CONSTRUCTION CODE AMENDMENTS

2013 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Brad R. Wilson

Senate Sponsor: Curtis S. Bramble

LONG TITLE

General Description:

This bill modifies the State Construction Code.

Highlighted Provisions:

This bill:

- adopts the 2012 edition of certain nationally recognized building codes;
- modifies certain statewide amendments to the State Construction Code; and
- repeals certain local amendments to the State Construction Code.

Money Appropriated in this Bill:

None

Other Special Clauses:

This bill takes effect on July 1, 2013.

Utah Code Sections Affected:

AMENDS:

15A-2-103, as last amended by Laws of Utah 2012, Chapter 76

15A-2-104, as enacted by Laws of Utah 2011, Chapter 14

15A-3-102, as enacted by Laws of Utah 2011, Chapter 14

15A-3-103, as enacted by Laws of Utah 2011, Chapter 14

15A-3-104, as enacted by Laws of Utah 2011, Chapter 14

15A-3-105, as enacted by Laws of Utah 2011, Chapter 14

15A-3-107, as enacted by Laws of Utah 2011, Chapter 14

15A-3-108, as last amended by Laws of Utah 2012, Chapter 76

15A-3-110, as enacted by Laws of Utah 2011, Chapter 14

15A-3-112, as enacted by Laws of Utah 2011, Chapter 14
15A-3-113, as last amended by Laws of Utah 2012, Chapters 76 and 219
15A-3-202, as last amended by Laws of Utah 2012, Chapter 62
15A-3-204, as enacted by Laws of Utah 2011, Chapter 14
15A-3-205, as enacted by Laws of Utah 2011, Chapter 14
15A-3-206, as enacted by Laws of Utah 2011, Chapter 14
15A-3-302, as enacted by Laws of Utah 2011, Chapter 14
15A-3-303, as enacted by Laws of Utah 2011, Chapter 14
15A-3-304, as enacted by Laws of Utah 2011, Chapter 14
15A-3-305, as enacted by Laws of Utah 2011, Chapter 14
15A-3-306, as enacted by Laws of Utah 2011, Chapter 14
15A-3-307, as enacted by Laws of Utah 2011, Chapter 14
15A-3-309, as enacted by Laws of Utah 2011, Chapter 14
15A-3-310, as enacted by Laws of Utah 2011, Chapter 14
15A-3-311, as enacted by Laws of Utah 2011, Chapter 14
15A-3-313, as enacted by Laws of Utah 2011, Chapter 14
15A-3-314, as enacted by Laws of Utah 2011, Chapter 14
15A-3-401, as enacted by Laws of Utah 2011, Chapter 14
15A-3-501, as enacted by Laws of Utah 2011, Chapter 14
15A-3-601, as last amended by Laws of Utah 2012, Chapter 76
15A-3-801, as enacted by Laws of Utah 2011, Chapter 14

REPEALS:

15A-4-302, as enacted by Laws of Utah 2011, Chapter 14
15A-4-304, as enacted by Laws of Utah 2012, Chapter 76
15A-4-305, as enacted by Laws of Utah 2012, Chapter 76
15A-4-306, as enacted by Laws of Utah 2012, Chapter 76
15A-4-307, as enacted by Laws of Utah 2012, Chapter 76

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

Section 1. Section **15A-2-103** is amended to read:

CHAPTER 2. ADOPTION OF STATE CONSTRUCTION CODE

Part 1. General Provisions

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, Statewide Amendments to International Plumbing 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 [~~2009~~] 2012 edition of the International Building Code, including Appendix J, issued by the International Code Council;

(b) the [~~2009~~] 2012 edition of the International Residential Code, issued by the International Code Council;

(c) the [~~2009~~] 2012 edition of the International Plumbing Code, issued by the International Code Council;

(d) the [~~2009~~] 2012 edition of the International Mechanical Code, issued by the International Code Council;

(e) the [~~2009~~] 2012 edition of the International Fuel Gas Code, issued by the International Code Council;

(f) the 2011 edition of the National Electrical Code, issued by the National Fire Protection Association;

(g) the 2009 edition of the International Energy Conservation Code, issued by the International Code Council;

(h) subject to Subsection 15A-2-104(2), the HUD Code;

(i) subject to Subsection 15A-2-104(1), Appendix E of the [~~2009~~] 2012 edition of the

International Residential Code, issued by the International Code Council; and

(j) 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 2. Section **15A-2-104** is amended to read:

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

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

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

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

(i) Appendix E of the [~~2009~~] 2012 edition of the IRC, as issued by the International Code Council for installations defined in Section AE101 of Appendix E; or

(ii) if an installation is beyond the scope of the [~~2009~~] 2012 edition of the IRC as defined in Section AE101 of Appendix E, the 2005 edition of the NFPA 225 Model Manufactured Home Installation Standard, issued by the National Fire Protection Association.

(c) A manufacturer, dealer, or homeowner is permitted to design for unusual installation of a manufactured home not provided for in the manufacturer's standard installation instruction, Appendix E of the [~~2009~~] 2012 edition of the IRC, or the 2005 edition of the NFPA 225, if the design is approved in writing by a professional engineer or architect licensed in Utah.

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

(2) Pursuant to the HUD Code Section 604(d), a manufactured home may be installed in the state that does not meet the local snow load requirements as specified in Chapter 3, Part 2, Statewide Amendments to IRC, except that the manufactured home shall have a protective structure built over the home that meets the IRC and the snow load requirements under Chapter 3, Part 2, Statewide Amendments to IRC.

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

CHAPTER 3. STATEWIDE AMENDMENTS INCORPORATED AS PART OF STATE CONSTRUCTION CODE

Part 1. Statewide Amendments to IBC

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

(1) IBC, Section 106, is deleted.

(2) (a) In IBC, Section 110, a new section is added as follows: "110.3.5, Weather-resistant exterior wall envelope. An inspection shall be made of the weather-resistant exterior wall envelope as required by Section 1403.2, and flashing as required by Section 1405.4 to prevent water from entering the weather-resistive barrier."

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

(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 [~~defimition for "Assisted Living Facility" is deleted and replaced with the following: "ASSISTED LIVING FACILITY. See Section 308.1.1.~~]

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 definition for ["~~Child Care Facilities" is deleted and replaced with the following: "CHILD CARE FACILITIES. See Section 308.3.1."~~] Foster Care Facilities is modified by changing the word "Foster" to "Child."

(6) 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) 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."

(8) 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."

(9) 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."

[~~(6)~~] (10) In the list in IBC, Section 304.1, the following words are added after the words "Ambulatory [~~health~~] care facilities" [~~is deleted and replaced with "Ambulatory health care facilities with four or fewer surgical operating rooms."~~]: "where four or more care recipients are rendered incapable of self preservation."

[~~(7)~~] (11) In IBC, Section 305.2, [~~is deleted and replaced with the following: "305.2 Day care. The use of a building or structure, or portion thereof, for educational, supervision, child day care centers, or personal care services of more than four children shall be classified as a Group E occupancy. See Section 424 for special requirements for Group E child day care centers.~~] 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."

[~~Exception: Areas used for child day care purposes with a Residential Certificate or a Family~~

~~License, as defined 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 310.1 or shall comply with the International Residential Code in accordance with Section 101.2. Areas used for Hourly Child Care Centers, as defined in Utah Administrative Code, R430-60, or Out of School Time Programs, as defined in Utah Administrative Code, R430-70, may be classified as accessory occupancies."~~]

[~~(8) In IBC, Section 308, the following definitions are added: "308.1.1 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.~~]

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

(13) A new IBC Section 305.2.4 is added as follows: "305.2.4 Child Day Care -- Residential Certificate or a Family License. Areas used for child day care purposes with a Residential Certificate R430-50 or a Family License, as defined 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 comply with the International Residential Code in accordance with Section R101.2."

(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."

(15) 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."

[~~(9) In IBC, Section 308.2, the words "Assisted living facilities" are deleted and replaced with "Type I Assisted living facilities."~~]

[~~(10)~~] (16) In IBC, Section 308.3, [~~is deleted and replaced with the following: "308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, or custodial care on a 24-hour basis of more than three persons who are not capable of self-preservation. This group shall include, but not be limited to the following: hospitals, nursing homes (both intermediate care facilities and skilled nursing facilities), mental~~

~~hospitals, detoxification facilities, ambulatory surgical centers with five or more operating rooms where care is less than 24 hours, and type II assisted living facilities. Type II assisted living facilities with five or fewer persons shall be classified as a Group R-4. Type II assisted living facilities as defined in 308.1.1 with at least six and not more than sixteen residents shall be classified as a Group I-1 facility."~~] the words "(see Section 308.2.1)" are added after the words "assisted living facilities".

[~~(11)~~] (17) In IBC, Section 308.3.1, [~~the definition for "CHILD CARE FACILITIES" is deleted and replaced with the following: "CHILD CARE FACILITIES. A child care facility, as licensed by the Utah Department of Human Services in Utah Administrative Code, R501, that provides care on a 24-hour basis to more than four children 2 1/2 years of age or less shall be classified as Group I-2."~~] all of the words after the first International Residential Code are deleted.

[~~(12) IBC, Section 308.5, is deleted and replaced with the following: "308.5 Group I-4, day care facilities. This group shall include buildings and structures occupied by persons of any age who receive custodial care less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. A facility such as the above with four or fewer persons shall be classified as an R-3 or shall comply with the International Residential Code in accordance with Section 101.2. Places of worship during religious functions and Group E child day care centers are not included."~~]

[~~(13) IBC, Section 308.5.2, is deleted.~~]

[~~(14) In IBC, Section 310.1, in the subsection designated as R-1, at the end of the sentence beginning with "Congregate living facilities" the following is added: "or shall comply with the International Residential Code."~~]

[~~(15) In IBC, Section 310.1, in the subsection designated as R-2, at the end of the sentence beginning with "Congregate living facilities" the following is added: "or shall comply with the International Residential Code."~~]

[~~(16) In IBC, Section 310.1, the following is added at the end of the subsection~~

~~designated as R-3: "Areas used for day care purposes may be located in a residential dwelling unit under all of the following conditions:~~]

[~~1. Compliance with the 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."~~]

[~~(17) In IBC, Section 310.1, the subsection designated as R-4 is deleted and replaced with the following: "R-4: Residential occupancies shall include buildings arranged for occupancy as Type I Assisted Living Facilities or Residential Treatment/Support Assisted Living Facilities including more than five but not more than 16 residents, excluding staff.~~]

[~~Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided for in this code."~~]

[~~(18) In IBC, Section 310.2, the definition for "Residential Care/Assisted Living Facilities" is deleted and replaced with the following: "Assisted Living Facilities, see Section 308.1.1".~~]

(18) 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."

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

(19) In IBC, Section 308.4.1, the word "five" is deleted and replaced with the word

"three" in both places.

(20) In IBC, Section 308.6, the word "five" is deleted and replaced with the word "four".

(21) In IBC, Section 308.6.1, the following changes are made:

(a) The word "five" is deleted and replaced with the word "four".

(b) The words "2 ½ 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 425 for special requirements for Day Care."

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

(23) In IBC, Section 310.5, the words "and single family dwellings complying with the IRC" are added after "Residential occupancies".

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

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

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."

(26) In IBC, Section 310.6, the words "(see Section 308.2.1)" are added after "assisted living facilities".

Section 4. Section **15A-3-103** is amended to read:

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

(1) [~~Section~~] IBC[,] Section 403.5.5[,] is deleted.

