

AGENCY PUBLIC NOTICE

Agency Information

1. Agency: Commerce - Occupational and Professional Licensing
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(Interested persons may inspect this filing at the above address or at DAR during business hours)

Title

2. Title:
 Proposed Building Codes and Amendments under Utah Uniform Building Standards Act

Summary

3. Summary:

See the attached document for full details and summary of proposed building codes and amendments. A public hearing regarding the proposed building codes will be held October 15, 2009 at 9:00 AM in Room 1112 of the State Office Building, Salt Lake City, Utah. The attached document has two parts: Part 1 - Proposed Building Codes and Amendments under Utah Uniform Building Standards Act, and Part 2 - Summary of Recommended Code and Amendment Changes. The second part is a summary and explanation of the changes proposed in the first part. It should be noted that the proposed changes are made with strikethrough and underline as if making changes to existing rules, which have adopted the current building codes. This format is used for easier identification of items that are recommended for changes. As a result of Senate Bill 211, changes in building codes are no longer adopted by rule but are adopted by the Legislature after receiving a recommendation from the Uniform Building Code Commission. The Uniform Building Code Commission is obligated under the Uniform Building Standards Act to have a public hearing regarding the proposed changes to the building codes. This public notice and scheduled public hearing are for the Uniform Building Code Commission to receive public comment on the proposed building codes prior to it making its recommendation to the legislative Business and Labor Interim Committee

File Information

4. Attach an RTF document containing the text of this rule change (filename):
 There is a document associated with this rule filing.

Part 1

Proposed Building Codes and Amendments

Under

UTAH UNIFORM BUILDING STANDARDS ACT

(as of 9/14/09)

R156-56-701. Specific Editions of Uniform Building Standards.

- (1) In accordance with Subsection 58-56-3(1)(b)(ii), and subject to the limitations contained in Subsection ~~(6), (7), and (8)~~ (5), (6), and (7) the following codes are hereby incorporated by reference, which codes together with any amendments specified under these rules, are adopted to be effective on July 1, 2010 as 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 ~~2006~~ 2009 edition of the International Building Code (IBC), including Appendix J promulgated by the International Code Council ~~shall become effective on January 1, 2007~~ ;
 - (b) the 2008 edition of the National Electrical Code (NEC) promulgated by the National Fire Protection Association, ~~to become effective January 1, 2009~~;
 - (c) the ~~2006~~ 2009 edition of the International Plumbing Code (IPC) promulgated by the International Code Council ~~shall become effective on January 1, 2007~~ ;
 - (d) the ~~2006~~ 2009 edition of the International Mechanical Code (IMC) promulgated by the International Code Council ~~shall become effective on January 1, 2007~~ ;
 - (e) the ~~2006~~ 2009 edition of the International Residential Code (IRC) promulgated by the International Code Council ~~shall become effective on January 1, 2007~~ ;
 - (f) the ~~2006~~ 2009 edition of the International Energy Conservation Code (IECC) promulgated by the International Code Council ~~shall become effective on January 1, 2007~~ ;
 - (g) the ~~2006~~ 2009 edition of the International Fuel Gas Code (IFGC) promulgated by the International Code Council ~~shall become effective on January 1, 2007~~ ;
 - (h) subject to the provisions of Subsection (4), the Federal Manufactured Housing Construction and Safety Standards Act (HUD Code) as promulgated by the Department of Housing and Urban Development and published in the Federal Register as set forth in 24 CFR parts 3280 and 3282 as revised April 1, 1990;
 - (i) subject to the provisions of Subsection ~~(4)~~ (3), Appendix E of the ~~2006~~ 2009 edition of the
the
International Residential Code promulgated by the International Code Council ~~shall become effective on January 1, 2007~~ ; and
 - (j) subject to the provisions of Subsection ~~(4)~~ (3), the 2005 edition of the NFPA 225 Model Manufactured Home Installation Standard promulgated by the National Fire Protection Association ~~shall become effective January 1, 2007~~ ; and
 - (k) the 2006 edition of the Utah Wildland Urban Interface Code (UWUI) promulgated by the International Code Council together with alternatives or amendments approved by the Utah Division of Forestry ~~shall be effective July 1, 2008 as is~~ an approved code that may be adopted by the local compliance agency by local ordinance or other similar action as a local amendment to the codes listed in this Subsection.
- (2) In accordance with Subsection 58-56-4(6), and subject to the limitations contained in Subsection 58-56-4(7), the following codes or standards are hereby incorporated by reference and approved for use and adoption by a compliance agency as the construction standards which may be applied to existing buildings in the regulation of building alteration, remodeling, repair, removal, seismic evaluation and rehabilitation in the state:
 - (a) the 1997 edition of the Uniform Code for the Abatement of Dangerous Buildings (UCADB) promulgated by the International Code Council;
 - (b) the ~~2006~~ 2009 edition of the International Existing Building Code (IEBC), including its appendix chapters, promulgated by the International Code Council;
 - (c) ASCE 31-03, Seismic Evaluation of Existing Buildings, promulgated by the American Society of Civil Engineers;

