may not be fully occupied" are added at the end of the sentence.

(11) IBC, Section 1025, is deleted.

(12) In IBC, Section [~~1029.14~~] 1029.15, exception 2 is deleted.

[~~(13) In IBC, Section 1109.8, the following words "shall be capable of operation without a key and" are inserted in the second sentence between the words "lift" and "shall".~~]

[~~(14)~~] (13) In IBC, Section [~~1208.4~~] 1207.4, 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 m2) of 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 9. Section **15A-3-107** is amended to read:

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 Condition 1," a new footnote c is added as follows: "c. Type II Assisted Living Facilities that are I-2 Condition 1 occupancy classifications in accordance with Section 308 shall be Risk Category II in this table."

(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: "$f_2 = 0.20 +$

.025(A-5) for other configurations where roof snow load exceeds 30 psf;

$f_2 = 0$ for roof snow loads of 30 psf (1.44kN/m^2) or less.

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

(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 kNm^2) or less need not be combined with seismic loads. Where flat roof snow loads exceed 30 pounds per square foot (1.44 kNm^2), the snow loads may be reduced in accordance with the following in load combinations including both snow and seismic loads. [~~W$_s$~~] S as calculated below, shall be combined with seismic loads.

[~~W$_s$~~] S = $(0.20 + 0.025(A-5))P_f$ is greater than or equal to $0.20\ P_f$.

Where:

[~~W$_s$~~] S = Weight of snow to be [~~included~~] used in combination with seismic [~~calculations~~] loads

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".

(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. Where the minimum live load, in accordance with Section 1607, is greater than the design roof snow load, pf, the live load shall be used for design, but it may not be reduced to a load lower than the design roof snow load. Drifting need not be considered for roof snow loads, pf, less than 20 psf."

(5) A new IBC, Section 1608.1.1, is added as follows: "1608.1.1 Ice dams and icicles along eaves. Section 7.4.5 of Chapter 7 of ASCE 7 referenced in IBC Section 1608.1 [~~of the~~

~~IBC~~] is deleted and replaced with the 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_g, 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 A_o.~~]

[~~WHERE:~~]

[~~P_g = Ground snow load at a given elevation (psf);~~]

[~~P_o = 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 1607.12 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 for roof snow loads less than 20 psf."~~]

(6) A new IBC, Section 1608.1.2, is added as follows: "1608.1.2 Thermal factor. The value for the thermal factor, Ct, used in calculation of pf shall be determined from Table 7.3-2 in ASCE 7. Exception: Except for unheated structures, the value of Ct need not exceed 1.0

when ground snow load, p_g, is calculated using Section 1608.2.1."

~~[(7) IBC, Table 1608.1.2(a) and Table 1608.1.2(b), are added as follows:~~]

~~["TABLE NO. 1608.1.2(a)~~				
~~- STATE OF UTAH - REGIONAL SNOW LOAD FACTORS~~				
~~-~~	~~COUNTY~~	~~P_g~~	~~S~~	~~A_g~~
~~-~~	~~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~~
~~-~~	~~Iron~~	~~43~~	~~63~~	~~5.8~~
~~-~~	~~Juab~~	~~43~~	~~63~~	~~5.2~~
~~-~~	~~Kane~~	~~36~~	~~63~~	~~5.7~~
~~-~~	~~Millard~~	~~43~~	~~63~~	~~5.3~~
~~-~~	~~Morgan~~	~~57~~	~~63~~	~~4.5~~
~~-~~	~~Piute~~	~~43~~	~~63~~	~~6.2~~
~~-~~	~~Rich~~	~~57~~	~~63~~	~~4.1~~
~~-~~	~~Salt Lake~~	~~43~~	~~63~~	~~4.5~~
~~-~~	~~San Juan~~	~~43~~	~~63~~	~~6.5~~
~~-~~	~~Sanpete~~	~~43~~	~~63~~	~~5.2~~

-	~~Sevier~~	~~43~~	~~63~~	~~6.0~~
-	~~Summit~~	~~86~~	~~63~~	~~5.0~~
-	~~Tooele~~	~~43~~	~~63~~	~~4.5~~
-	~~Uintah~~	~~43~~	~~63~~	~~7.0~~
-	~~Utah~~	~~43~~	~~63~~	~~4.5~~
-	~~Wasatch~~	~~86~~	~~63~~	~~5.0~~
-	~~Washington~~	~~29~~	~~63~~	~~6.0~~
-	~~Wayne~~	~~36~~	~~63~~	~~6.5~~
-	~~Weber~~	~~43~~	~~63~~	~~4.5~~

~~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.~~

~~County~~	~~City~~	~~Elevation~~	~~Ground Snow Load (psf)~~	~~Roof Snow Load (psf)[6]~~
~~Carbon~~	~~Price[3]~~ ~~[All other county locations[5]~~	~~5550~~] [~~--~~	~~43~~] [~~--~~	~~30~~] [~~--~~
~~Davis~~	~~Fruit Heights[3]~~	~~4500 - 4850~~	~~57~~	~~40~~
~~Emery~~	~~Green River[3]~~	~~4070~~	~~36~~	~~25~~
~~Garfield~~	~~Panguitch[3]~~	~~6600~~	~~43~~	~~30~~
~~Rich~~	~~Woodruff[3]~~ ~~[Laketown[4]~~ ~~[Garden City[5]~~ ~~[Randolph[4]~~	~~6315~~] [~~6000~~] [~~--~~] [~~6300~~	~~57~~] [~~57~~] [~~--~~] [~~57~~	~~40~~] [~~40~~] [~~--~~] [~~40~~
~~San Juan~~	~~Monticello[3]~~	~~6820~~	~~50~~	~~35~~

~~Summit~~	~~Coalville[3]~~ [~~Kamas[4]~~	~~5600~~] [~~6500~~	~~86~~] [~~114~~	~~60~~] [~~80~~
~~Tooele~~	~~Tooele[3]~~	~~5100~~	~~43~~	~~30~~
~~Utah~~	~~Orem[3]~~ [~~Pleasant Grove[4]~~ [~~Provo[5]~~	~~4650~~] [~~5000~~] [~~--~~	~~43~~] [~~43~~] [~~--~~	~~30~~] [~~30~~] [~~--~~
~~Wasatch~~	~~Heber[5]~~	~~--~~	~~--~~	~~--~~
~~Washington~~	~~Leeds[3]~~ [~~Santa Clara[3]~~ [~~St. George[3]~~ [~~All other county locations[5]~~	~~3460~~] [~~2850~~] [~~2750~~] [~~--~~	~~29~~] [~~21~~] [~~21~~] [~~--~~	~~20~~] [~~15~~] [~~15~~] [~~--~~
~~Wayne~~	~~Loa[3]~~	~~7080~~	~~43~~	~~30~~