[~~(2) In IBC, Section 422.1, the words "Sections 422.1 to 422.6" are replaced with "Sections 422.1 to 422.7".~~]

[~~(3) In IBC, Section 422, a new section is added as follows: "422.7 Separation. Occupancies classified as Group B Ambulatory Health Care Facilities shall be separated from all surrounding tenants and occupancies in accordance with Table 508.4 but not less than one-hour fire barrier when the suite is capable of providing care for four or more care recipients who are incapable of self preservation."~~]

[~~(4) A new IBC, Section 424, is added as follows: "Section 424 Group E Child Day Care Centers. Group E child day care centers shall comply with Section 424.~~]

[~~424.1 Location at grade. Group E child day care centers shall be located at the level of exit discharge.~~]

[~~Exception: 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.~~]

[~~424.2 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 1029.~~]

[~~424.3 All Group E Child Day Care Centers shall comply with Utah Administrative Code, R430-100, Child Care Centers."~~]

(2) IBC Section (F)406.5.8 is deleted and replaced with the following: "(F)406.5.8 Standpipe system. An open parking garage shall be equipped with an approved Class I 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.

Exception: Open parking garages equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a standpipe system is not required by Section 905.3.1."

(3) A new IBC Section (F)406.5.8.1 is added as follows: "(F) 406.5.8.1 Installation requirements. Class I manual standpipe shall be designed and installed in accordance with Section 905 and NFPA 14. Class I 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."

(4) In IBC, Section 422.2, a new paragraph is added as follows: "422.2 Separations: Ambulatory care facilities licensed by the Utah Department of Health shall be separated from adjacent tenants with a fire barrier 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."

(5) A new IBC Section 425, Day Care, is added as follows:

"425.1 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.

425.2 Definitions.

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

425.2.2 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.

425.2.3 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.

425.2.4 Family Day Care: Providing care for clients listed in the following two groups:

425.2.4.1 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.

425.2.4.2 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.

425.2.5 R710-8: Utah Administrative Code, R710-8, Day Care Rules, as enacted under the authority of the Utah Fire Prevention Board.

425.3. Family Day Care.

425.3.1 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.

425.3.2 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.

425.3.2.1 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 1029.

425.3.3 Family Day Care units shall not be located above the second story.

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

425.3.4.1 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 1009 or Section 1010 or Section 1026.

425.3.5 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.

425.3.6 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.

425.3.7 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.

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

425.3.9 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.

425.4 Day Care Centers.

425.4.1 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.

425.4.2 Emergency Evacuation Drills shall be completed as required in IFC, Chapter 4, Section 405.

425.4.3 Location at grade. Group E child day care centers shall be located at the level of exit discharge.

425.4.3.1 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.

425.4.4 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 1029.

425.4.5 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.

425.5 Requirements for all Day Care

425.5.1 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.

425.5.2 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."

[~~(5)~~] (6) In IBC, Section 504.2, a new section is added as follows: "504.2.1 Notwithstanding the exceptions to Section 504.2, Group I-2 Assisted Living Facilities shall be allowed to be two stories 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 1008.1.9.3 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."

[~~(6) In IBC, Table 508.4, a new footnote g is added as follows: "g. See Section 422.7 for additional requirements of Group B Ambulatory Health Care Facilities."~~]

Section 5. Section **15A-3-104** is amended to read:

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

[~~(1) In IBC, Section 707.5.1, a new exception 4 is added as follows: "4. Group B Ambulatory Health Care Facilities."~~]

[~~(2) In IBC, Section (F)902, the definition for record drawings is deleted and replaced with the following: "(F) RECORD DRAWINGS. Drawings ("as builts") that document all aspects of a fire protection system as installed."~~]

(1) IBC, Section (F)901.8, is deleted and replaced with the following: "(F)901.8 Pump and riser room size. Fire pump and automatic sprinkler system riser rooms shall be designed with adequate space for all installed equipment necessary for the installation and to provide

sufficient working space around the stationary equipment. Clearances around equipment shall be in accordance with manufacturer requirements and not less than the following minimum elements:

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

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

901.8.3 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 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 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)~~] (2) In IBC, Section (F)903.2.2, the words [~~"all fire areas"~~] "the entire floor" are deleted and replaced with [~~"buildings"~~] "a building" and the last paragraph is deleted.

[~~(4)~~] (3) 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)~~] (4) 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)~~] (5) IBC, [~~Section~~] Sections (F)903.2.8, [~~is~~] (F)903.2.8.1, and (F)903.2.8.2, 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. 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."

[~~(7)~~] (6) 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."

[~~(8) IBC, Section (F)903.2.10, is deleted and replaced with the following: "(F)903.2.10 Group S-2. An automatic sprinkler system shall be provided throughout buildings classified as parking garages in accordance with Section 406.2 or where located beneath other groups.~~]

[~~Exception 1: Parking garages of less than 5,000 square feet (464 m^2) accessory to Group R-3 occupancies.~~]

[~~Exception 2: Open parking garages not located beneath other groups if one of the following conditions is met:~~]

[~~a. Access is provided for fire fighting operations to within 150 feet (45,720 mm) of all portions of the parking garage as measured from the approved fire department vehicle access; or~~]

[~~b. Class I standpipes are installed throughout the parking garage."~~]

[~~(9) In IBC, Section (F)903.2.10.1, the last clause "where the fire area exceeds 5,000 square feet (464 m^2)" is deleted.~~]

[~~(10)~~] (7) IBC, Section (F)904.11, is deleted and replaced with the following: "(F)904.11 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."

[~~(11)~~] (8) IBC, [~~Subsections~~] Sections (F)904.11.3, (F)904.11.3.1, (F)904.11.4, and (F)904.11.4.1, are deleted.

(9) IBC, Section (F)907.2.3 Group E:

(a) The first sentence is deleted and rewritten as follows: "A manual fire alarm system that initiates the occupant notification system in accordance with Section (F)907.5 and installed in accordance with Section (F)907.6 shall be installed in Group E occupancies."

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

[~~(12) A new IBC, Section (F)907.9, is added as follows: "Section (F)907.9 Carbon monoxide alarms. Carbon monoxide alarms shall be installed on each habitable level of a dwelling unit or sleeping unit in Groups R-2, R-3, R-4, and I-1 equipped with fuel burning appliances and in dwelling units that have attached garages. If more than one carbon monoxide alarm is required, they shall be interconnected as required in the International Fire Code, Chapter 9, Section 907.2.11.3. In new construction, carbon monoxide alarms shall receive their primary power as required in the International Fire Code, Chapter 9, Section 907.2.11.4. Listed single- and multiple-station carbon monoxide alarms shall comply with UL 2034 and~~

~~shall be installed in accordance with the provisions of this code and NFPA 720."~~]

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

(11) In IBC, Section (F)908.7, the following new subsections are added: "(F)908.7.1 Interconnection. Where more than one carbon monoxide alarm is required to be installed within Group R or I-1 occupancies, the carbon monoxide alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms. 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)908.7.2 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 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.

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

(12) IBC, Section (F)908.7.1, is renumbered to 908.7.3.

Section 6. Section **15A-3-105** is amended to read:

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

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

[~~(b) the word "delayed" is deleted throughout and replaced with "controlled"; and~~]

[~~(c) the last sentence before the numbered subsections 1 through 6 is deleted.~~]

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

[~~(2)~~] (3) In IBC, Section [~~1009.4.2~~] 1009.7.2, exception 5 is deleted and replaced with the following: "5. 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)."

[~~(3)~~] (4) In IBC, Section [~~1009.12~~] 1009.15, a new exception 6 is added as follows: "6. 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."

[~~(4) In IBC, Section 1013.2, the words "adjacent fixed seating" are deleted.~~]

[~~(5) In IBC, Section 1013.2, a new exception 5 is added as follows: "5. For occupancies in Group R-3 and within individual dwelling units in occupancies in Group R-2, as applicable in Section 101.2, guards shall form a protective barrier not less than 36 inches (914 mm) in height."~~]

[~~(6) In IBC, Section 1015.2.2, the following sentence is added at the end: "Additional exits or exit access doorways shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available."~~]

(5) In IBC, Section 1011.5, the words ", including when the building may not be fully occupied." are added at the end of the sentence.

[~~(7)~~] (6) IBC, Section 1024, is deleted.

[~~(8) A new IBC, Section 1109.7.1, is added as follows: "1109.7.1 Platform (wheelchair) lifts. All platform (wheelchair) lifts shall be capable of independent operation without a key."~~]

(7) In IBC, Section 1028.12, exception 2 is deleted.

(8) 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".

(9) In IBC, Section 1208.4, subparagraph 1 is deleted and replaced with the following: "1. The unit shall have a living room of not less than 165 square feet (15.3 m^2) of floor area. An additional 100 square feet (9.3 m^2) of floor area shall be provided for each occupant of such unit in excess of two."

Section 7. Section **15A-3-107** is amended to read:

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

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

(2) In IBC, Section [~~1605.2.1, the formula shown as "f_2 = 0.2 for other roof configurations" is~~] 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, [~~Section~~] Sections 1605.3.1 and [~~Section~~] 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 as calculated below, shall be combined with seismic loads.

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

Where:

W_s = Weight of snow to be included in seismic calculations

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."

(5) A new IBC, Section 1608.1.1, is added as follows: "1608.1.1 Section 7.4.5 of Chapter 7 of ASCE 7 referenced in Section 1608.1 of the IBC is deleted and replaced with the 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. [~~A record of such action together with the substantiating data shall be provided to the division for a permanent record.~~]

[~~The building official may also directly adopt roof snow loads in accordance with Table 1608.1.2(b), provided the site is no more than 100 ft. higher than the listed elevation.~~]

Where the minimum roof live load in accordance with Section 1607.11 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."