- (d) ~~Pre-standard and Commentary for the ASCE/SEI 41-06, Seismic Rehabilitation of Existing Buildings, (FEMA 356) published by the Federal Emergency Management Agency (November 2000) promulgated by the American Society of Civil Engineers.~~
- ~~(3)~~ Amendments adopted by rule to prior editions of the Uniform Building Standards shall remain in effect until specifically amended or repealed.
- ~~(4)~~(3) In accordance with Subsection 58-56-3(1)(b)(ii), the following are hereby adopted as the installation standard for manufactured housing for new installations or for existing manufactured or mobile homes which are subject to relocation, building alteration, remodeling or rehabilitation in the state:
- (a) The manufacturer's installation instruction for the model being installed shall be the primary standard.
 - (b) If the manufacturer's installation instruction for the model being installed is not available or is incomplete, the following standards shall be applicable:
 - (i) Appendix E of the ~~2006~~ 2009 edition of the International Residential Code as promulgated 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 ~~2006~~ 2009 edition of the International Residential Code as defined in Section AE101 of Appendix E, then the 2005 edition of the NFPA 225 Model Manufactured Home Installation Standard promulgated by the National Fire Protection Association shall apply.
 - (c) The manufacturer, dealer or homeowner shall be permitted to design for unusual installation of a manufactured home not provided for in the manufacturer's standard installation instruction Appendix E of the ~~2006~~ 2009 edition of the International Residential Code, or the 2005 edition of the NFPA 225, provided the design is approved in writing by a professional engineer or architect licensed in Utah.
 - (d) For mobile homes built prior to June 15, 1976, the home shall also comply with the additional installation and safety requirements specified in Section R156-56-808.
- ~~(5)~~(4) Pursuant to the Federal Manufactured Home Construction and Safety Standards Section 604(d), a manufactured home may be installed in the state of Utah which does not meet the local snow load requirements as specified in Subsection R156-56-~~801~~ 802; however all such homes which fail to meet the standards of Subsection R156-56-~~801~~ 802 shall have a protective structure built over the home which meets the ~~International Building Code~~ International Residential Code and the snow load requirements under Subsection R156-56-~~801~~ 802.
- ~~(6)~~(5) To the extent that the building codes adopted under Subsection (1) establish local administrative functions or establish a method of appeal which pursuant to Section 58-56-8 are designated to be established by the compliance agency, such provisions are not included in the codes adopted hereunder but authority over such provisions are reserved to the compliance agency to establish such provisions.
- ~~(7)~~(6) To the extent that the building codes adopted under Subsection (1) establish provisions, standards or references to other codes which by state statutes are designated to be established or administered by other state agencies or local city, town or county jurisdictions, such provisions are not included in the codes adopted herein but authority over such provisions are reserved to the agency or local government having authority over such provisions. Provisions excluded under this Subsection include but are not limited to:
- (a) the International Property Maintenance Code;
 - (b) the International Private Sewage Disposal Code, authority over which would be reserved to the Department of Health and the Department of Environmental Quality;
 - (c) the International Fire Code which pursuant to Section 53-7-106 authority is reserved to

- the Utah Fire Prevention Board;
- (d) day care provisions which are in conflict with the Child Care Licensing Act, authority over which is designated to the Utah Department of Health; and
- (e) wildland urban interface provisions which go beyond the authority of Subsection 58-56-4(2), authority over which is designated to the Utah Division of Forestry or to the local compliance agencies.