~~[1]The IBC requires a minimum live load - See Section 1607.12.~~

~~[2]This table is informational only in that actual site elevations may vary. Table is only valid if site elevation is within 100 feet of the listed elevation. Otherwise, contact the local Building Official.~~

~~[3]Values adopted from Table VII of the Utah Snow Load Study.~~

~~[4]Values based on site-specific study. Contact local Building Official for additional information.~~

~~[5]Contact local Building Official.~~

~~[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."~~]

(7) A new IBC, Section 1608.1.3 is added as follows: "1608.1.3 Drifts on adjacent structures. Section 7.7.2 of ASCE 7 referenced in IBC, Section 1608.1, is deleted and replaced with the following: 7.7.2 Adjacent structures. At lower adjacent structures, the requirements of Section 7.7.1 shall be used to calculate windward and leeward drifts. The resulting drift is permitted to be truncated."

(8) A new IBC, Section 1608.2.1 is added as follows: "1608.2.1 Utah ground snow loads. Section 7.2 of ASCE 7 referenced in IBC, Section 1608.1 is modified as follows:

(a) In paragraph 1, 7.2-8 is deleted and replaced with 7.2-9.

(b) On Figure 7.2-1, remove CS and other ground snow load values in the state of Utah. Add red shaded region for the state of Utah with the following note: See note for Utah.

(c) The following is added to the Note on Figure 7.2.1: See Table 7.2-9 for Utah.

(d) Add Table 7-2.9 as follows:

TABLE 7.2-9

GROUND SNOW LOADS FOR SELECTED LOCATIONS IN UTAH

City/Town	County	Ground Snow Load (lb/ft2)	Elevation (ft)
Beaver	Beaver	35	5886
Brigham City	Box Elder	42	4423

Castle Dale	Emery	32	5669
Coalville	Summit	57	5581
Duchesne	Duchesne	39	5508
Farmington	Davis	35	4318
Fillmore	Millard	30	5138
Heber City	Wasatch	60	5604
Junction	Piute	27	6030
Kanab	Kane	25	4964
Loa	Wayne	37	7060
Logan	Cache	43	4531
Manila	Daggett	26	6368
Manti	Sanpete	37	5620
Moab	Grand	21	4029
Monticello	San Juan	67	7064
Morgan	Morgan	52	5062
Nephi	Juab	39	5131
Ogden	Weber	37	4334
Panguitch	Garfield	41	6630
Parowan	Iron	32	6007
Price	Carbon	31	5558
Provo	Utah	31	4541
Randolph	Rich	50	6286
Richfield	Sevier	27	5338
St. George	Washington	21	2585
Salt Lake City	Salt Lake	28	4239

Tooele	Tooele	35	5029
Vernal	Uintah	39	5384

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

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

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

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

[~~(10)~~] (9) A new IBC, Section 1613.1.1, is added as follows: "1613.1.1 Effective Seismic Weight. In ASCE 12.7.2 and 12.14.8.1 [~~of Chapter 12 of ASCE 7~~] as referenced in Section 1613.1, Definition of W, Item 4 is deleted and replaced with the following:

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

WHERE:

W_s = Weight of snow to be included [~~in seismic calculations~~] as effective seismic weight

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

P_f = Design roof snow load, psf.

For the purposes 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."

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

~~horizontal directions.~~]

[~~Exceptions:~~]

[~~1. Where rigid braces are used to limit lateral deflections.~~]

[~~2. At fire sprinkler heads in frangible surfaces per NFPA 13."~~]

Section 10. Section **15A-3-110** is amended to read:

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

(1) A new IBC, Section 2306.1.5, is added as follows: "2306.1.5 Load duration factors. The allowable stress increase of 1.15 for snow load, shown in Table 2.3.2, Frequently Used Load Duration Factors, Cd, of the National Design Specifications, shall not be utilized at elevations above 5,000 feet (1,524 M)."

[~~(2) In IBC, Section 2308.3.1, a new exception, 3, is added as follows: " 3. Where foundation plates or sills are bolted or anchored to the foundation with not less than 1/2 inch (12.7 mm) diameter steel bolts or approved anchors, embedded at least 7 inches (178 mm) into concrete or masonry and spaced not more than 32 inches (816 mm) apart, there shall be a minimum of two bolts or anchor straps per piece located not less than 4 inches (102 mm) from each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate."~~]

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

(2) In IBC, Section 2308.3.1, the words "6 feet (1829 mm)" and "4 feet (1219 mm)" are deleted and each replaced with the words "32 inches."

Section 11. Section **15A-3-112** is amended to read:

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

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

[~~(a) The title for [P] Table 2902.1 is deleted and replaced with the following: "[P]~~

~~Table 2902.1, Minimum Number of Required Plumbing Facilities a, h".~~]

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

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

[~~(d)~~] (c) A new footnote h is added as follows: "FOOTNOTE: [~~h~~] g. When provided, subject to footnote [~~i~~] i, in public toilet facilities there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms."

[~~(e)~~] (d) A new footnote [~~i~~] h is added to the table as follows: "FOOTNOTE [~~i~~] h: Non-residential child care facilities shall comply with additional sink requirements of Utah Administrative Code [~~R430-100-4~~], R381-60-9, Hourly Child Care Centers, R381-70-9, Out of School Time Child Care Programs, and R381-100-9, Child Care Centers."

[~~(f)~~] (e) A new footnote [~~j~~] i is added to the table as follows: "FOOTNOTE [~~j~~] i: A building owned by a state government entity or by a political subdivision of the state that allows access to the public shall provide diaper changing facilities in accordance with footnote h if:

1. the building is newly constructed; or

2. a bathroom in the building is renovated."

(f) Footnote f is deleted and replaced with the following: "FOOTNOTE f: The required number and type of plumbing fixtures for outdoor public swimming pools shall be in accordance with Utah Administrative Code, R392-302, Design, Construction and Operation of Public Pools."

(2) A new IBC, Section [P]2902.7, is added as follows:

"[P]2902.7 Toilet Facilities for Workers.