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

"TABLE NO. 1608.1.2(a)

STATE OF UTAH - REGIONAL SNOW LOAD FACTORS

	COUNTY	P_o	S	A_o
	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)~~]

[~~RECOMMENDED SNOW LOADS FOR SELECTED UTAH CITIES AND TOWNS(2)~~]

			[~~Roof Snow Load (PSF)~~]	[~~Ground Snow Load (PSF)~~]
	[~~Beaver County~~]			

		[~~Beaver~~]	[~~5,920 ft.~~]	[~~43~~]	[~~62~~]
		[~~Box Elder County~~]			
		[~~Brigham City~~]	[~~4,300 ft.~~]	[~~30~~]	[~~43~~]
		[~~Tremonton~~]	[~~4,290 ft.~~]	[~~30~~]	[~~43~~]
		[~~Cache County~~]			
		[~~Logan~~]	[~~4,530 ft.~~]	[~~35~~]	[~~50~~]
		[~~Smithfield~~]	[~~4,595 ft.~~]	[~~35~~]	[~~50~~]
		[~~Carbon County~~]			
		[~~Price~~]	[~~5,550 ft.~~]	[~~30~~]	[~~43~~]
		[~~Daggett County~~]			
		[~~Manila~~]	[~~5,377 ft.~~]	[~~30~~]	[~~43~~]
		[~~Davis County~~]			
		[~~Bountiful~~]	[~~4,300 ft.~~]	[~~30~~]	[~~43~~]
		[~~Farmington~~]	[~~4,270 ft.~~]	[~~30~~]	[~~43~~]
		[~~Layton~~]	[~~4,400 ft.~~]	[~~30~~]	[~~43~~]
		[~~Fruit Heights~~]	[~~4,500 ft.~~]	[~~40~~]	[~~57~~]
		[~~Duchesne County~~]			
		[~~Duchesne~~]	[~~5,510 ft.~~]	[~~30~~]	[~~43~~]
		[~~Roosevelt~~]	[~~5,104 ft.~~]	[~~30~~]	[~~43~~]
		[~~Emery County~~]			
		[~~Castledale~~]	[~~5,660 ft.~~]	[~~30~~]	[~~43~~]
		[~~Green River~~]	[~~4,070 ft.~~]	[~~25~~]	[~~36~~]
		[~~Garfield County~~]			
		[~~Panguitch~~]	[~~6,600 ft.~~]	[~~30~~]	[~~43~~]
		[~~Grand County~~]			
		[~~Moab~~]	[~~3,965 ft.~~]	[~~25~~]	[~~36~~]

	[~~Iron County~~]			
	[~~Cedar City~~]	[~~5,831 ft.~~]	[~~30~~]	[~~43~~]
	[~~Juab County~~]			
	[~~Nephi~~]	[~~5,130 ft.~~]	[~~30~~]	[~~43~~]
	[~~Kane County~~]			
	[~~Kanab~~]	[~~5,000 ft.~~]	[~~25~~]	[~~36~~]
	[~~Millard County~~]			
	[~~Millard~~]	[~~5,000 ft.~~]	[~~30~~]	[~~43~~]
	[~~Delta~~]	[~~4,623 ft.~~]	[~~30~~]	[~~43~~]
	[~~Morgan County~~]			
	[~~Morgan~~]	[~~5,064 ft.~~]	[~~40~~]	[~~57~~]
	[~~Piute County~~]			
	[~~Piute~~]	[~~5,996 ft.~~]	[~~30~~]	[~~43~~]
	[~~Rich County~~]			
	[~~Woodruff~~]	[~~6,315 ft.~~]	[~~40~~]	[~~57~~]
	[~~Salt Lake County~~]			
	[~~Murray~~]	[~~4,325 ft.~~]	[~~30~~]	[~~43~~]
	[~~Salt Lake City~~]	[~~4,300 ft.~~]	[~~30~~]	[~~43~~]
	[~~Sandy~~]	[~~4,500 ft.~~]	[~~30~~]	[~~43~~]
	[~~West Jordan~~]	[~~4,375 ft.~~]	[~~30~~]	[~~43~~]
	[~~West Valley~~]	[~~4,250 ft.~~]	[~~30~~]	[~~43~~]
	[~~San Juan County~~]			
	[~~Blanding~~]	[~~6,200 ft.~~]	[~~30~~]	[~~43~~]
	[~~Monticello~~]	[~~6,820 ft.~~]	[~~35~~]	[~~50~~]
	[~~Sanpete County~~]			
	[~~Fairview~~]	[~~6,750 ft.~~]	[~~35~~]	[~~50~~]

		[~~Mt. Pleasant~~]	[~~5,900 ft.~~]	[~~30~~]	[~~43~~]
		[~~Manti~~]	[~~5,740 ft.~~]	[~~30~~]	[~~43~~]
		[~~Ephraim~~]	[~~5,540 ft.~~]	[~~30~~]	[~~43~~]
		[~~Gunnison~~]	[~~5,145 ft.~~]	[~~30~~]	[~~43~~]
		[~~Sevier County~~]			
		[~~Salina~~]	[~~5,130 ft.~~]	[~~30~~]	[~~43~~]
		[~~Richfield~~]	[~~5,270 ft.~~]	[~~30~~]	[~~43~~]
		[~~Summit County~~]			
		[~~Coalville~~]	[~~5,600 ft.~~]	[~~60~~]	[~~86~~]
		[~~Kamas~~]	[~~6,500 ft.~~]	[~~70~~]	[~~100~~]
		[~~Park City~~]	[~~6,800 ft.~~]	[~~100~~]	[~~142~~]
		[~~Park City~~]	[~~8,400 ft.~~]	[~~162~~]	[~~231~~]
		[~~Summit Park~~]	[~~7,200 ft.~~]	[~~90~~]	[~~128~~]
		[~~Tooele County~~]			
		[~~Tooele~~]	[~~5,100 ft.~~]	[~~30~~]	[~~43~~]
		[~~Uintah County~~]			
		[~~Vernal~~]	[~~5,280 ft.~~]	[~~30~~]	[~~43~~]
		[~~Utah County~~]			
		[~~American Fork~~]	[~~4,500 ft.~~]	[~~30~~]	[~~43~~]
		[~~Orem~~]	[~~4,650 ft.~~]	[~~30~~]	[~~43~~]
		[~~Pleasant Grove~~]	[~~5,000 ft.~~]	[~~30~~]	[~~43~~]
		[~~Provo~~]	[~~5,000 ft.~~]	[~~30~~]	[~~43~~]
		[~~Spanish Fork~~]	[~~4,720 ft.~~]	[~~30~~]	[~~43~~]
		[~~Wasatch County~~]			
		[~~Heber~~]	[~~5,630 ft.~~]	[~~60~~]	[~~86~~]
		[~~Washington County~~]			

	[~~Central~~]	[~~5,209 ft.~~]	[~~25~~]	[~~36~~]
	[~~Dameron~~]	[~~4,550 ft.~~]	[~~25~~]	[~~36~~]
	[~~Leeds~~]	[~~3,460 ft.~~]	[~~20~~]	[~~29~~]
	[~~Rockville~~]	[~~3,700 ft.~~]	[~~25~~]	[~~36~~]
	[~~Santa Clara~~]	[~~2,850 ft.~~]	[~~15 (1)~~]	[~~21~~]
	[~~St. George~~]	[~~2,750 ft.~~]	[~~15 (1)~~]	[~~21~~]
	[~~Wayne County~~]			
	[~~Loa~~]	[~~7,080 ft.~~]	[~~30~~]	[~~43~~]
	[~~Hanksville~~]	[~~4,308 ft.~~]	[~~25~~]	[~~36~~]
	[~~Weber County~~]			
	[~~North Ogden~~]	[~~4,500 ft.~~]	[~~40~~]	[~~57~~]
	[~~Ogden~~]	[~~4,350 ft.~~]	[~~30~~]	[~~43~~]
[~~NOTES~~]				
[~~(1) The IBC requires a minimum live load - See 1607.11.2.~~]				
[~~(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."~~]				

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]	6315	57	40
	Laketown[4]	6000	57	40
	Garden City[5]	--	--	--
	Randolph[4]	6300	57	40
San Juan	Monticello[3]	6820	50	35
Summit	Coalville[3]	5600	86	60
	Kamas[4]	6500	114	80
Tooele	Tooele[3]	5100	43	30
Utah	Orem[3]	4650	43	30
	Pleasant Grove[4]	5000	43	30
	Provo[5]	--	--	--
Wasatch	Heber[5]	--	--	--
Washington	Leeds[3]	3460	29	20
	Santa Clara[3]	2850	21	15
	St. George[3]	2750	21	15
	All other county locations[5]	--	--	--
Wayne	Loa[3]	7080	43	30

[1]The IBC requires a minimum live load - See 1607.11.2.

[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."

[~~(10) In IBC, Section 1609.1.1, a new exception 7 is added as follows: "7. The wind design procedure as found in Sections 1616 through 1624 of the 1997 Uniform Building Code may be used as an alternative wind design procedure for signs and free standing walls as listed in item 7 listed in Table 16-H of the 1997 Uniform Building Code. The Importance Factor, I, shall be determined in accordance with Table 6-1 of ASCE 7. Stress increases are only allowed as provided in Section 1605.3 of the 2009 IBC."~~]

[~~(11)~~] (10) A new IBC, Section 1613.1.1, is added as follows: "1613.1.1 ASCE 12.7.2 and 12.14.8.1 of Chapter 12 of ASCE 7 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 seismic design shall be calculated, in accordance with the following formula: $W_s = (0.20 + 0.025(A-5))P_f$ is greater than or equal to 0.20 P_f.

WHERE:

W_s = Weight of snow to be included in seismic calculations

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."

[~~(12)~~] (11) A new IBC, Section [~~1613.8~~] 1613.5, is added as follows: "[~~1613.8~~] 1613.5 ASCE 7, Section 13.5.6.2.2 paragraph (e) is modified to read as follows: (e) Penetrations shall have a sleeve or adapter through the ceiling tile to allow for free movement of at least 1 inch (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 8. Section **15A-3-108** is amended to read:

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

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

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

"TABLE 1807.1.6.4

EMPIRICAL FOUNDATION WALLS (1,7,8)

Max. Height	Top Edge Support	Min. Thickness	Vertical Steel (2)	Horizontal Steel (3)	Steel at Openings (4)	Max. Lintel Length	Min. Lintel Length

2'(610 mm)	None	6"	(5)	2- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
3'(914 mm)	None	6"	#4@32"	3- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
4'(1,219 mm)	None	6"	#4@32"	4- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	3'(914 mm)	2" for each foot of opening width; min. 6"
6'(1,829 mm)	Floor or roof Diaphragm (6)	8"	#4@24"	5- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
8'(2,438 mm)	Floor or roof Diaphragm (6)	8"	#4@24"	6- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
9'(2,743 mm)	Floor or roof Diaphragm (6)	8"	#4@16"	7- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"

Over 9'(2,743 mm), Engineering required for each column

Footnotes:

(1) Based on 3,000 psi (20.6 Mpa) concrete and 60,000 psi (414 Mpa) reinforcing steel.

(2) To be placed in the center of the wall, and extended from the footing to within three inches (76 mm) of the top of the wall; dowels of #4 bars to match vertical steel placement shall be provided in the footing, extending 24 inches (610 mm) into the foundation wall.

(3) One bar shall be located in the top four inches (102 mm), one bar in the bottom four inches (102 mm) and the other bars equally spaced between. Such bar placement satisfies the requirements of Section 1805.9. Corner reinforcing shall be provided so as to lap 24 inches (610 mm).

(4) Bars shall be placed within two inches (51 mm) of the openings and extend 24 inches (610 mm) beyond the edge of the opening; vertical bars may terminate three inches (76 mm) from the top of the concrete.
(5) Dowels of #4 bar at 32 inches on center shall be provided in the footing, extending 18 inches (457 mm) into the foundation wall.
(6) Diaphragm shall conform to the requirements of Section 2308.
(7) Footing shall be a minimum of nine inches thick by 20 inches wide.
(8) Soil backfill shall be soil classification types GW, GP, SW, or SP, per Table 1610.1. Soil shall not be submerged or saturated in groundwater."

(3) In IBC, Section [~~1904.3~~] 1904.2, a new exception 1 is added as follows and the current exception is modified to be number 2.

Exceptions:

"1. In ACI Table 4.3.1, for Exposure Class F1, change Maximum w/cm from 0.45 to 0.5 and Minimum f'c from 4,500 psi to 3,000 psi."

[~~(4) IBC, Section 1904.4.1 is deleted and replaced with the following:~~]

[~~"1904.4.1 Air Entrainment. Concrete that extends above grade and is exposed to freezing and thawing while moist shall be air entrained in accordance with ACI 318, Section 4.4.1."~~]

(4) A new IBC, Section 1905.1.11, is added as follows: "1905.1.11 ACI 318, Table 4.2.1." Modify ACI 318, Table 4.2.1 to read as follows: In the portion of the table designated as "Conditions", the Exposure categories and classes are deleted and replaced with the following:

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

F1: Concrete elements exposed to freezing and thawing cycles and are not likely to be saturated or exposed to deicing chemicals.