(8) (7) To the extent that the codes adopted under Subsection (1) establish provisions that exceed the authority granted to the Division, under the Utah Uniform Building Standards Act, to adopt codes or amendments to such codes by rulemaking procedures, the scope described in subsection 58-56-4(2) or other provisions of the Utah Uniform Building Standards Act such provisions, to the extent such authority scope is exceeded, are not included in the codes adopted.

R156-56-703. Code Amendments.

In accordance with Subsection 58-56-7(1) (2), the procedure and manner under which requests for amendments to codes shall be filed with the division and recommended or declined for adoption are as follows:

- (1) All requests for amendments to any of the uniform building standards shall be submitted to the division on forms specifically prepared by the division for that purpose.
- (2) The processing of requests for code amendments shall be in accordance with division policies and procedures.

R156-56-801. Statewide Amendments to the IBC.

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

- (1) ~~All references to the ICC Electrical Code are deleted and replaced with the National Electrical Code adopted under Subsection R156-56-701(1)(b).~~
- (2) ~~Section 101.4.1 is deleted and replaced with the following:~~
 101.4.1 Electrical. The provisions of the National Electrical Code (NEC) shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.
- (1) ~~Section 106 is deleted in its entirety.~~
- (3) ~~Section 106.3.2 is deleted and replaced with the following:~~
 106.3.2 Previous approval. If a lawful permit has been issued and the construction of which has been pursued in good faith within 180 days after the effective date of the code and has not been abandoned, then the construction may be completed under the code in effect at the time of the issuance of the permit.
- (4) (2) In Section ~~109.110~~, a new section is added as follows:
~~109.3.5~~ 110.3.5 Weather-resistive barrier and flashing resistant exterior wall envelope. An inspection shall be made of the weather-resistive barrier resistant exterior wall envelope as required by Section 1403.2 and flashing as required by Section ~~1405.3~~ 1405.4 to prevent water from entering the weather-resistant exterior wall envelope resistive barrier.
 The remaining sections will be renumbered as follows:
~~109.3.6~~ 110.3.6 Lath or gypsum board inspection
~~109.3.7~~ 110.3.7 Fire- and smoke- resistant penetrations
~~109.3.8~~ 110.3.8 Energy efficiency inspections
~~109.3.9~~ 110.3.9 Other inspections
~~109.3.10~~ 110.3.10 Special inspections
~~109.3.11~~ 110.3.11 Final inspection.
- (5) (3) Section ~~114.1~~ 115.1 is deleted and replaced with the following:
~~114.1~~ 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 dangerous or unsafe, the building official is authorized to stop work.
- (6)(4) In Section 202, the definition for Assisted Living Facility is deleted and replaced with the following:
ASSISTED LIVING FACILITY. See Section 308.1.1.
- (5) In Section 202, the definition for Child Care Facilities is deleted and replaced with the following:
CHILD CARE FACILITIES. See Section 308.3.1.
- (6) In the list in Section 304.1, Ambulatory health care facilities is deleted and replaced with
Ambulatory health care facilities with four or fewer surgical operating rooms
- (7) 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 ~~421~~ 424 for special requirements for Group E child day care centers.
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, or Family Group License 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.
~~Child day care centers providing care for more than 100 children 2 1/2 years or less of age shall be classified as Group I-4.~~
- (8) In 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.
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.
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.
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 Section 308.2 is the words "Assisted living facilities" are deleted and replaced with the following: Type I Assisted living facilities.
~~308.2 Group I-1. This occupancy shall include buildings, structures, or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following: residential board and care facilities, type I assisted living facilities, residential treatment/support assisted living facility, half-way houses,~~

~~group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug centers and convalescent facilities. A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2. A facility such as above, housing at least six and not more than 16 persons, shall be classified as a Group R-4.~~