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

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

Section 12. Section **15A-3-113** is amended to read:

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

[~~(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."

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

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

Section 13. 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, 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:~~]

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

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

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

[~~(6)~~] (5) 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)~~] (6) 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)~~] (7) 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, 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)~~] (8) IRC, Figure R301.2(5), is deleted and replaced with [~~Table R301.2(5a) and Table R301.2(5b)~~] R301.2(5) as follows:

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

	[~~Emery~~]	[~~43~~]	[~~63~~]	[~~6.0~~]
	[~~Garfield~~]	[~~43~~]	[~~63~~]	[~~6.0~~]
	[~~Grand~~]	[~~36~~]	[~~63~~]	[~~6.5~~]
	[~~Iron~~]	[~~43~~]	[~~63~~]	[~~5.8~~]
	[~~Juab~~]	[~~43~~]	[~~63~~]	[~~5.2~~]
	[~~Kane~~]	[~~36~~]	[~~63~~]	[~~5.7~~]
	[~~Millard~~]	[~~43~~]	[~~63~~]	[~~5.3~~]
	[~~Morgan~~]	[~~57~~]	[~~63~~]	[~~4.5~~]
	[~~Piute~~]	[~~43~~]	[~~63~~]	[~~6.2~~]
	[~~Rich~~]	[~~57~~]	[~~63~~]	[~~4.1~~]
	[~~Salt Lake~~]	[~~43~~]	[~~63~~]	[~~4.5~~]
	[~~San Juan~~]	[~~43~~]	[~~63~~]	[~~6.5~~]
	[~~Sanpete~~]	[~~43~~]	[~~63~~]	[~~5.2~~]
	[~~Sevier~~]	[~~43~~]	[~~63~~]	[~~6.0~~]
	[~~Summit~~]	[~~86~~]	[~~63~~]	[~~5.0~~]
	[~~Tooele~~]	[~~43~~]	[~~63~~]	[~~4.5~~]
	[~~Uintah~~]	[~~43~~]	[~~63~~]	[~~7.0~~]
	[~~Utah~~]	[~~43~~]	[~~63~~]	[~~4.5~~]
	[~~Wasatch~~]	[~~86~~]	[~~63~~]	[~~5.0~~]
	[~~Washington~~]	[~~29~~]	[~~63~~]	[~~6.0~~]
	[~~Wayne~~]	[~~36~~]	[~~63~~]	[~~6.5~~]
	[~~Weber~~]	[~~43~~]	[~~63~~]	[~~4.5~~]

[~~TABLE NO. R301.2(5b)~~]
[~~REQUIRED SNOW LOADS FOR SELECTED UTAH CITIES AND TOWNS1,2~~]

[~~The following jurisdictions require design snow load values that differ from the Equation in the Utah Snow Load Study.~~]				
[~~County~~]	[~~City~~]	[~~Elevation~~]	[~~Ground Snow Load (psf)~~]	[~~Roof Snow Load (psf) 6~~]
[~~Carbon~~]	[~~Price3~~ ~~All other county locations5~~]	[~~5550~~ ~~--~~]	[~~43~~ ~~--~~]	[~~30~~ ~~--~~]
[~~Davis~~]	[~~Fruit Heights3~~]	[~~4500 - 4850~~]	[~~57~~]	[~~40~~]
[~~Emery~~]	[~~Green River3~~]	[~~4070~~]	[~~36~~]	[~~25~~]
[~~Garfield~~]	[~~Panguitch3~~]	[~~6600~~]	[~~43~~]	[~~30~~]
[~~Rich~~]	[~~Woodruff3~~ ~~Laketown4~~ ~~Garden City5~~ ~~Randolph4~~]	[~~6315~~ ~~6000~~ ~~--~~ ~~6300~~]	[~~57~~ ~~57~~ ~~--~~ ~~57~~]	[~~40~~ ~~40~~ ~~--~~ ~~40~~]
[~~San Juan~~]	[~~Monticello3~~]	[~~6820~~]	[~~50~~]	[~~35~~]
[~~Summit~~]	[~~Coalville3~~ ~~Kamas4~~]	[~~5600~~ ~~6500~~]	[~~86~~ ~~114~~]	[~~60~~ ~~80~~]
[~~Tooele~~]	[~~Tooele3~~]	[~~5100~~]	[~~43~~]	[~~30~~]
[~~Utah~~]	[~~Orem3~~ ~~Pleasant Grove4~~ ~~Provo5~~]	[~~4650~~ ~~5000~~ ~~--~~]	[~~43~~ ~~43~~ ~~--~~]	[~~30~~ ~~30~~ ~~--~~]
[~~Wasatch~~]	[~~Heber5~~]	[~~--~~]	[~~--~~]	[~~--~~]

[~~Washington~~]	[~~Leeds3~~ ~~Santa Clara3~~ ~~St. George3~~ ~~All other county locations5~~]	[~~3460~~ ~~2850~~ ~~2750~~ ~~--~~]	[~~29~~ ~~21~~ ~~21~~ ~~--~~]	[~~20~~ ~~15~~ ~~15~~ ~~--~~]
[~~Wayne~~]	[~~Loa3~~]	[~~7080~~]	[~~43~~]	[~~30~~]
[~~1The IRC requires a minimum live load -- See R301.6.~~]				
[~~2This table is informational only in that actual site elevations may vary. Table is only valid if site elevation is within 100 feet of the listed elevation. Otherwise, contact the local Building Official.~~]				
[~~3Values adopted from Table VII of the Utah Snow Load Study~~]				
[~~4Values based on site-specific study. Contact local Building Official for additional information.~~]				
[~~5Contact local Building Official.~~]				
[~~6Based on Ce =1.0, Ct =1.0 and Is =1.0"~~]				

"TABLE R301.2(5)

GROUND SNOW LOADS FOR SELECTED LOCATIONS IN UTAH

City/Town	County	Ground Snow Load (lb/ft2)	Elevation (ft)
Beaver	Beaver	35	5886
Brigham City	Box Elder	42	4423
Castle Dale	Emery	32	5669
Coalville	Summit	57	5581
Duchesne	Duchesne	39	5508
Farmington	Davis	35	4318
Fillmore	Millard	30	5138