F2: Concrete elements exposed to freezing and thawing cycles and are likely to be saturated,

but not exposed to deicing chemicals.

F3: Concrete elements exposed to freezing and thawing cycles and are likely to be saturated and exposed to deicing chemicals."

Section 9. 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, C_d, of the National Design Specifications, shall not be utilized at elevations above 5,000 feet (1,524 M)."

(2) In IBC, Section 2308.6, a new exception is added as follows: "Exception: 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 [~~7-05~~] 7, as amended in Section 1613.8, for installation in high seismic areas."

Section 10. Section **15A-3-112** is amended to read:

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

(1) In IBC[~~, Section 2902.1, the title for~~] [P] Table 2902.1 [~~is deleted and replaced and a new footnote g is added as follows~~] 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, ~~[g]~~ h]"[~~, and~~].

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

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

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

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

(2) 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 11. Section **15A-3-113** is amended to read:

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

(1) A new section IBC, Section [~~3401.6~~] 3401.7, is added as follows: "[~~3401.6~~] 3401.7 Parapet bracing, wall anchors, and other appendages. Until June 30, 2014, a building constructed before 1975 shall have parapet bracing, wall anchors, and appendages such as cornices, spires, towers, tanks, signs, statuary, etc. evaluated by a licensed engineer when the building is undergoing structural alterations, which may include structural sheathing replacement of 10% or greater, or other structural repairs. Reroofing or water membrane replacement may not be considered a structural alteration or repair for purposes of this section. Beginning July 1, 2014, a building constructed before 1975 shall have parapet bracing, wall anchors, and appendages such as cornices, spires, towers, tanks, signs, statuary, etc. evaluated by a licensed engineer when the building is undergoing a total reroofing. Parapet bracing, wall anchors, and appendages required by this section shall be evaluated in accordance with 75% of the seismic forces as specified in Section 1613. When allowed by the local building official, alternate methods of equivalent strength as referenced in an approved code under Utah Code, Subsection 15A-1-204(6)(a), will be considered when accompanied by engineer-sealed drawings, details, and calculations. When found to be deficient because of design or deteriorated condition, the engineer's recommendations to anchor, brace, reinforce, or remove the deficient feature shall be implemented.

Exceptions:

1. Group R-3 and U occupancies.

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

(2) IBC, Section 3408.4, is deleted and replaced with the following: "3408.4 [~~Change in Occupancy~~] Seismic. When a change in occupancy results in a structure being reclassified to a higher [~~Occupancy~~] Risk Category (as defined in Table 1604.5), or when such change of occupancy results in a design occupant load increase of 100% or more, the structure shall conform to the seismic requirements for a new structure.

Exceptions:

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

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

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

[~~(3) In IBC, Section 3411.1, the exception is deleted and replaced with the following: "Exception: Type B dwelling or sleeping units required by Section 1107 of this code are not required to be provided in existing buildings and facilities unless being altered or undergoing a~~

~~change of occupancy classification."~~]

[~~(4) In IBC, Chapter 35, the referenced standard ACI 318-08 is modified to change Table 4.2.1 of ACI 318-08 as follows: In the portion of Table 4.2.1 designated as "Conditions", the Exposure categories and classes are deleted and replaced with the following:~~]

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

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

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

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

[~~(5)~~] (3) In IBC, Chapter 35, the referenced standard [~~ICC/ANSI A117.1-03~~] 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."

[~~(6) The following referenced standard is added under NFPA in IBC, Chapter 35:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~720-09~~]	[~~Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment~~]	[~~907.9"~~]

[~~(7)~~] (4) 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"

[~~(8) In IBC, Chapter 35, NFPA referenced standard 10-07 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]

[~~10-10~~]	[~~Portable Fire Extinguishers~~]	[~~906.2, 906.3.2, 906.3.4, Table 906.3(1), Table 906.3(2)"~~]

[~~(9) In IBC, Chapter 35, NFPA referenced standard 11-05 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~11-10~~]	[~~Low Expansion Foam~~]	[~~904.7"~~]

[~~(10) In IBC, Chapter 35, NFPA referenced standard 12-05 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~12-08~~]	[~~Carbon Dioxide Extinguishing Systems~~]	[~~904.8, 904.11"~~]

[~~(11) In IBC, Chapter 35, NFPA referenced standard 12A-04 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~12A-09~~]	[~~Halon 1301 Fire Extinguishing Systems~~]	[~~904.9"~~]

[~~(12) In IBC, Chapter 35, NFPA referenced standard 13-07 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~13-10~~]	[~~Installation of Sprinkler Systems~~]	[~~708.2, 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.3, 904.11, 905.3.4, 907.6.3, 1613.3"~~]

[~~(13) In IBC, Chapter 35, NFPA referenced standard 13D-07 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~13D-10~~]	[~~Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes~~]	[~~903.3.1.3, 903.3.5.1.1"~~]

[~~(14) In IBC, Chapter 35, NFPA referenced standard 13R-07 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~13R-10~~]	[~~Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height~~]	[~~903.3.1.2, 903.3.5.1.1, 903.3.5.1.2, 903.4"~~]

[~~(15) In IBC, Chapter 35, NFPA referenced standard 14-07 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~14-10~~]	[~~Installation of Standpipe and Hose System~~]	[~~905.2, 905.3.4, 905.6.2, 905.8"~~]

[~~(16) In IBC, Chapter 35, NFPA referenced standard 17-02 is deleted and replaced with~~

~~the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~17-09~~]	[~~Dry chemical Extinguishing Systems~~]	[~~904.5, 904.11"~~]

[~~(17) In IBC, Chapter 35, NFPA referenced standard 17A-02 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~17A-09~~]	[~~Wet Chemical Extinguishing System~~]	[~~904.5, 904.11"~~]

[~~(18) In IBC, Chapter 35, NFPA referenced standard 20-07 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~20-10~~]	[~~Installation of Stationary Pumps for Fire Protection~~]	[~~913.1, 913.2.1, 913.5"~~]

[~~(19) In IBC, Chapter 35, NFPA referenced standard 72-07 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~72-10~~]	[~~National Fire Alarm Code~~]	[~~901.6, 903.4.1, 904.3.5, 907.2, 907.2.5, 907.2.11, 907.2.13.2, 907.3, 907.3.3, 907.3.4, 907.5.2.1.2, 907.5.3.3, 907.6, 907.6.1, 907.6.5, 907.7, 907.7.1, 907.7.2, 911.1.5, 3006.5, 3007.6~~"]

[~~(20) In IBC, Chapter 35, NFPA referenced standard 92B-05 is deleted and replaced~~

~~with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~92B-09~~]	[~~Smoke Management Systems in Malls, Atria and Large Spaces~~]	[~~909.8"~~]

[~~(21) In IBC, Chapter 35, NFPA referenced standard 101-06 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~101-09~~]	[~~Line Safety Code~~]	[~~1028.6.2"~~]

[~~(22) In IBC, Chapter 35, NFPA referenced standard 110-05 is deleted and replaced with the following:~~]

[~~"Number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~110-10~~]	[~~Emergency and Standby Power Systems~~]	[~~2702.1"~~]

Section 12. Section **15A-3-202** is amended to read:

Part 2. Statewide Amendments to IRC

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 in legal nonconforming rental housing use. A structure classified as a legal nonconforming rental housing use, whose egress bedroom window is smaller than required by this code, is not required to undergo a physical change to conform to this code if the change would compromise the structural integrity of the building 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."

[~~(5)~~] (6) In IRC, Section R202, the definition of "Cross Connection" is deleted and replaced with the following: "CROSS CONNECTION. Any physical connection or potential connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other either water of unknown or questionable safety or steam, gas, or chemical, whereby there exists the possibility for flow from one system to the other, with the direction of flow depending on the pressure differential between the two systems (see "Backflow, Water Distribution")."

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

[~~(6)~~] (8) In IRC, Section R202, the definition of "Potable Water" is deleted and replaced with the following: "POTABLE WATER. Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the Utah Code, Title 19, Chapters 4, Safe Drinking Water Act, and 5, Water Quality Act, and the regulations of the public health authority having jurisdiction."

[~~(7)~~] (9) IRC, Figure R301.2(5), is deleted and replaced with Table R301.2(5a) and Table R301.2(5b) as follows:

"TABLE NO. R301.2(5a)

STATE OF UTAH - REGIONAL SNOW LOAD FACTORS

	COUNTY	P_o	S	A_o
	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)~~]

[~~RECOMMENDED SNOW LOADS FOR SELECTED UTAH CITIES AND TOWNS(2)~~]				
			[~~Roof Snow Load (PSF)~~]	[~~Ground Snow Load (PSF)~~]
	[~~Beaver County~~]			
	[~~Beaver~~]	[~~5,920 ft.~~]	[~~43~~]	[~~62~~]
	[~~Box Elder County~~]			
	[~~Brigham City~~]	[~~4,300 ft.~~]	[~~30~~]	[~~43~~]
	[~~Tremonton~~]	[~~4,290 ft.~~]	[~~30~~]	[~~43~~]
	[~~Cache County~~]			
	[~~Logan~~]	[~~4,530 ft.~~]	[~~35~~]	[~~50~~]
	[~~Smithfield~~]	[~~4,595 ft.~~]	[~~35~~]	[~~50~~]
	[~~Carbon County~~]			
	[~~Price~~]	[~~5,550 ft.~~]	[~~30~~]	[~~43~~]
	[~~Daggett County~~]			
	[~~Manila~~]	[~~5,377 ft.~~]	[~~30~~]	[~~43~~]
	[~~Davis County~~]			
	[~~Bountiful~~]	[~~4,300 ft.~~]	[~~30~~]	[~~43~~]
	[~~Farmington~~]	[~~4,270 ft.~~]	[~~30~~]	[~~43~~]
	[~~Layton~~]	[~~4,400 ft.~~]	[~~30~~]	[~~43~~]
	[~~Fruit Heights~~]	[~~4,500 ft.~~]	[~~40~~]	[~~57~~]
	[~~Duchesne County~~]			
	[~~Duchesne~~]	[~~5,510 ft.~~]	[~~30~~]	[~~43~~]
	[~~Roosevelt~~]	[~~5,104 ft.~~]	[~~30~~]	[~~43~~]
	[~~Emery County~~]			
	[~~Castle Dale~~]	[~~5,660 ft.~~]	[~~30~~]	[~~43~~]
	[~~Green River~~]	[~~4,070 ft.~~]	[~~25~~]	[~~36~~]