- (10) 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 ~~two~~ five or more operating rooms where care is less than 24 hours, ~~outpatient medical care facilities for ambulatory patients (accommodating more than five such patients in each tenant space) which may render the patient incapable of unassisted self preservation,~~ 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.
- (11) In section 308.3.1 the definition for CHILD CARE FACILITIES is deleted and replaced with the following:
~~308.3.1 Child care facility~~ CHILD CARE FACILITIES. A child care facility, as licensed by the 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.
- (12) 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) Section 308.5.2 and the exception are is deleted in their entirety. and replaced with the following:
~~308.5.2 Child care facility. A facility that provides supervision and personal care on less than a 24 hour basis for more than 100 children 2 1/2 years of age or less shall be classified as Group I-4:~~
- (14) In Section 310.1, in the Subsection designated as R-1, the sentence beginning with Congregate living facilities shall have the following added at the end:
or shall comply with the International Residential Code.
- (15) In Section 310.1, in the Subsection designated as R-2, the sentence beginning with Congregate living facilities shall have the following added at the end:
or shall comply with the International Residential Code.
- (14) (16) In Section 310.1, is deleted and replaced with the following: the Subsection designated as R-3 shall have the following added at the end of the Subsection:
310.1 Residential Group "R". Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classed as an Institutional Group I. Residential occupancies shall include the following:
R-1: Residential occupancies where the occupants are primarily transient in nature (less than 30 days) including: Boarding Houses (transient) and congregate living facilities, Hotels (transient), and Motels (transient).
Exception: Boarding houses and congregate living facilities accommodating 10 persons or less shall be classified as a Residential Group R-3 or shall comply with the

~~International Residential Code in accordance with Section 101.2.~~

~~R-2: Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including: Apartment Houses, Boarding houses (not transient) and congregate living facilities, Convents, Dormitories, Fraternities and Sororities, Monasteries, Vacation timeshare properties, Hotels (non transient), and Motels (non transient).~~

~~Exception: Boarding houses and congregate living facilities accommodating 10 persons or less shall be classified as a Residential Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2.~~

~~R-3: Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I and where buildings do not contain more than two dwelling units, as applicable in Section 101.2, or adult and child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours. Adult and child care facilities that are within a single family home are permitted to comply with the International Residential Code in accordance with Section 101.2. 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 State Department of Health, as enacted under the authority of the Utah Child Care Licensing Act, UCA, Sections 26-39-101 through 26-39-110, and in any of the following categories:
 - ~~a. Utah Administrative Code, R430-50, Residential Certificate Child Care Standards.~~
 - ~~b. Utah Administrative Code, R430-90, Licensed Family Child Care.~~~~
- ~~3. Compliance with all zoning regulations of the local regulator.~~

~~(17) In 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 Residential Care/ Type I Assisted Living Facilities or Residential Treatment/Support Assisted Living Facilities including more than five but not more than 16 occupants 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 or shall comply with the International Residential Code in accordance with Section 101.2.~~

~~(15)(18) In Section 310.2 the definition for Residential Care/Assisted Living Facilities is deleted, and replaced with the following:~~

~~See Section 308.1.1 for modifications of definitions.~~

~~(19) Section 403.5.5 is deleted.~~

~~(20) In Section 422.1 the words "Sections 422.1 to 422.6" are changed to "Sections 422.1 to 422.7.~~

~~(21) In 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.~~

~~(16)(22) A new section 421 424 is added as follows:~~

~~Section 421 424 Group E Child Day Care Centers. Group E child day care centers shall comply with Section 421 424.~~

~~421.1 424.1 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.

~~421.2~~ 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 ~~1026~~ 1029.

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

~~(17)~~ (23) In 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 ~~1008.1.8.3~~ 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.

~~(24)~~ In Table 508.4 footnote g is added as follows:

g. See Section 422.7 for additional requirements of Group B Ambulatory Health Care Facilities.

~~(25)~~ In Section 707.5.1 a new exception 4 is added as follows:

4. Group B Ambulatory Health Care Facilities.

~~(18)~~ (26) In Section (F)902, the definition for record drawings is deleted and replaced with the following:

(F)RECORD DRAWINGS. Drawings ("as built") that document all aspects of a fire protection system as installed.

~~(27)~~ In Section (F)903.2.2 the words "all fire areas" are deleted and replaced with "buildings".

~~(19)~~ (28) In Section ~~(F)903.2.3~~ (F)903.2.4 condition 2 is deleted and replaced with the following:

2. ~~Where a A~~ A Group F-1 fire area is located more than three stories above the lowest level of fire department vehicle access; ~~or.~~

~~(20)~~ (29) In Section ~~(F)903.2.6~~ (F)903.2.7 condition 2 is deleted and replaced with the following:

2. ~~Where a A~~ A Group M fire area is located more than three stories above the lowest level of fire department vehicle access; ~~or.~~

~~(21)~~ (30) Section ~~(F)903.2.7~~ (F)903.2.8 is deleted and replaced with the following:

~~(F)903.2.7~~ (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.