Heber City	Wasatch	60	5604
Junction	Piute	27	6030
Kanab	Kane	25	4964
Loa	Wayne	37	7060
Logan	Cache	43	4531
Manila	Daggett	26	6368
Manti	Sanpete	37	5620
Moab	Grand	21	4029
Monticello	San Juan	67	7064
Morgan	Morgan	52	5062
Nephi	Juab	39	5131
Ogden	Weber	37	4334
Panguitch	Garfield	41	6630
Parowan	Iron	32	6007
Price	Carbon	31	5558
Provo	Utah	31	4541
Randolph	Rich	50	6286
Richfield	Sevier	27	5338
St. George	Washington	21	2585
Salt Lake City	Salt Lake	28	4239
Tooele	Tooele	35	5029
Vernal	Uintah	39	5384

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

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

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

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

[~~(10)~~] (9) IRC, Section R301.6, is deleted and replaced with the following: "R301.6 Utah Snow Loads. The snow loads specified in Table R301.2(5b) shall be used for the jurisdictions identified in that table. Otherwise, [~~the ground snow load, Pg, to be used in the determination of design snow loads for buildings and other structures shall be determined by using the following formula: Pg = (Po2 + S2(A-Ao)2)0.5 for A greater than Ao, and Pg = Po for A less than or equal to Ao.~~] for other locations in Utah, see Bean, B., Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental Engineering Faculty Publications, Paper 3589, http://utahsnowload.usu.edu/, for ground snow load values.

[~~WHERE:~~

~~Pg = Ground snow load at a given elevation (psf);~~

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

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

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

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

~~The building official may round the roof snow load to the nearest 5 psf. The ground snow load, Pg, 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 Table R301.6 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 for roof snow loads less than 20 psf."~~]

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

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

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

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

(14) IRC, Sections R311.7.4 through R311.7.5.3, are deleted and replaced with the following: "R311.7.4 Stair treads and risers. 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 inch (9.5 mm).

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). 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 more than 3/8 inch (9.5 mm).

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.

Exceptions.

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

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

(15) IRC, Section R312.2, is deleted.

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

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

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

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

(19) A new IRC, Section R315.7, is added as follows: " R315.7 Interconnection. Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section R315.1, the alarm devices shall be interconnected in

such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

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

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

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

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

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

Section 14. Section **15A-3-203** is amended to read:

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

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

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

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

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

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

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

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

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

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

(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[".]."

(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 code official, the builder may certify compliance to components criteria for items which may not be inspected during regularly scheduled inspections."

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

(a) In the first sentence:

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

dwelling";

[~~(i)~~] (ii) [~~on or~~] after January 1, 2019, [~~and before January 1, 2021,~~] replace the word "five" with "3.5"; and

[~~(ii) after January 1, 2021, replace the word "five" with "three."~~]

[~~(b) In the first sentence,~~]

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

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

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

(d) The following sentence is inserted after the third sentence: "The following parties 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 manufacturers or other comparable training."

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

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

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

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

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

(iii) on or after January 1, 2021, with the following: "Exception: The duct air leakage

test is not required for systems with all air handlers and at least 80% of all ducts (measured by length) located entirely within the building thermal envelope."

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

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

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

(b) in Subsection 2:

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

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

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

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

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

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

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

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

following:

TABLE N1103.6.1 (R403.6.1)

MECHANICAL VENTILATION SYSTEM FAN EFFICACY

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

[~~(13)~~] (15) In IRC, Section N1106.4 (R406.4), the table is deleted and replaced with the following:

TABLE N1106.4 (R406.4)

MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	65
5	69
6	68

[~~(14)~~] (16) In IRC, Section M1307.2, the words "In Seismic Design Categories D0, D1, and D2, and in townhouses in Seismic Design Category C", are deleted, and in Subparagraph 1, the last sentence is deleted.

[~~(15)~~] (17) IRC, Section M1411.8, is deleted.

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

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

(1) A new IRC, Section P2602.3, is added as follows: "P2602.3 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 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."

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

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

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

[~~(3)~~] (5) In IRC, Section P2801.8, all words in the first sentence up to the word "water" are deleted.

[~~(4)~~] (6) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly testing. The premise owner or 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)~~] (7) In IRC, Section P2902.1, the following subsections are added as follows:

"P2902.1.1 General Installation Criteria.

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

P2902.1.2 Specific Installation Criteria.

P2902.1.2.1 Reduced Pressure Principle Blackflow Prevention Assembly.

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

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

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

c. The assembly shall be installed 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 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.

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.

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.

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

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."

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

[~~(6)~~] (9) In IRC, Section P2903.9.3, the first sentence is deleted and replaced with the following: "Unless the plumbing appliance or plumbing fixture has a wall-mount valve, shutoff valves shall be required on each fixture supply pipe to each plumbing appliance and to each plumbing fixture other than bathtubs and showers."

[~~(7)~~] (10) 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 system shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 2901."

[~~(8)~~] (11) IRC, Section P2910.9.5, is deleted and replaced with the following:

"P2910.9.5 Makeup water.

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

[~~(9)~~] (12) In IRC, Section P2911.12.4, the following words are deleted: "and backwater valves[~~"~~]."

[~~(10)~~] (13) In IRC, Section P2912.15.6, the following words are deleted: "and backwater valves[~~"~~]."

[~~(11)~~] (14) In IRC, Section P2913.4.2, the following words are deleted: "and backwater valves[~~"~~]."

[~~(12)~~] (15) IRC, Section P3009, is deleted and replaced with the following:

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

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

[~~(13)~~] (16) In IRC, Section P3103.6, the following sentence is added at the end of the paragraph: "Vents extending through the wall shall terminate not less than 12 inches from the wall with an elbow pointing downward."

[~~(14)~~] (17) In IRC, Section P3104.4, the following sentence is added at the end of the paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain

and floor sink installations when installed below grade in accordance with Chapter 30, and Sections P3104.2 and P3104.3. A wall cleanout shall be provided in the vertical vent."

Section 16. Section **15A-3-302** is amended to read:

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

[~~(1) A new IPC, Section 101.2.1, 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)~~] (1) In IPC, Section 202, the definition for "Backflow Backpressure, Low Head" is deleted.

[~~(3)~~] (2) 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)~~] (3) 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."

[~~(5)~~] (4) In IPC, Section 202, the definition for "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")."

[~~(6)~~] (5) In IPC, Section 202, the following definition is added: "Deep Seal Trap. A manufactured or field fabricated trap with a liquid seal of 4" or larger."