1180		[~~Garfield County~~]			
1181		[~~Panguitch~~]	[~~6,600 ft.~~]	[~~30~~]	[~~43~~]
1182		[~~Grand County~~]			
1183		[~~Moab~~]	[~~3,965 ft.~~]	[~~25~~]	[~~36~~]
1184		[~~Iron County~~]			
1185		[~~Cedar City~~]	[~~5,831 ft.~~]	[~~30~~]	[~~43~~]
1186		[~~Juab County~~]			
1187		[~~Nephi~~]	[~~5,130 ft.~~]	[~~30~~]	[~~43~~]
1188		[~~Kane County~~]			
1189		[~~Kanab~~]	[~~5,000 ft.~~]	[~~25~~]	[~~36~~]
1190		[~~Millard County~~]			
1191		[~~Fillmore~~]	[~~5,000 ft.~~]	[~~30~~]	[~~43~~]
1192		[~~Delta~~]	[~~4,623 ft.~~]	[~~30~~]	[~~43~~]
1193		[~~Morgan County~~]			
1194		[~~Morgan~~]	[~~5,064 ft.~~]	[~~40~~]	[~~57~~]
1195		[~~Piute County~~]			
1196		[~~Piute~~]	[~~5,996 ft.~~]	[~~30~~]	[~~43~~]
1197		[~~Rich County~~]			
1198		[~~Woodruff~~]	[~~6,315 ft.~~]	[~~40~~]	[~~57~~]
1199		[~~Salt Lake County~~]			
1200		[~~Murray~~]	[~~4,325 ft.~~]	[~~30~~]	[~~43~~]
1201		[~~Salt Lake City~~]	[~~4,300 ft.~~]	[~~30~~]	[~~43~~]
1202		[~~Sandy~~]	[~~4,500 ft.~~]	[~~30~~]	[~~43~~]
1203		[~~West Jordan~~]	[~~4,375 ft.~~]	[~~30~~]	[~~43~~]
1204		[~~West Valley~~]	[~~4,250 ft.~~]	[~~30~~]	[~~43~~]
1205		[~~San Juan County~~]			

	[~~Blanding~~]	[~~6,200 ft.~~]	[~~30~~]	[~~43~~]
	[~~Monticello~~]	[~~6,820 ft.~~]	[~~35~~]	[~~50~~]
	[~~Sanpete County~~]			
	[~~Fairview~~]	[~~6,750 ft.~~]	[~~35~~]	[~~50~~]
	[~~Mt. Pleasant~~]	[~~5,900 ft.~~]	[~~30~~]	[~~43~~]
	[~~Manti~~]	[~~5,740 ft.~~]	[~~30~~]	[~~43~~]
	[~~Ephraim~~]	[~~5,540 ft.~~]	[~~30~~]	[~~43~~]
	[~~Gunnison~~]	[~~5,145 ft.~~]	[~~30~~]	[~~43~~]
	[~~Sevier County~~]			
	[~~Salina~~]	[~~5,130 ft.~~]	[~~30~~]	[~~43~~]
	[~~Richfield~~]	[~~5,270 ft.~~]	[~~30~~]	[~~43~~]
	[~~Summit County~~]			
	[~~Coalville~~]	[~~5,600 ft.~~]	[~~60~~]	[~~86~~]
	[~~Kamas~~]	[~~6,500 ft.~~]	[~~70~~]	[~~100~~]
	[~~Park City~~]	[~~6,800 ft.~~]	[~~100~~]	[~~142~~]
	[~~Park City~~]	[~~8,400 ft.~~]	[~~162~~]	[~~231~~]
	[~~Summit Park~~]	[~~7,200 ft.~~]	[~~90~~]	[~~128~~]
	[~~Tooele County~~]			
	[~~Tooele~~]	[~~5,100 ft.~~]	[~~30~~]	[~~43~~]
	[~~Uintah County~~]			
	[~~Vernal~~]	[~~5,280 ft.~~]	[~~30~~]	[~~43~~]
	[~~Utah County~~]			
	[~~American Fork~~]	[~~4,500 ft.~~]	[~~30~~]	[~~43~~]
	[~~Orem~~]	[~~4,650 ft.~~]	[~~30~~]	[~~43~~]
	[~~Pleasant Grove~~]	[~~5,000 ft.~~]	[~~30~~]	[~~43~~]
	[~~Provo~~]	[~~5,000 ft.~~]	[~~30~~]	[~~43~~]

	[~~Spanish Fork~~]	[~~4,720 ft.~~]	[~~30~~]	[~~43~~]
[~~Wasatch County~~]				
	[~~Heber~~]	[~~5,630 ft.~~]	[~~60~~]	[~~86~~]
[~~Washington County~~]				
	[~~Central~~]	[~~5,209 ft.~~]	[~~25~~]	[~~36~~]
	[~~Dameron~~]	[~~4,550 ft.~~]	[~~25~~]	[~~36~~]
	[~~Leeds~~]	[~~3,460 ft.~~]	[~~20~~]	[~~29~~]
	[~~Rockville~~]	[~~3,700 ft.~~]	[~~25~~]	[~~36~~]
	[~~Santa Clara~~]	[~~2,850 ft.~~]	[~~15 (1)~~]	[~~21~~]
	[~~St. George~~]	[~~2,750 ft.~~]	[~~15 (1)~~]	[~~21~~]
[~~Wayne County~~]				
	[~~Loa~~]	[~~7,080 ft.~~]	[~~30~~]	[~~43~~]
	[~~Hanksville~~]	[~~4,308 ft.~~]	[~~25~~]	[~~36~~]
[~~Weber County~~]				
	[~~North Ogden~~]	[~~4,500 ft.~~]	[~~40~~]	[~~57~~]
	[~~Ogden~~]	[~~4,350 ft.~~]	[~~30~~]	[~~43~~]
[~~NOTES~~]				
[~~(1) The IRC requires a minimum live load - See R301.6.~~]				
[~~(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."~~]				

TABLE NO. R301.2(5b)
REQUIRED SNOW LOADS FOR SELECTED UTAH CITIES AND TOWNS[1,2]
The following jurisdictions require design snow load values that differ from the Equation in the Utah Snow Load Study.

County	City	Elevation	Ground Snow Load (psf)	Roof Snow Load (psf) [6]
Carbon	Price[3]	5550	43	30
	All other county locations[5]	--	--	--
Davis	Fruit Heights[3]	4500 - 4850	57	40
Emery	Green River[3]	4070	36	25
Garfield	Panguitch[3]	6600	43	30
Rich	Woodruff[3]	6315	57	40
	Laketown[4]	6000	57	40
	Garden City[5]	--	--	--
	Randolph[4]	6300	57	40
San Juan	Monticello[3]	6820	50	35
Summit	Coalville[3]	5600	86	60
	Kamas[4]	6500	114	80
Tooele	Tooele[3]	5100	43	30
Utah	Orem[3]	4650	43	30
	Pleasant Grove[4]	5000	43	30
	Provo[5]	--	--	--
Wasatch	Heber[5]	--	--	--
Washington	Leeds[3]	3460	29	20
	Santa Clara[3]	2850	21	15
	St. George[3]	2750	21	15
	All other county locations[5]	--	--	--
Wayne	Loa[3]	7080	43	30

[1]The IRC requires a minimum live load – See R301.6.

[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)~~] (10) 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, 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. 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);

A_o = 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, P_g, may be adjusted by the building official when a licensed engineer or architect submits data substantiating the adjustments. [~~A record of such action together with the substantiating data shall be provided to the division for a permanent record.~~

~~The building official may also directly adopt roof snow loads in accordance with Table R301.2(5b), provided the site is no more than 100 ft. higher than the listed elevation.~~]

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."

[~~(9)~~] (11) In IRC, Section R302.2, the words "Exception: A" are deleted and replaced with the following:

"Exceptions:

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

2. In buildings equipped with an automatic residential fire sprinkler system, a".

[~~(10)~~] (12) In IRC, Section R302.2.4, a new exception 6 is added as follows: "6. Townhouses separated by a common 2-hour fire-resistance-rated wall as provided in Section R302.2."

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

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

[~~(11)~~] (15) IRC, Sections R311.7.4 through R311.7.4.3, are deleted and replaced with the following: "R311.7.4 Stair treads and risers. R311.7.4.1 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).

R311.7.4.2 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).

R311.7.4.3 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."

[~~(12)~~] (16) In IRC, Section [~~R312.2~~] R312.1.2, the words "adjacent fixed seating" are deleted.

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

[~~(13)~~] (18) IRC, [~~Section R313, is~~] 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."

[~~(14) IRC, Section R315.1, is deleted and replaced with the following: "R315.1 Carbon monoxide alarms. For new construction, a listed carbon monoxide alarm shall be installed on each habitable level of dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages."~~]

[~~(15) IRC, Section R315.3, is deleted and replaced with the following: "R315.3 Alarm~~

~~requirements. Listed single- and multiple-station carbon monoxide alarms shall comply with UL 2034 and shall be installed in accordance with the provision of this code and NFPA 720."~~]

(19) A new IRC, Section R315.5, is added as follows: "R315.5 Power source. Carbon monoxide alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for over-current protection.

Exceptions:

1. Carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power.

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 which could provide access for hard wiring, without the removal of interior finishes."

(20) A new IRC, Section R315.6, is added as follows: "R315.6 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."

[~~(16)~~] (21) In IRC, Section R403.1.6, a new Exception 4 is added as follows: "4. 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."

[~~(17)~~] (22) 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."

[~~(18)~~] (23) 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."

(24) IRC, Section R501.3, is deleted.

Section 13. Section **15A-3-204** is amended to read:

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

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

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

(3) A new IRC, Section G2401.2, is added as follows: "G2401.2 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 provide access for service and comply with the IBC or the IRC."

Section 14. 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 P2801.7, [~~the word "townhouses" is~~] all words in the first sentence up to the word "water" are deleted.

(4) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly testing. The premise owner or his designee shall have backflow prevention assemblies operation tested 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."

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

[~~"TABLE P2902.3~~]
[~~General Methods of Protection~~]

1430	[~~Assembly (applicable standard)~~]	[~~Degree of Hazard~~]	[~~Application~~]	[~~Installation Criteria~~]
1431	[~~Reduced Pressure Principle Backflow Preventer~~] ([~~AWWA C511, USC-FCCCHR, ASSE 1013 CSA CNA/CSA-B64.4) and Reduced Pressure Detector Assembly (ASSE 1047, USC-FCCCHR)~~]	[~~High or Low~~]	[~~Backpressure or Backsiphonage~~] [~~1/2" - 16"~~]	[~~a. The bottom of each RP assembly shall be a minimum of 12 inches above the ground or floor.~~] [~~b. RP assemblies shall NOT be installed in a pit.~~] [~~c. The relief valve on each RP assembly shall not be directly connected to any waste disposal line, including sanitary sewer, storm drains, or vents.~~] [~~d. The assembly shall be installed in a horizontal position only unless listed or approved for vertical installation.~~]
1432	[~~Double Check Backflow Prevention Assembly (AWWA C510, USC-FCCCHR, ASSE 1015) Double Check Detector Assembly Backflow Preventer (ASSE 1048, USC-FCCCHR)~~]	[~~Low~~]	[~~Backpressure or Backsiphonage 1/2" - 16"~~]	[~~a. If installed in a pit, the DC 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.~~] [~~b. Shall be installed in a horizontal position unless listed or approved for vertical installation.~~]

1433	[~~Pressure Vacuum Breaker Assembly (ASSE 1020, USC-FCCCHR)~~]	[~~High or Low~~]	[~~Backsiphonage 1/2" - 2"~~]	[~~a. Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.~~] [~~b. Shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.~~] [~~c. Shall not be installed below ground or in a vault or pit.~~] [~~d. Shall be installed in a vertical position only.~~]
1434	[~~Spill Resistant Vacuum Breaker (ASSE 1056, USC-FCCCHR)~~]	[~~High or Low~~]	[~~Backsiphonage 1/4" - 2"~~]	[~~a. Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.~~] [~~b. Shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.~~] [~~c. Shall not be installed below ground or in a vault or pit.~~] [~~d. Shall be installed in a vertical position only.~~]