~~(22)~~ (31) In Section ~~(F)903.2.8~~ (F)903.2.9 condition 2 is deleted and replaced with the following:

2. ~~Where a A~~ A Group S-1 fire area is located more than three stories above the lowest level of fire department vehicle access; ~~or.~~

~~(23)~~ (32) Section ~~(F)903.2.9~~ (F)903.2.10 is deleted and replaced with the following:

~~(F)903.2.9~~ (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 m²) 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.

(24) (33) In Section ~~(F)903.2.9.1~~ (F)903.2.10.1 the last clause "where the fire area exceeds 5,000 square feet (464 m²)" is deleted.

(25) (34) Section (F)904.11 and Subsections ~~(F)904.11.3, (F)904.11.3.1, (F)904.11.4 and (F)904.11.4.1~~ are 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 of the type and arrangement protected. 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. ~~Automatic fire-extinguishing systems shall be installed in accordance with the referenced standard for wet-chemical extinguishing systems, NFPA 17A.~~

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.

~~(Subsections (F)904.11.1 and (F)904.11.2 remain unchanged.~~

(35) ~~Subsections (F)904.11.3, (F)904.11.3.1, (F)904.11.4 and (F)904.11.4.1 are deleted in their entirety.~~

(26) ~~Section (F)907.2.10 is deleted and replaced with the following:~~

~~(F)907.2.10 Single and multiple station alarms. Listed single and multiple station smoke alarms complying with U.L. 217 shall be installed in accordance with the provision of this code and the household fire warning equipment provision of NFPA 72. Listed single and multiple station carbon monoxide detectors shall comply with U.L. 2034 and shall be installed in accordance with the provisions of this code and NFPA 720.~~

~~(F)907.2.10.1 Smoke alarms. Single or multiple station smoke alarms shall be installed in the locations described in Sections (F)907.2.10.1.1 through (F)907.2.10.1.3~~

~~(F)907.2.10.1.1 Group R-1. Single or multiple station smoke alarms shall be installed in all of the following locations in Group R-1:~~

- ~~1. In sleeping areas.~~
- ~~2. In every room in the path of the means of egress from the sleeping area to the door leading from the sleeping unit.~~
- ~~3. In each story within the sleeping unit, including basements. For sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.~~

~~(F)907.2.10.1.2 Groups R-2, R-3, R-4 and I-1. Single or multiple station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and I-1, regardless of occupant load at all of the following locations:~~

- ~~1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.~~
- ~~2. In each room used for sleeping purposes.~~
- ~~3. In each story within a dwelling unit, including basements and cellars but not~~

~~including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.~~

~~(F)907.2.10.1.3 Group I-1. Single or multiple station smoke alarms shall be installed and maintained in sleeping areas in occupancies in Group I-1.~~

~~Exception: Single or multiple station smoke alarms shall not be required where the building is equipped throughout with an automatic fire detection system in accordance with Section (F)907.2.6.~~

(36) A new section (F)907.9 is added as follows:

Section (F)907.9 (F)907.2.10.2 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.

~~(F)907.2.10.3 Power source. In new construction, required 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. 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: Alarms are not required to be equipped with battery backup in Group R-1 where they are connected to an emergency electrical system.~~

~~(F)907.2.10.4 Interconnection. Where more than one alarm is required to be installed with an individual dwelling unit in Group R-2, R-3, or R-4, or within an individual sleeping unit in Group R-1, the alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. Approved combination smoke and carbon monoxide detectors shall be permitted.~~

~~(F)907.2.10.5 Acceptance testing. When the installation of the alarm devices is complete, each detector and interconnecting wiring for multiple station alarm devices shall be tested in accordance with the household fire warning equipment provisions of NFPA 72 and NFPA 720, as applicable.~~

(27) ~~In Section 1007.3 a new exception 6 is added as follows:~~

~~6. Areas of refuge are not required at exit stairways in buildings or facilities equipped throughout with an automatic fire sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~

(28) ~~In Section 1007.4 the word "exception" is changed to "exception 1" and an exception 2 is added as follows:~~

~~2. Elevators are not required to be accessed from an area of refuge or horizontal exit in buildings or facilities equipped throughout with an automatic fire sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~

(29) ~~In Section 1008.1.8.3, a new subparagraph (5) is added as follows:~~

~~(5) Doors in Group I-1 and I-2 occupancies, where the clinical needs of the patients require specialized security measures for their safety, approved access controlled egress may be installed when all the following are met:~~