[~~(7)~~] (6) In IPC, Section 202, the definition for "Essentially Nontoxic Transfer Fluid" is

deleted and replaced with the following:

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

[~~(8)~~] (7) In IPC, Section 202, the definition for "Essentially Toxic Transfer Fluid" is deleted and replaced with the following:

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

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

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

[~~(11)~~] (10) In IPC, Section 202, the following definition is added: "Motor Vehicle Waste Disposal Well. An injection well that discharges to the subsurface by way of a floor drain, septic system, French drain, dry well, or similar system that receives or has received fluid from a facility engaged in vehicular repair or maintenance activities, including an auto body repair shop, automotive repair shop, new and used car dealership, speciality repair shop, or any other facility that does any vehicular repair work. A motor vehicle waste disposal well is subject to rulemaking under Section 19-5-104 regarding underground injection."

[~~(12)~~] (11) In IPC, Section 202, the following definition is added: "Pollution (Low Hazard). An impairment of the quality of the potable water to a degree that does not create a hazard to the public health but that does adversely and unreasonably affect the aesthetic qualities of such potable water for domestic use."

[~~(13)~~] (12) In IPC, Section 202, the definition for "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, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and the regulations of the public health authority having jurisdiction."

Section 17. Section **15A-3-303** is amended to read:

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

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

"Exception: 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 Division of Drinking Water Rule, Utah Administrative Code, [~~R309-305-6~~] R309-105-12(4)."

(2) IPC, Section 311.1, is deleted.

(3) 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 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.

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."

(4) In IPC, Section 312.5, 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 water pipes 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. 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.

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."

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

Section 18. Section **15A-3-304** is amended to read:

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

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

[~~(a) The title for Table 403.1 is deleted and replaced with the following: "Table 403.1, Minimum Number of Required Plumbing Fixturesa, h";~~]

[~~(b)~~] (a) In row number "3", for [~~"E" occupancy,~~] in the field for "OTHER", a new footnote [~~g~~] h is added.

[~~(c)~~] (b) In row number "5", for "[~~I-4~~] Adult day care and child day care" occupancy, in the field for "OTHER", a new footnote [~~g~~] h is added.

(c) Footnote f is deleted and replaced with the following: "FOOTNOTE f: The required number and type of plumbing fixtures for outdoor public swimming pools shall be in accordance with Utah Administrative Code, R392-302 Design, Construction and Operation of Public Pools."

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

(e) A new footnote [~~g~~] h is added to the table as follows: "FOOTNOTE [~~g~~] h: Non-residential child care facilities shall comply with the additional sink requirements [~~for sinks in administrative rule made by the Department of Health~~] of Utah Administrative Code, R381-60-9, Hourly Child Care Centers, R381-70-9, Out of School Time Child Care Programs, and R381-100-9, Child Care Centers."

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

(3) A new IPC, Section [~~412.5~~] 413.5, is added as follows: "[~~412.5~~] 413.5 Public toilet rooms. All public toilet rooms [~~in A & E occupancies and M occupancies with restrooms having multiple water closets or urinals~~] shall be equipped with at least one floor drain."

(4) A new IPC, Section 412.6, is added as follows: "Prohibition of motor vehicle waste disposal wells. New and existing motor vehicle waste disposal wells are prohibited. A motor vehicle waste disposal well associated with a single family residence is not subject to this

prohibition."

(5) IPC, Section 423.3, is deleted.

Section 19. Section **15A-3-305** is amended to read:

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

(1) IPC, Section 502.4, is deleted and replaced with the following: "502.4 Seismic supports. As a minimum requirement, water heaters shall be anchored or strapped to resist horizontal displacement caused by earthquake motion. Strapping shall be at points within the upper one-third and lower one-third of the appliance's vertical dimensions. "

(2) In IPC, Section 504.6, a new number 15 is added as follows: "15. Be installed in accordance with the manufacturer's installation instructions, not to exceed 180 degrees in directional change."

[~~(2)~~] (3) In IPC, Section 504.7.2, the following is added at the end of the section: "When permitted by the code official, the pan drain may be directly connected to a soil stack, waste stack, or branch drain. The pan drain shall be individually trapped and vented as required in Section 907.1. The pan drain shall not be directly or indirectly connected to any vent. The trap shall be provided with a trap primer conforming to ASSE 1018 or ASSE 1044, a barrier type floor drain trap seal protection device meeting ASSE 1072, or a deep seal p-trap."

[~~(3)~~] (4) 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 20. 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."

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

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

"608.1.1 General Installation Criteria.

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

608.1.2 Specific Installation Criteria.

608.1.2.1 Reduced Pressure Principle Blackflow Prevention Assembly.

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

a. The assembly shall not be installed in a pit <u>or below grade where the relief port could be</u>

submerged in water or where fumes could be present at the relief port discharge.

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

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

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

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.

608.1.2.2 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 unless the assembly is listed or approved for vertical installation.

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

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

608.1.2.3 Pressure Vacuum [~~Break~~] Breaker Assembly and Spill Resistant Pressure Vacuum Breaker Assembly.

A pressure vacuum [~~break~~] breaker assembly and 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.

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 or in a vault or pit.

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

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

(9) In IPC, Section [~~608.5~~] 608.6, the words "with the potential to create a condition of either contamination or pollution or" are added after the word "substances."[~~.~~]

(10) In IPC, Section [~~608.6~~] 608.7, the following sentence is added at the end of the paragraph: "Any connection between potable water piping and sewer-connected waste shall be protected by an air gap in accordance with Section [~~608.13.1~~] 608.14.1."

(11) IPC, Section [~~608.7~~] 608.8, is deleted and replaced with the following: "[~~608.7~~] 608.8 Stop and Waste Valves installed below grade. Combination stop-and-waste valves shall be permitted to be installed underground or below grade. Freeze proof yard hydrants that drain the riser into 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 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."~~]

[~~(13)~~] (12) IPC, Section [~~608.13.3~~] 608.14.3, is deleted and replaced with the following: "[~~608.13.3~~] 608.14.3 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, and humidifiers in accordance with Section 608.17.10. The relief opening shall discharge by air

gap and shall be prevented from being submerged."

[~~(14)~~] (13) IPC, Section [~~608.13.4~~] 608.14.4, 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)~~] (14) IPC, Section [~~608.15.3~~] 608.16.3, is deleted and replaced with the following: "[~~608.15.3~~] 608.16.3 Protection by a backflow preventer with intermediate atmospheric vent. Connections to residential boilers only, without chemical treatment, and humidifiers shall be protected by a backflow preventer with an intermediate atmospheric vent."