[~~General Installation Criteria~~]			[~~The assembly owner, when necessary, shall provide devices or structures to facilitate testing, repair, and/or maintenance and to ensure the safety of the backflow technician.~~] [~~Assemblies shall not be installed more than five feet off the floor unless a permanent platform is installed.~~] [~~The body of the assembly shall not be closer than 12 inches to any wall, ceiling or encumbrance, and shall be accessible for testing, repair and/or maintenance.~~] [~~In cold climates, assemblies shall be protected from freezing by a means acceptable to the code official.~~] [~~Assemblies shall be maintained as an intact assembly."~~]

[~~(6) IRC, Table 2902.3a, is added as follows:~~]

["~~TABLE 2902.3a~~]			
[~~Specialty Backflow Devices for low hazard use only~~]			
[~~Device~~]	[~~Degree of Hazard~~]	[~~Application~~]	[~~Applicable Standard~~]
[~~Air Gap~~]	[~~High or Low~~]	[~~Backsiphonage~~]	[~~See Table P2902.3.1 ASME A112.1.2~~]

1441	[~~Antisiphon-type Water Closet Flush Tank Ball Cock~~]	[~~Low~~]	[~~Backsiphonage~~]	[~~ASSE 1002 CSA CAN/ CSA-B125~~]
1442	[~~Atmospheric Vacuum Breaker~~]	[~~High or Low~~]	[~~Backsiphonage~~] [~~a. Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.~~] [~~b. Shall not be installed where it may be subjected to continuous pressure for more than 12 consecutive hours at any time.~~] [~~c. Shall be installed a minimum of six inches above all downstream piping and the highest point of use.~~] [~~d. Shall be installed on the discharge (downstream) side of any valves.~~] [~~e. The AVB shall be installed in a vertical position only.~~]	[~~ASSE 1001 USC-FCCCHR, CSA CAN/ CSA-B64.1.1~~]
1443	[~~Dual check valve Backflow Preventer~~]	[~~Low~~]	[~~Backsiphonage or Backpressure 1/4" - 1"~~]	[~~ASSE 1024~~]

1444	[~~Backflow Preventer with Intermediate Atmospheric Vent~~]	[~~Low Residential Boiler~~]	[~~Backsiphonage or Backpressure 1/4" - 3/4"~~]	[~~ASSE 1012 CSA CAN/ CSA-B64.3~~]
1445	[~~Dual check valve type Backflow Preventer for Carbonated Beverage Dispensers/Post Mix Type~~]	[~~Low~~]	[~~Backsiphonage or Backpressure 1/4" - 3/8"~~]	[~~ASSE 1022~~]
1446	[~~Hose-connection Vacuum Breaker~~]	[~~Low~~]	[~~Backsiphonage 1/2", 3/4", 1"~~]	[~~ASSE 1011 CSA CAN/ CSA-B64.2~~]
1447	[~~Vacuum Breaker Wall Hydrants, Frost-resistant, Automatic Draining Type~~]	[~~Low~~]	[~~Backsiphonage 3/4", 1"~~]	[~~ASSE 1019 CSA CAN/ CSA-B64.2.2~~]
1448	[~~Laboratory Faucet Backflow Preventer~~]	[~~Low~~]	[~~Backsiphonage~~]	[~~ASSE 1035 CSA CAN/ CSA-B64.7~~]

[~~Hose Connection Backflow Preventer~~]	[~~Low~~]	[~~Backsiphonage 1/2" - 1"~~]	[~~ASSE 1052~~]
[~~Installation Guidelines: The above specialty devices shall be installed in accordance with their listing and the manufacturer's instructions and the specific provisions of this chapter."~~]			

"DEVICE	DEGREE OF HAZARD[a]	APPLICATION[b]	APPLICABLE STANDARDS
BACKFLOW PREVENTION ASSEMBLIES:			
Double check backflow prevention assembly and double check fire protection backflow prevention assembly	Low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1015, AWWA C510, CSA B64.5, CSA B64.5.1
Double check detector fire protection backflow prevention assemblies	Low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1048
Pressure vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2" - 2"	ASSE 1020, CSA B64.1.2

1456	Reduced pressure principle backflow prevention assembly and reduced pressure principle fire protection backflow assembly	High or low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1013, AWWA C511, CSA B64.4, CSA B64.4.1
1457	Reduced pressure detector fire protection backflow prevention assemblies	High or low hazard	Backpressure or backsiphonage (Fire Sprinkler Systems)	ASSE 1047
1458	Spill-resistant vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2" - 2"	ASSE 1056
1459	BACKFLOW PREVENTER PLUMBING DEVICES:			
1460	Antisiphon-type fill valves for gravity water closet flush tanks	High hazard	Backsiphonage only	ASSE 1002, CSA B125.3
1461	Backflow preventer for carbonated beverage machines	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 3/8"	ASSE 1022
1462	Backflow preventer with intermediate atmospheric vents	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 3/8"	ASSE 1012, CSA B64.3
1463	Dual check valve type backflow preventers	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 1"	ASSE 1024, CSA B64.6

	Hose connection backflow preventer	High or low hazard	Backsiphonage only Sizes1/2" - 1"	ASSE 1052, CSA B64.2, B64.2.1
	Hose connection vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/2", 3/4", 1"	ASSE 1011, CAN/CSA B64.1.1
	Atmospheric type vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/2" - 4"	ASSE 1001, CSA B64.1.1
	Vacuum breaker wall hydrants, frost resistant, automatic draining type	High or low hazard	Backsiphonage only Sizes 3/4", 1"	ASSE 1019, CSA B64.2.2
	OTHER MEANS or METHODS:			
	Air gap	High or low hazard	Backsiphonage only	ASME A112.1.2
	Air gap fittings for use with plumbing fixtures, appliances and appurtenances	High or low hazard	Backpressure or backsiphonage	ASME A112.1.3
	For SI: 1 inch = 25.4 mm			
	a. Low Hazard - See Pollution (Section 202), High Hazard - See Contamination (Section 202)			
	b. See Backpressure (Section 202), See Backpressure, low head (Section 202), See Backsiphonage Section 202)			
	Installation Guidelines: The above specialty devices shall be installed in accordance with their listing and the manufacturer's instructions and the specific provisions of this chapter."			

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

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

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

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

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

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

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

[~~(7)~~] (13) 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."

[~~(8)~~] (14) 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 15. Section **15A-3-206** is amended to read:

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

(1) In IRC, Section [~~E3902.11~~] E3902.12, the following words are deleted: "family rooms, dining rooms, living rooms, parlors, libraries, dens, sunrooms, recreation rooms, closets, hallways, and similar rooms or areas[~~"~~]. Exception: This section does not apply for a simple move or an extension of a branch circuit or an outlet which does not significantly increase the existing electrical load. This exception does not include changes involving remodeling or additions to a residence."

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

"Standard reference number	Title	Referenced in code section number
USC-FCCCHR [~~9th~~] 10th Edition Manual of Cross Connection Control	Foundation for Cross-Connection Control and Hydraulic Research University of Southern California Kaprielian Hall 300 Los Angeles CA 90089-2531	Table P2902.3"

[~~(3) In IRC, Chapter 44, the following standard is added under NFPA as follows:~~]

[~~"Standard reference number~~]	[~~Title~~]	[~~Referenced in code section number~~]
[~~720-09~~]	[~~Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment~~]	[~~R315.3"~~]

[~~(4) IRC, Appendix O, Gray Water Recycling Systems, is deleted and replaced with Appendix C of the International Plumbing Code as amended by the State Construction Code.~~]

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

Part 3. Statewide Amendments to IPC

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

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

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

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

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

[~~(4)~~] (5) 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) 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) In IPC, Section 202, in the definition for gray water a comma is inserted after the word "washers"; the word "and" is deleted; and the following is added to the end: "and clear water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without objectionable odors; non-highly pigmented; and will not interfere with the operation of the

sewer treatment facility."

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

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

(10) 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."

[~~(5)~~] (11) 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, Chapters 4, Safe Drinking Water Act, and 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, [~~Table 303.4, the item listed as "Backflow prevention devises" is modified as follows~~] Section 303.4, the following exception is added:

[~~(a) in the Third-Party Certified field, after the word "Required" add "See footnote 1";~~]

[~~(b) in the Third-Party Tested field the following is added: "Required see footnote 1";~~ ~~and~~]

[~~(c) a new footnote 1 is added as follows: "1.~~]

"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."

(2) IPC, Section 304.3, Meter Boxes, is deleted.

(3) IPC, Section 311.1, is deleted.

[~~(4) IPC, Sections 312.10 through 312.10.2, are deleted and replaced with the following: "312.10 Backflow assembly testing. The premise owner or his designee shall have backflow prevention assemblies operation tested 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."~~]

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

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

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

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

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

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

5. No water supply 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."

(5) 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."

(6) 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, [~~Section~~] Table 403.1, [~~a new footnote g is added as follows:~~] 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 Facilities[a, h]";

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

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

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

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

(2) A new IPC, Section [~~406.4~~] 406.3, is added as follows: "[~~406.4~~] 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, is added as follows: "412.5 Public toilet rooms. All public toilet rooms shall be equipped with at least one floor drain."

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. Appliances designed to be fixed in position shall be fastened or anchored in an approved manner. 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. At the lower point, the strapping shall maintain a minimum distance of 4 inches (102 mm) above the controls."

[~~(1)~~] (2) 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."

[~~(2)~~] (3) A new IPC, Section 504.7.3, is added as follows: "504.7.3 Pan Designation.

A water heater pan shall be considered an emergency receptor designated to receive the discharge of water from the water heater only and shall not receive the discharge from any other fixtures, devises, or equipment."

Section 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. 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 [~~20 psi."~~] 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."

[~~(6)~~] (7) IPC, Table 608.1, is deleted and replaced with the following:

[~~"TABLE 608.1~~]			
[~~General Methods of Protection~~]			
[~~Assembly (applicable standard)~~]	[~~Degree of Hazard~~]	[~~Application~~]	[~~Installation Criteria~~]
[~~Reduced Pressure Principle Backflow Preventer (AWWA C511, USC-FCCCHR, ASSE 1013 CSA CNA/CSA-B64.4) and Reduced Pressure Detector Assembly (ASSE 1047, USC-FCCCHR)~~]	[~~High or Low~~]	[~~Backpressure or Backsiphonage 1/2" - 16"~~]	[~~a. The bottom of each RP assembly shall be a minimum of 12 inches above the ground or floor.~~] [~~b. RP assemblies shall NOT be installed in a pit.~~] [~~c. The relief valve on each RP assembly shall not be directly connected to any waste disposal line, including sanitary sewer, storm drains, or vents.~~] [~~d. The assembly shall be installed in a horizontal position only unless listed or approved for vertical installation.~~]

1697	[~~Double Check Backflow Prevention Assembly (AWWA C510, USC-FCCCHR, ASSE 1015) Double Check Detector Assembly Backflow Preventer (ASSE 1048, USC-FCCCHR)~~]	[~~Low~~]	[~~Backpressure or Backsiphonage 1/2" - 16"~~]	[~~a. If installed in a pit, the DC 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.~~] [~~b. Shall be installed in a horizontal position unless listed or approved for vertical installation.~~]
1698	[~~Pressure Vacuum Breaker Assembly (ASSE 1020, USC-FCCCHR)~~]	[~~High or Low~~]	[~~Backsiphonage 1/2" - 2"~~]	[~~a. Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.~~] [~~b. Shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.~~] [~~c. Shall not be installed below ground or in a vault or pit.~~] [~~d. Shall be installed in a vertical position only.~~]