- ~~5.1 The controlled egress doors shall unlock upon activation of the automatic fire sprinkler system or automatic fire detection system.~~
- ~~5.2 The facility staff can unlock the controlled egress doors by either sensor or keypad.~~
- ~~5.3 The controlled egress doors shall unlock upon loss of power.~~
- (37) In Section 1008.1.9.6 the words “Group I-1 and” are added in the title and in the first sentence before the words “Group I-2”, the word “delayed” is deleted throughout and replaced with the word “controlled”, and the last sentence before the numbered subsections 1 through 6 is deleted.
- (30) (38) In Section ~~1009.3~~ 1009.4.2, Exception #4 #5 is deleted and replaced with the following:
4. 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).
- (31) (39) In Section ~~1009.10~~ 1009.12 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.
- (32) ~~Section 1012.3 is amended to include the following exception at the end of the section:~~
~~Exception. Non-circular handrails serving an individual unit in a Group R-1, Group R-2 or Group R-3 occupancy with a perimeter greater than 6 1/4 inches (160 mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (10 mm) to a level that is not less than 1 3/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4 inches (32 mm) to a maximum of 2 3/4 inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).~~
- (40) In Section 1013.2 the words “adjacent fixed seating” are deleted.
- (33) (41) In Section 1013.2 Exception 3 5 is added as follows:
3. 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.
- (34) (42) In 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.
- (43) Section 1024 is deleted in its entirety.
- (35) (44) A new 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.
- (36) (45) In 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 m²) of floor area. An additional 100 square feet (9.3 m²) of floor area shall be provided for each occupant of such unit in excess of two.
- (37) ~~Section 1405.3 is deleted and replaced with the following:~~
~~1405.3 Flashing. Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect it to the exterior. Flashings shall be installed at the perimeters of~~

~~exterior door and window assemblies, penetrations and terminations of exterior wall assemblies, exterior wall intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projected flanges shall be installed on both sides and the ends of copings, under sills and continuously above projected trim. A flashing shall be installed at the intersection of the foundation to stucco, masonry, siding or brick veneer. The flashing shall be on an approved corrosion resistant flashing with a 1/2" drip leg extending past exterior side of the foundation.~~

(46) In Table 1604.5 in Occupancy Category III in the sentence that begins Group I-2, a new footnote (b) is added as follows:

b. Type II Assisted Living Facilities that are I-2 occupancy classifications in accordance with Section 308 shall be Occupancy Category II in this table.

(38) (47) In Section 1605.2.1, the formula shown as " $f_2 = 0.2$ for other roof configurations" is 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/m²) or less.

Where A = Elevation above sea level at the location of the structure (ft/1000).

(39) (48) In Section 1605.3.1 and ~~section~~ Section 1605.3.2, Exception number 2 in each section is deleted and replaced with the following:

2. Flat roof snow loads of 30 pounds per square foot (1.44 kNm²) or less need not be combined with seismic loads. Where flat roof snow loads exceed 30 pounds per square foot (1.44 kNm²), the snow loads may be reduced in accordance with the 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/1000)

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 .

(40) ~~In Table 1607.1 number 9 is deleted and replaced with the following:~~

TABLE 1607.1 NUMBER 9

| Occupancy or Use | Uniform (psf) | Concentrated (lbs) |
|------------------------------|--------------------------|--------------------|
| 9. Decks, except residential | Same as occupancy served | |
| 9.1 Residential decks | 60 psf | |

(41) (49) Section 1608.1 is deleted and replaced with the following:

1608.1 General. Except as modified in section 1608.1.1, 1608.1.2, and 1608.1.3 design snow loads shall be determined in accordance with Section Chapter 7 of ASCE 7, but the design roof load shall not be less than that determined by Section 1607.

(42) (50) Section 1608.1.1 is added as follows:

1608.1.1 Section 7.4.5 of Section 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.

(43) (51) Section 1608.1.2 is added as follows:

1608.1.2 Utah Snow Loads. 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./1000)

A_o = Base ground snow elevation from Table 1608.1.2(a) (ft./1000)

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.