[~~(17)~~] (15) IPC, Section [~~608.15.4~~] 608.16.4, is deleted and replaced with the following: "[~~608.15.4~~] 608.16.4 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. The atmospheric vacuum breaker shall not be installed where it may be subjected to continuous pressure for more than 12 consecutive hours at any time. 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)~~] (16) In IPC, Section [~~608.15.4.2~~] 608.16.4.2, 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."

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

[~~(19)~~] (18) IPC, Section [~~608.16.2~~] 608.17.2, is deleted and replaced as follows: "[~~608.16.2~~] 608.17.2 Connections to boilers. The potable supply to a boiler shall be protected by an air gap or a reduced pressure principle backflow preventer, complying with ASSE 1013, CSA B64.4 or AWWA C511.

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

[~~(20)~~] (19) In IPC, Section [~~608.16.4.1~~] 608.17.4.1, a new exception is added as follows: "Exception: All class 1 and 2 systems containing chemical additives consisting of strictly glycerine (C.P. or U.S.P. 96.5 percent grade) or propylene glycol shall be protected against backflow with a double check valve assembly. Such systems shall include written certification of the chemical additives at the time of original installation and service or maintenance."

[~~(21)~~] (20) IPC, Section [~~608.16.7~~] 608.17.7, is deleted and replaced with the following: "[~~608.16.7~~] 608.17.7 Chemical dispensers. Where chemical dispensers connect to the water distribution system, the water supply system shall be protected against backflow in accordance with Section [~~608.13.1~~] 608.14.1, Section [~~608.13.2~~] 608.14.2, Section [~~608.13.5~~] 608.14.5, Section [~~608.13.6~~] 608.14.6 or Section [~~608.13.8~~] 608.14.8. Installation shall be in accordance with Section 608.1.2. Chemical dispensers shall connect to a separate dedicated water supply line, and not a sink faucet."

[~~(22)~~] (21) IPC, Section [~~608.16.8~~] 608.17.8, is deleted and replaced with the following: "[~~608.16.8~~] 608.17.8 Portable cleaning equipment. Where the portable cleaning equipment connects to the water distribution system, the water supply system shall be protected against backflow in accordance with Section [~~608.13.1~~] 608.14.1 or Section [~~608.13.2~~] 608.14.2."

[~~(23)~~] (22) A new IPC, Section [~~608.16.11~~] 608.17.11, is added as follows: "[~~608.16.11~~] 608.17.11 Automatic and coin operated car washes. The water supply to an

automatic or coin operated car wash shall be protected in accordance with Section [~~608.13.1~~] 608.14.1 or Section [~~608.13.2~~] 608.14.2."

[~~(24)~~] (23) IPC, Section [~~608.17~~] 608.18, is deleted and replaced with the following: "[~~608.17~~] 608.18 Protection of individual water supplies. See Section 602.3 for requirements."

Section 21. Section **15A-3-307** is amended to read:

15A-3-307. Amendments to Chapter 7 of IPC.

(1) IPC, Section 701.2, is deleted and replaced with the following: "701.2 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer where the sewer is accessible and is within 300 feet of the property line in accordance with Utah Code, Section 10-8-38; or an approved private sewage disposal system in accordance with Utah Administrative Code, Rule R317-4, as administered by the Department of Environmental Quality, Division of Water Quality."

(2) A new IPC Section 701.8 is added as follows: "701.8 Drainage piping in food service areas. Exposed soil or waste piping shall not be installed above any working, storage, or eating surfaces in food service establishments."

[~~(2)~~] (3) In IPC, Section 712.3.3.1, the following words are added [~~before~~] after the word [~~"or"~~] "PE": "stainless steel, cast iron, galvanized steel, brass,".

Section 22. Section **15A-3-310** is amended to read:

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

[~~IPC, Chapter 10, is not amended.~~] In IPC, Section 1003.3.8, the word "gravity" is inserted before the word "grease."

Section 23. Section **15A-3-314** is amended to read:

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

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

"1401. Subsurface Landscape Irrigation Systems.

[~~Gray water~~] Graywater recycling systems utilized for subsurface irrigation for single-family

residences shall comply with the requirements of UAC R317-401, [~~Gray Water~~] Graywater Systems. [~~Gray water~~] Graywater recycling systems utilized for subsurface irrigation for other occupancies shall comply with UAC R317-3, Design Requirements for Wastewater Collection, Treatment, and Disposal Systems, and UAC R317-4, Onsite [~~Waterwaste~~] Wastewater Systems."

Section 24. Section **15A-3-401** is amended to read:

15A-3-401. General provisions.

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

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

(3) In IMC, Section 1004.3.1, the word "unlisted" is inserted before the word "boilers".

[~~(4) IMC, Section 1101.10, is deleted.~~]

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

Section 25. Section **15A-3-501** is amended to read:

15A-3-501. General provisions.

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

(1) In IFGC, Section 404.9, a new Section 404.9.1, is added as follows: "404.9.1 Meter protection. Fuel gas services shall be in an approved location and/or provided with structures designed to 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 still provide

access for service and comply with the IBC or the IRC."

(2) IFGC, Section 409.5.3, is deleted.

(3) In IFGC, Section 502.1, the last sentence is deleted and replaced with "Plastic vents for Category IV appliances shall not be required to be listed and labeled where such vents comply with all of the following:

1. specified by the appliance manufacturer;

2. installed in accordance with the appliance manufacturer's instructions; and

3. the vent gas temperatures do not exceed 140 degrees Fahrenheit."

(4) In IFGC, Section 503.4.1, in the last sentence after "appliance manufacturer" insert: "where the appliance vent gas temperatures do not exceed 140 degrees Fahrenheit,".

(5) In IFGC, Section 503.6.11.1, the following exception is added:

"Exception: Existing and replacement Category I appliances may be located in rooms within the occupiable space provided all the following are met:

1. The original installation was compliant with existing codes at the time of installation.

2. The dwelling is equipped with a current, operable carbon monoxide detector, installed in accordance with Section 915 of the International Building Code.

3. The AHJ has approved a replacement based on the extreme difficulty of an installing individual Category I vent system or a direct vent Category IV appliance.

4. The room or space is used for no other purpose.

5. Combustion air is provided in accordance with Section 304. Where outdoor combustion air is provided, the room has a solid weather-stripped door equipped with an approved self-closure device.