[~~Spill Resistant Vacuum Breaker (ASSE 1056, USC-FCCCHR)~~]	[~~High or Low~~]	[~~Backsiphonage 1/4" - 2"~~]	[~~a. Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.~~] [~~b. Shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.~~] [~~c. Shall not be installed below ground or in a vault or pit.~~] [~~d. Shall be installed in a vertical position only.~~]

[~~General Installation Criteria~~]			[~~The assembly owner, when necessary, shall provide devices or structures to facilitate testing, repair, and/or maintenance and to ensure the safety of the backflow technician.~~] [~~Assemblies shall not be installed more than five feet off the floor unless a permanent platform is installed.~~] [~~The body of the assembly shall not be closer than 12 inches, to any wall, ceiling or encumbrance, and shall be accessible for testing, repair and/or maintenance.~~] [~~In cold climates, assemblies shall be protected from freezing by a means acceptable to the code official.~~] [~~Assemblies shall be maintained as an intact assembly."~~]

[~~(7) IPC, Table 608.1.1, is added as follows:~~]

[~~"TABLE 608.1.1~~]			
[~~Specialty Backflow Devices for low hazard use only~~]			
[~~Device~~]	[~~Degree of Hazard~~]	[~~Application~~]	[~~Applicable Standard~~]

1705	[~~Air Gap~~]	[~~High or Low~~]	[~~Backsiphonage~~]	[~~See Table 608.15.1 ASME A112.1.2~~]
1706	[~~Antisiphon-type Water Closet Flush Tank Ball Cock~~]	[~~Low~~]	[~~Backsiphonage~~]	[~~ASSE 1002 CSA CAN/ CSA-B125~~]
1707	[~~Atmospheric Vacuum Breaker~~]	[~~High or Low~~]	[~~Backsiphonage~~] [~~a. Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.~~] [~~b. Shall not be installed where it may be subjected to continuous pressure for more than 12 consecutive hours at any time.~~] [~~c. Shall be installed a minimum of six inches above all downstream piping and the highest point of use.~~] [~~d. Shall be installed on the discharge (downstream) side of any valves.~~] [~~e. The AVB shall be installed in a vertical position only.~~]	[~~ASSE 1001 USC-FCCCHR, CSA CAN/ CSA-B64.1.1~~]

1708	[~~Dual check valve Backflow Preventer~~]	[~~Low~~]	[~~Backsiphonage or Backpressure 1/4" - 1"~~]	[~~ASSE 1024~~]
1709	[~~Backflow Preventer with Intermediate Atmospheric Vent~~]	[~~Low Residential Boiler~~]	[~~Backsiphonage or Backpressure 1/4" - 3/4"~~]	[~~ASSE 1012 CSA CAN/ CSA-B64.3~~]
1710	[~~Dual check valve type Backflow Preventer for Carbonated Beverage Dispensers/Post Mix Type~~]	[~~Low~~]	[~~Backsiphonage or Backpressure 1/4" - 3/8"~~]	[~~ASSE 1022~~]
1711	[~~Hose-connection Vacuum Breaker~~]	[~~Low~~]	[~~Backsiphonage 1/2", 3/4", 1"~~]	[~~ASSE 1011 CSA CAN/ CSA-B64.2~~]
1712	[~~Vacuum Breaker Wall Hydrants, Frost-resistant, Automatic Draining Type~~]	[~~Low~~]	[~~Backsiphonage 3/4", 1"~~]	[~~ASSE 1019 CSA CAN/ CSA-B64.2.2~~]
1713	[~~Laboratory Faucet Backflow Preventer~~]	[~~Low~~]	[~~Backsiphonage~~]	[~~ASSE 1035 CSA CAN/ CSA-B64.7~~]

[~~Hose Connection Backflow Preventer~~]	[~~Low~~]	[~~Backsiphonage 1/2" - 1"~~]	[~~ASSE 1052~~]
[~~Installation Guidelines: The above specialty devices shall be installed in accordance with their listing and the manufacturer's instructions and the specific provisions of this chapter."~~]			

"TABLE 608.1

Application of Back Flow Preventers

DEVICE	DEGREE OF HAZARD[a]	APPLICATION[b]	APPLICABLE STANDARDS
BACKFLOW PREVENTION ASSEMBLIES:			
Double check backflow prevention assembly and double check fire protection backflow prevention assembly	Low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1015, AWWA C510, CSA B64.5, CSA B64.5.1
Double check detector fire protection backflow prevention assemblies	Low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1048
Pressure vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2" - 2"	ASSE 1020, CSA B64.1.2

1723	Reduced pressure principle backflow prevention assembly and reduced pressure principle fire protection backflow assembly	High or low hazard	Backpressure or backsiphonage Sizes 3/8" - 16"	ASSE 1013, AWWA C511, CSA B64.4, CSA B64.4.1
1724	Reduced pressure detector fire protection backflow prevention assemblies	High or low hazard	Backpressure or backsiphonage (Fire Sprinkler Systems)	ASSE 1047
1725	Spill-resistant vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2" - 2"	ASSE 1056
1726	BACKFLOW PREVENTER PLUMBING DEVICES:			
1727	Antisiphon-type fill valves for gravity water closet flush tanks	High hazard	Backsiphonage only	ASSE 1002, CSA B125.3
1728	Backflow preventer for carbonated beverage machines	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 3/8"	ASSE 1022
1729	Backflow preventer with intermediate atmospheric vents	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 3/8"	ASSE 1012, CSA B64.3
1730	Dual check valve type backflow preventers	Low hazard	Backpressure or backsiphonage Sizes 1/4" - 1"	ASSE 1024, CSA B64.6

Hose connection backflow preventer	High or low hazard	Backsiphonage only Sizes1/2" - 1"	ASSE 1052, CSA B64.2, B64.2.1
Hose connection vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/2", 3/4", 1"	ASSE 1011, CAN/CSA B64.1.1
Atmospheric type vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/2" - 4"	ASSE 1001, CSA B64.1.1
Vacuum breaker wall hydrants, frost resistant, automatic draining type	High or low hazard	Backsiphonage only Sizes 3/4", 1"	ASSE 1019, CSA B64.2.2
OTHER MEANS or METHODS:			
Air gap	High or low hazard	Backsiphonage only	ASME A112.1.2
Air gap fittings for use with plumbing fixtures, appliances and appurtenances	High or low hazard	Backpressure or backsiphonage	ASME A112.1.3
For SI: 1 inch = 25.4 mm			
a. Low Hazard - See Pollution (Section 202), High Hazard - See Contamination (Section 202)			
b. See Backpressure (Section 202), See Backpressure, low head (Section 202), See Backsiphonage (Section 202)			
Installation Guidelines: The above specialty devices shall be installed in accordance with their listing and the manufacturer's instructions and the specific provisions of this chapter."			

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

(9) In IPC, Section 608.5, the words "with the potential to create a condition of either

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

[~~(8)~~] (10) In IPC, Section 608.6, 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."

[~~(9)~~] (11) IPC, Section 608.7, is deleted[~~.~~] and replaced with the following: "608.7 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."

[~~(10)~~] (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."

[~~(11)~~] (13) IPC, Section 608.13.3, is deleted and replaced with the following: "608.13.3 Backflow preventer with intermediate atmospheric vent. Backflow preventers with intermediate atmospheric vents shall conform to ASSE 1012 or CSA CAN/CSA-B64.3. These devices shall be permitted to be installed on residential boilers only, without chemical treatment, where subject to continuous pressure conditions. The relief opening shall discharge by air gap and shall be prevented from being submerged."

[~~(12)~~] (14) IPC, Section 608.13.4, is deleted.

[~~(13)~~] (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."

[~~(14)~~] (16) IPC, Section 608.15.3, is deleted and replaced with the following: "608.15.3 Protection by a backflow preventer with intermediate atmospheric vent. Connections to residential boilers only, without chemical treatment, shall be protected by a backflow preventer with an intermediate atmospheric vent."

[~~(15)~~] (17) IPC, Section 608.15.4, is deleted and replaced with the following: "608.15.4 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type or pressure-type vacuum breakers. [~~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. The critical level of the pressure vacuum breaker shall be set a minimum of 12 inches (304 mm) above the flood level rim of the fixture or device.~~] 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. [~~Vacuum breakers shall not be installed under exhaust hoods or similar locations that will contain toxic fumes or vapors.~~] Atmospheric Vacuum Breakers - The critical level of the atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above the flood level rim of the fixture or device.

Pipe-applied vacuum breakers shall be installed not less than 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served. No valves shall be installed downstream of the atmospheric vacuum breaker. Pressure Vacuum Breaker - The critical level of the pressure vacuum breaker shall be set a minimum of 12 inches (304 mm) above the flood level of the fixture or device."

[~~(16)~~] (18) In IPC, Section 608.15.4.2, the following is added after the first sentence: "Add-on-backflow prevention devices shall be non-removable. In climates where freezing temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow preventer shall be used."

[~~(17)~~] (19) In IPC, Section 608.16.2, [~~the first sentence of the paragraph~~] is deleted and replaced as follows: "608.16.2 Connections to boilers. The potable [~~water supply to the residential boiler only, without chemical treatment, shall be~~] 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."

[~~(18)~~] (20) IPC, Section 608.16.3, is deleted and replaced with the following: "608.16.3 Heat exchangers. Heat exchangers shall be separated from potable water by double-wall construction. An air gap open to the atmosphere shall be provided between the two walls.

Exceptions:

1. Single wall heat exchangers shall be permitted when all of the following conditions are met:

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

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

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

2. Steam systems that comply with paragraph 1 above.

3. Approved listed electrical drinking water coolers."

[~~(19)~~] (21) In IPC, Section 608.16.4.1, 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."

[~~(20)~~] (22) IPC, Section 608.16.7, is deleted and replaced with the following: "608.16.7 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, Section 608.13.2, Section 608.13.5, Section 608.13.6 or Section 608.13.8. Chemical dispensers shall connect to a separate dedicated water supply separate from any sink faucet."

[~~(21)~~] (23) IPC, Section 608.16.8, is deleted and replaced with the following: "608.16.8 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, Section 608.13.2 or Section 608.13.8."

[~~(22)~~] (24) A new IPC, Section 608.16.11, is added as follows: "608.16.11 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 or Section 608.13.2."

[~~(23)~~] (25) IPC, Section 608.17, is deleted[~~.~~] and replaced with the following: "608.17

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) In IPC, Section 712.3.3.1, the following words are added before the word "or": "stainless steel, cast iron, galvanized steel".

Section 22. Section **15A-3-309** is amended to read:

15A-3-309. Amendments to Chapter 9 of IPC.

[~~(1) IPC, Section 901.3, is deleted and replaced with the following: "901.3 Chemical waste vent system. The vent system for a chemical waste system shall be independent of the sanitary vent system and shall terminate separately through the roof to the open air or to an air admittance valve provided at least one chemical waste vent in the system terminates separately through the roof to the open air."~~]

[~~(2)~~] (1) In IPC, Section [~~904.1~~] 903.1, when the number of inches is to be specified, "12 inches (304.8mm)" is inserted.

[~~(3)~~] (2) In IPC, Section [~~904.6~~] 903.6, 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."

[~~(4)~~] (3) In IPC, Section 905.4, 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, and bath tub installations when installed in accordance with Sections 702.2, 905.2 and 905.3 and provided with a wall clean out."