6. Common vents terminate with a listed cap."

[~~(3)~~] (6) In IFGC, Section 631.2, the following sentence is inserted before the first sentence: " In accordance with Title 34A, Chapter 7, Safety, and requirements made by rule by the Labor Commission, boilers and pressure vessels in Utah are regulated by the Utah Labor Commission, Division of Boiler, Elevator and Coal Mine Safety, except those located in

private residences or in apartment houses of less than five family units. Boilers shall be installed in accordance with their listing and labeling, with minimum clearances as prescribed by the manufacturer's installation instructions and the state boiler code, whichever is greater."

Section 26. Section **15A-3-701** is amended to read:

15A-3-701. General provisions.

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

(1) In IECC, Section [~~C403.2.9.1.3~~] C403.11.2.3, the words "by the designer" are deleted.

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

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

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

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

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

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

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

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

"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."

(6) In IECC, Section R402.4.1, in the first sentence, the word "and" is deleted and

replaced with the word "or".

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

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

(a) In the first sentence:

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

[~~(i)~~] (ii) [~~on or~~] after January 1, 2019, [~~and before January 1, 2021,~~] replace the word "five" with "3.5"; and

[~~(ii) after January 1, 2021, replace the word "five" with "three."~~]

[~~(b) In the first sentence,~~]

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

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

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

(d) The following sentence is inserted after the third sentence: "The following parties 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 manufacturers or other comparable training."

(9) In IECC, Section R403.3.3:

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

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

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

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

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

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

(10) In IECC, Section R403.3.3, the following is added after the exception: "The following parties shall be approved to conduct testing:

1. Parties certified by BPI or RESNET.

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

(11) In IECC, Section R403.3.4:

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

(b) in Subsection 2:

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

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

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

(12) In IECC, Section R403.3.5, the words "or plenums" are deleted.

(13) In IECC, Section R403.5.3, Subsection 5 is deleted and Subsections 6 and 7 are renumbered.

(14) IECC, Section R403.6.1, is deleted and replaced with the following: "R403.6.1 Whole-house mechanical ventilation system fan efficacy. Fans used to provide whole-house mechanical ventilation shall meet the efficacy requirements of Table R403.6.1.

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

(15) In IECC, Section R403.6.1, the table is deleted and replaced with the following:

TABLE R403.6.1

MECHANICAL VENTILATION SYSTEM FAN EFFICACY

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

[~~(14)~~] (16) In IECC, Section R406.4, the table is deleted and replaced with the following:

TABLE R406.4

MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	65
5	69
6	68

Section 27. Section **15A-3-801** is amended to read:

15A-3-801. General provisions.

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

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

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

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

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

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

(4) In Section [~~301.1~~] 301.3, the exception is deleted.

(5) Section [~~403.5~~] 503.6 is deleted and replaced with the following:

"[~~403.5~~] 503.6 Bracing for unreinforced masonry parapets and other appendages upon reroofing.

Where the intended alteration requires a permit for reroofing and involves removal of roofing materials from more than 25% of the roof area of a building assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. [~~For purposes of this section, design seismic forces need not be taken greater than 75% of those that would be required for the design of similar nonstructural components in new buildings of similar purpose and location~~] Reduced seismic forces are permitted for design purposes."

(6) In Section 705.1, Exception number 3, the following is added at the end of the exception:

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

(7) Section [~~707.3.1~~] 706.3.1 is deleted and replaced with the following:

"[~~707.3.1~~] 706.3.1 Bracing for unreinforced masonry bearing wall parapets and other appendages.

Where a permit is issued for reroofing more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of bracing to resist the reduced International Building Code level seismic forces as specified in Section [~~301.1.4.2~~] 303 of this code unless an evaluation demonstrates compliance of such items."

(8) Section 906.6 is deleted and replaced with the following:

"906.6 Bracing for unreinforced masonry parapets and other appendages upon reroofing.

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

[~~(8)~~] (9) (a) Section [~~1007.3.1~~] 1006.3 is deleted and replaced with the following:

[~~"1007.3.1 Compliance with the International Building Code Level Seismic Forces. When a building or portion thereof is subject to a change of occupancy such that a change in the nature of the occupancy results in a higher risk category based on Table 1604.5 of the International Building Code or when such change of occupancy results in a design occupant~~

~~load increase of 100% or more, the building shall conform to the seismic requirements of the International Building Code for the new risk category."~~]

"1006.3 Seismic Loads. Where a change of occupancy results in a building being assigned to a higher risk category, or when a change of occupancy results in a design occupant load increase of 100% or more, the building shall satisfy the requirements of Section 1613 of the International Building Code using full seismic forces."

(b) Section [~~1007.3.1~~] 1006.3, exceptions 1 through 3 remain unchanged.

(c) In Section [~~1007.3.1~~] 1006.3, add a new exception 4 as follows:

"4. Where the design occupant load increase is less than 25 occupants and the occupancy category does not change."

[~~(9)~~] (10) In Section 1012.7.3, exception 2 is deleted.

[~~(10)~~] (11) In Section 1012.8.2, number 7 is added as follows:

"7. When a change of occupancy in a building or portion of a building results in a Group R-2 occupancy, not less than 20% of the dwelling or sleeping units shall be Type B dwelling or sleeping units. These dwelling or sleeping units may be located on any floor of the building provided with an accessible route. Two percent, but not less than one unit, of the dwelling or sleeping units shall be Type A dwelling units."

Section 28. Section **15A-4-107** is amended to read:

15A-4-107. Amendments to IBC applicable to Sandy City.

The following amendments are adopted as amendments to the IBC for Sandy City:

(1) A new IBC, Section (F)903.2.13, is added as follows: "(F)903.2.13 An automatic sprinkler system shall be installed in accordance with NFPA 13 throughout buildings containing all occupancies where fire flow exceeds 2,000 gallons per minute, based on Table B105.1 (2) of the [~~2015~~] 2018 International Fire Code. A one- or two-family dwelling or a town home is not required to have a fire sprinkler system except in accordance with Section 15A-5-203."