[~~(5) In IPC, Section 917.8, a new exception is added as follows: "Exception: Air admittance valves shall be permitted in non-neutralized special waste systems provided that they conform to the requirements in Sections 901.3 and 702.5, are tested to ASTM F1412, and are certified by ANSI/ASSE."~~]

Section 23. Section **15A-3-310** is amended to read:

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

(1) In IPC, Section 1002.4, the following is added at the end of the paragraph: "Approved Means of Maintaining Trap Seals. Approved means of maintaining trap seals include the following, but are not limited to the methods cited:

(a) [~~Listed Trap Seal Primer~~] A listed trap seal primer conforming to ASSE 1018 and ASSE 1044

(b) A hose bibb or bibbs within the same room

(c) Drainage from an untrapped lavatory discharging to the tailpiece of those fixture traps which require priming. All fixtures shall be in the same room and on the same floor level as the trap primer

(d) Barrier type floor drain trap seal protection device meeting ASSE Standard 1072

(e) Deep seal p-trap".

Section 24. Section **15A-3-311** is amended to read:

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

(1) IPC, Section 1104.2, is deleted and replaced with the following: "1104.2 Combining storm and sanitary drainage prohibited. The combining of sanitary and storm drainage systems is prohibited."

(2) IPC, Section [~~1108~~] 1109, is deleted.

Section 25. Section **15A-3-313** is amended to read:

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

[~~IPC, Chapter 13, is not amended.~~]

(1) In IPC, Section 1301.1, all words after the word "urinals" are deleted and the following sentence is added at the end: "Gray water recycling systems for subsurface landscape

irrigation shall conform with UAC R317-401 Gray Water Systems."

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

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

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

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

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

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

Section 26. Section **15A-3-314** is amended to read:

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

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

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

(2) In IPC, Chapter 14, the following referenced standard is added:

"Standard reference number	Title	Referenced in code section number
USC-FCCCHR [~~9th~~] 10th Edition Manual of Cross Connection Control	Foundation for Cross-Connection Control and Hydraulic Research University of Southern California Kaprielian Hall 300 Los Angeles CA 90089-2531	Table 608.1"

[~~(3) IPC, Appendix C, is deleted and replaced with the following Appendix C, Gray Water Recycling Systems, which may be adopted by local jurisdictions only as provided under the State Construction Code: "Appendix C Gray Water Recycling Systems~~]

[~~Note: Section 301.3 of this code requires all plumbing fixtures that receive water or waste to discharge to the sanitary drainage system of the structure. In order to allow for the utilization of a gray water system, Section 301.3 should be revised to read as follows:~~]

[~~In jurisdictions which have adopted this Appendix C as amended as a local amendment as provided herein, Section 301.3 of the IPC is deleted and replaced with the following:~~]

[~~301.3 Connections to drainage system. All plumbing fixtures, drains, appurtenances, and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems required by Chapter 8.~~]

[~~Exception: Bathtubs, showers, lavatories, clothes washers, laundry trays, and approved clear~~

~~water wastes shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved gray water system for flushing of water closets and urinals or for subsurface landscape irrigation.~~]

[~~SECTION C101 GENERAL~~]

[~~C101.1 Scope. The provisions of this appendix shall govern the materials, design, construction, and installation of gray water systems for flushing of water closets and urinals (see Figure 2).~~]

[~~C101.2 Recording. The existence of a gray water recycling system shall be recorded on the deed of ownership for that property.~~]

[~~C101.3 Definition. The following term shall have the meaning shown herein.~~]

[~~GRAY WATER. Waste discharged from lavatories, bathtubs, showers, clothes washers, laundry trays, 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.~~]

[~~C101.4 Permits. Permits shall be required in accordance with Section 106 and may also be required by the local health department.~~]

[~~C101.5 Installation. In addition to the provisions of Section C101, systems for flushing of water closets and urinals shall comply with Section C102. Except as provided for in Appendix C, all systems shall comply with the provisions of the International Plumbing Code.~~]

[~~C101.6 Materials. Above-ground drain, waste, and vent piping for gray water systems shall conform to one of the standards listed in Table 702.1. Gray water underground building drainage and vent pipe shall conform to one of the standards listed in Table 702.2.~~]

[~~C101.7 Tests. Drain, waste, and vent piping for gray water systems shall be tested in accordance with Section 312.~~]

[~~C101.8 Inspections. Gray water systems shall be inspected in accordance with Section 107.~~]

[~~C101.9 Potable water connections. The potable water supply to any building utilizing a gray water recycling system shall be protected against backflow by a reduced pressure principle backflow preventer installed in accordance with this Code.~~]

[~~C101.10 Waste water connections. Gray water recycling systems shall receive only the waste discharge of bathtubs, showers, lavatories, clothes washers, or laundry trays, and other 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.~~]

[~~C101.11 Collection reservoir. Gray water shall be collected in an approved reservoir constructed of durable, nonabsorbent, and corrosion-resistant materials. The reservoir shall be a closed and gas-tight vessel. Access openings shall be provided to allow inspection and cleaning of the reservoir interior.~~]

[~~C101.12 Filtration. Gray water entering the reservoir shall pass through an approved cartridge filter having a design flow rate of less than 0.375 gallons per minute per square foot of effective filter area, or a sand or diatomaceous earth filter designed to handle the anticipated volume of water.~~]

[~~C101.12.1 Required valve. A full-open valve shall be installed downstream of the last fixture connection to the gray water discharge pipe before entering the required filter.~~]

[~~C101.13 Overflow. The collection reservoir shall be equipped with an overflow pipe having the same or larger diameter as the influent pipe for the gray water. The overflow pipe shall be trapped and indirectly connected to the sanitary drainage system.~~]

[~~C101.14 Drain. A drain shall be located at the lowest point of the collection reservoir and shall be indirectly connected to the sanitary drainage system. The drain shall be the same diameter as the overflow pipe required in Section C101.12.~~]

[~~C101.15 Vent required. The reservoir shall be provided with a vent sized in accordance with Chapter 9 and based on the diameter of the reservoir influent pipe.~~]

[~~SECTION C102 SYSTEMS FOR FLUSHING WATER CLOSETS AND URINALS~~]

[~~C102.1 Collection reservoir. The holding capacity of the reservoir shall be a minimum of twice the volume of water required to meet the daily flushing requirements of the fixtures supplied with gray water, but not less than 50 gallons (189 L). The reservoir shall be sized to limit the retention time of gray water to a maximum of 72 hours.~~]

[~~C102.2 Disinfection. Gray water shall be disinfected by an approved method that employs one or more disinfectants such as chlorine, iodine, or ozone that is recommended for use with the pipes, fittings, and equipment by the manufacturer of the pipe, fittings, and equipment. A minimum of 1ppm residual free chlorine shall be maintained in the gray water recycling system reservoir.~~]

[~~C102.3 Makeup water. Potable water shall be supplied as a source of makeup water for the gray water system. The potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer installed in accordance with this Code. There shall be a full-open valve located on the makeup water supply line to the collection reservoir.~~]

[~~C102.4 Coloring. The gray water shall be dyed blue or green with a food grade vegetable dye before such water is supplied to the fixtures.~~]

[~~C102.5 Materials. Distribution piping shall conform to one of the standards listed in Table 605.4.~~]

[~~C102.6 Identification. Distribution piping and reservoirs shall be identified as containing nonpotable water. Piping identification shall be in accordance with Section 608.8.~~]

[~~SECTION C103 SUBSURFACE LANDSCAPE IRRIGATION SYSTEMS~~]

[~~C103.1 Gray water recycling systems utilized for subsurface irrigation for single family residences shall comply with the requirements of Utah Administrative Code, R317-401, Gray Water Systems. Gray water recycling systems utilized for subsurface irrigation for other occupancies shall comply with Utah Administrative Code, R317-3 Design Requirements for Wastewater Collection, Treatment and Disposal Systems, and Utah Administrative Code, R317-4, Onsite Wastewater Systems."~~]

Section 27. Section **15A-3-401** is amended to read:

Part 4. Statewide Amendments to IMC

15A-3-401. General provisions.

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

(1) In IMC, Section 202, the definition for "CONDITIONED SPACE" is deleted and replaced with the following: "CONDITIONED SPACE. An area, room, or space enclosed

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."

[~~(1)~~] (2) In IMC, Section 403, a new Section 403.8 is added as follows: "Retrospective effect. Removal, alteration, or abandonment shall not be required, and continued use and maintenance shall be allowed, for a ventilation system within an existing installation that complies with the requirements of this Section 403 regardless of whether the ventilation system satisfied the minimum ventilation rate requirements of prior law."

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

(4) In IMC, Section 1004.2, the first sentence is deleted and replaced with the following: "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."

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

[~~(2)~~] (6) IMC, Section 1101.10, is deleted.

Section 28. Section **15A-3-501** is amended to read:

Part 5. Statewide Amendments to IFGC

15A-3-501. General provisions.

The following [~~is~~] are adopted as an amendment to the IFGC to be applicable statewide[~~, in IFGC, Chapter 4, Section 401, General, a new section IFGC, Section 401.9, is~~]:

(1) In IFGC, Section 404.9, a new Section 404.9.1, is added as follows: "[~~401.9~~] 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 631.2, the following sentence is inserted before the first sentence: "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."

Section 29. Section **15A-3-601** is amended to read:

Part 6. Statewide Amendments to NEC

15A-3-601. General provision.

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

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

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

Section 30. Section **15A-3-801** is amended to read:

Part 8. Installation and Safety Requirements for Mobile Homes Built Before June 15, 1976

15A-3-801. General provision.

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

(1) Related to exits and egress windows:

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

window that meets the minimum specifications of the U.S. Department of Housing and Urban Development's (HUD) Manufactured Homes Construction and Safety Standards (MHCSS) program as set forth in 24 C.F.R. Parts 3280 and 3283, MHCSS 3280.106 and 3280.404 for manufactured homes. These standards require the window to be at least 22 inches in the horizontal or vertical position in its least dimension and at least five square feet in area. The bottom of the window opening shall be no more than 36 inches above the floor, and the locks and latches and any window screen or storm window devices that need to be operated to permit exiting shall not be located more than 54 inches above the finished floor.

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

(2) Related to flame spread:

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

greater combustibility than the door itself (i.e., plastic louvers on a wooden door). Reference MHCSS 3280.203.

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

(3) Related to smoke detectors:

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

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

(4) Related to solid-fuel-burning stoves/fireplaces:

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

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

an integral door or shutters designed to close the fire chamber opening and shall include complete means for venting through the roof, a combustion air inlet, a hearth extension, and means to securely attach the unit to the manufactured home structure.

(i) Chimney. A listed, factory-built chimney designed to be attached directly to the fireplace/fireplace stove and equipped with, in accordance with the listing, a termination device and spark arrester, shall be required. The chimney shall extend at least three feet above the part of the roof through which it passes and at least two feet above the highest elevation of any part of the manufactured home that is within 10 feet of the chimney.

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

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

(5) Related to electrical wiring systems:

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

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

(6) Related to replacement furnaces and water heaters:

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

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

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

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

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

Section 31. **Repealer.**

This bill repeals:

Section **15A-4-302, Amendments to IPC applicable to Salt Lake City.**

Section **15A-4-304, Amendments to IPC applicable to Grand County.**

Section **15A-4-305, Amendments to IPC applicable to City of Moab.**

Section **15A-4-306, Amendments to IPC applicable to Murray City.**

Section **15A-4-307, Amendments to IPC applicable to Salt Lake County.**

Section 32. **Effective date.**

This bill takes effect on July 1, 2013.