(2) A new IBC, Appendix [~~L~~] N, is added and adopted as follows: "Appendix [~~L~~] N

BUILDINGS AND STRUCTURES CONSTRUCTED IN AREAS DESIGNATED AS WILDLAND-URBAN INTERFACE AREAS

AL 101.1 General. Buildings and structures constructed in areas designated as Wildland-Urban Interface Areas by Sandy City shall be constructed using ignition resistant construction as determined by the Fire Marshal. Section 502 of the 2006 International Wildland-Urban Interface Code (IWUIC), as promulgated by the International Code Council, shall be used to determine Fire Hazard Severity. The provisions listed in Chapter 5 of the 2006 International Wildland-Urban Interface Code, as modified herein, shall be used to determine the requirements for Ignition Resistant Construction."

(3) In Section 504 of the IWUIC Class I IGNITION-RESISTANT CONSTRUCTION a new Section 504.1.1 is added as follows: "504.1.1 General. Subsections 504.5, 504.6, and 504.7 shall only be required on the exposure side of the structure, as determined by the fire code official, where defensible space is less than 50 feet as defined in Section 603 of the 2006 International Wildland-Urban Interface Code."

(4) In Section 505 of the IWUIC Class 2 IGNITION-RESISTANT CONSTRUCTION Subsections 505.5 and 505.7 are deleted.

Section 29. Section **17-36-55** is amended to read:

17-36-55. Fees collected for construction approval -- Approval of plans.

(1) As used in this section:

(a) "Construction project" means the same as that term is defined in Section 38-1a-102.

(b) "Lodging establishment" means a place providing temporary sleeping accommodations to the public, including any of the following:

(i) a bed and breakfast establishment;

(ii) a boarding house;

(iii) dormitory;

(iv) a hotel;

(v) an inn;

(vi) a lodging house;

(vii) a motel;

(viii) a resort; or

(ix) a rooming house.

(c) "Planning review" means a review to verify that a county has approved the following elements of a construction project:

(i) zoning;

(ii) lot sizes;

(iii) setbacks;

(iv) easements;

(v) curb and gutter elevations;

(vi) grades and slopes;

(vii) utilities;

(viii) street names;

(ix) defensible space provisions and elevations, if required by the Utah Wildland Urban Interface Code adopted under Section 15A-2-103; and

(x) subdivision.

(d) (i) " Plan review" means all of the reviews and approvals of a plan that a county requires to obtain a building permit from the county with a scope that may not exceed a review to verify:

(A) that the construction project complies with the provisions of the State Construction Code under Title 15A, State Construction and Fire Codes Act;

(B) that the construction project complies with the energy code adopted under Section 15A-2-103;

(C) that the construction project received a planning review;

(D) that the applicant paid any required fees;

(E) that the applicant obtained final approvals from any other required reviewing

agencies;

(F) that the construction project complies with federal, state, and local storm water protection laws;

(G) that the construction project received a structural review; and

(H) the total square footage for each building level of finished, garage, and unfinished space.

(ii) " Plan review" does not mean a review of a document:

(A) required to be re-submitted for additional modifications or substantive changes identified by the plan review;

(B) submitted as part of a deferred submittal when requested by the applicant and approved by the building official; or

(C) that, due to the document's technical nature or on the request of the applicant, is reviewed by a third party.

(e) "State Construction Code" means the same as that term is defined in Section 15A-1-102.

(f) "State Fire Code" means the same as that term is defined in Section 15A-1-102.

[~~(e)~~] (g) "Structural review" means:

(i) a review that verifies that a construction project complies with the following:

(A) footing size and bar placement;

(B) foundation thickness and bar placement;

(C) beam and header sizes;

(D) nailing patterns;

(E) bearing points;

(F) structural member size and span; and

(G) sheathing; or

(ii) if the review exceeds the scope of the review described in Subsection (1)[~~(e)~~](g)(i), a review that a licensed engineer conducts.

[~~(f)~~] (h) "Technical nature" means a characteristic that places an item outside the training and expertise of an individual who regularly performs plan reviews.

(2) (a) If a county collects a fee for the inspection of a construction project, the county shall ensure that the construction project receives a prompt inspection.

(b) If a county cannot provide a building inspection within three business days, the county shall promptly engage an independent inspector with fees collected from the applicant.

(c) If an inspector identifies one or more violations of the State Construction Code or State Fire Code during an inspection, on the day on which the inspection occurs, the inspector shall give the permit holder written notification of each violation that:

(i) is delivered in hardcopy or by electronic means; and

(ii) upon request by the permit holder, includes a reference to each applicable provision of the State Construction Code or State Fire Code.

(3) (a) A county shall complete a plan review of a construction project for a one to two family dwelling or townhome by no later than 14 business days after the day on which the plan is submitted to the county.

(b) A county shall complete a plan review of a construction project for a residential structure built under the International Building Code, not including a lodging establishment, by no later than 21 business days after the day on which the plan is submitted to the county.

(c) (i) Subject to Subsection (3)(c)(ii), if a county does not complete a plan review before the time period described in Subsection (3)(a) or (b) expires, an applicant may request that the county complete the plan review.

(ii) If an applicant makes a request under Subsection (3)(c)(i), the county shall perform the plan review no later than:

(A) for a plan review described in Subsection (3)(a), 14 days from the day on which the applicant makes the request; or

(B) for a plan review described in Subsection (3)(b), 21 days from the day on which the applicant makes the request.

(d) An applicant may:

(i) waive the plan review time requirements described in this Subsection (3); or

(ii) with the county's consent, establish an alternative plan review time requirement.

(4) (a) A county may not enforce a requirement to have a plan review if:

(i) the county does not complete the plan review within the time period described in Subsection (3)(a) or (b); and

(ii) a licensed architect or structural engineer, or both when required by law, stamps the plan.

(b) A county may attach to a reviewed plan a list that includes:

(i) items with which the county is concerned and may enforce during construction; and

(ii) building code violations found in the plan.

(c) A county may not require an applicant to redraft a plan if the county requests minor changes to the plan that the list described in Subsection (4)(b) identifies.

(5) An applicant shall ensure that each construction project plan submitted for a plan review under this section has a statement indicating that actual construction will comply with applicable local ordinances and building codes.

Section 30. **Effective date.**

(1) Notwithstanding Subsection (2), if approved by two-thirds of all the members elected to each house, the actions affecting the following sections take effect upon approval by the governor, or the day following the constitutional time limit of Utah Constitution, Article VII, Section 8, without the governor's signature, or in the case of a veto, the date of veto override:

(a) Section 15A-3-203; and

(b) Section 15A-3-701.

(2) This bill takes effect on July 1, 2019.