(44) (52) 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 | 5920 ft. | 43 | 62 |
| Box Elder County | | | |
| Brigham City | 4300 ft. | 30 | 43 |
| Tremonton | 4290 ft. | 30 | 43 |
| Cache County | | | |
| Logan | 4530 ft. | 35 | 50 |
| Smithfield | 4595 ft. | 35 | 50 |
| Carbon County | | | |
| Price | 5550 ft. | 30 | 43 |
| Daggett County | | | |
| Manila | 5377 ft. | 30 | 43 |
| Davis County | | | |
| Bountiful | 4300 ft. | 30 | 43 |
| Farmington | 4270 ft. | 30 | 43 |
| Layton | 4400 ft. | 30 | 43 |
| Fruit Heights | 4500 ft. | 40 | 57 |
| Duchesne County | | | |
| Duchesne | 5510 ft. | 30 | 43 |
| Roosevelt | 5104 ft. | 30 | 43 |
| Emery County | | | |
| Castledale | 5660 ft. | 30 | 43 |
| Green River | 4070 ft. | 25 | 36 |
| Garfield County | | | |
| Panguitch | 6600 ft. | 30 | 43 |
| Grand County | | | |
| Moab | 3965 ft. | 5 | 36 |
| Iron County | | | |
| Cedar City | 5831 ft. | 30 | 43 |
| Juab County | | | |
| Nephi | 5130 ft. | 30 | 43 |
| Kane County | | | |

| | | | |
|-------------------|----------|-----|-----|
| Kanab | 5000 ft. | 25 | 36 |
| Millard County | | | |
| Millard | 5000 ft. | 30 | 43 |
| Delta | 4623 ft. | 30 | 43 |
| Morgan County | | | |
| Morgan | 5064 ft. | 40 | 57 |
| Piute County | | | |
| Piute | 5996 ft. | 30 | 43 |
| Rich County | | | |
| Woodruff | 6315 ft. | 40 | 57 |
| Salt Lake County | | | |
| Murray | 4325 ft. | 30 | 43 |
| Salt Lake City | 4300 ft. | 30 | 43 |
| Sandy | 4500 ft. | 30 | 43 |
| West Jordan | 4375 ft. | 30 | 43 |
| West Valley | 4250 ft. | 30 | 43 |
| San Juan County | | | |
| Blanding | 6200 ft. | 30 | 43 |
| Monticello | 6820 ft. | 35 | 50 |
| Sanpete County | | | |
| Fairview | 6750 ft. | 35 | 50 |
| Mt. Pleasant | 5900 ft. | 30 | 43 |
| Manti | 5740 ft. | 30 | 43 |
| Ephraim | 5540 ft. | 30 | 43 |
| Gunnison | 5145 ft. | 30 | 43 |
| Sevier County | | | |
| Salina | 5130 ft. | 30 | 43 |
| Richfield | 5270 ft. | 30 | 43 |
| Summit County | | | |
| Coalville | 5600 ft. | 60 | 86 |
| Kamas | 6500 ft. | 70 | 100 |
| Park City | 6800 ft. | 100 | 142 |
| Park City | 8400 ft. | 162 | 231 |
| Summit Park | 7200 ft. | 90 | 128 |
| Tooele County | | | |
| Tooele | 5100 ft. | 30 | 43 |
| Uintah County | | | |
| Vernal | 5280 ft. | 30 | 43 |
| Utah County | | | |
| American Fork | 4500 ft. | 30 | 43 |
| Orem | 4650 ft. | 30 | 43 |
| Pleasant Grove | 5000 ft. | 30 | 43 |
| Provo | 5000 ft. | 30 | 43 |
| Spanish Fork | 4720 ft. | 30 | 43 |
| Wasatch County | | | |
| Heber | 5630 ft. | 60 | 86 |
| Washington County | | | |
| Central | 5209 ft. | 25 | 36 |
| Dameron | 4550 ft. | 25 | 36 |
| Leeds | 3460 ft. | 20 | 29 |

| | | | |
|--------------|----------|--------|----|
| Rockville | 3700 ft. | 25 | 36 |
| Santa Clara | 2850 ft. | 15 (1) | 21 |
| St. George | 2750 ft. | 15 (1) | 21 |
| Wayne County | | | |
| Loa | 7080 ft. | 30 | 43 |
| Hanksville | 4308 ft. | 25 | 36 |
| Weber County | | | |
| North Ogden | 4500 ft. | 40 | 57 |
| Ogden | 4350 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.
- (45) (53) 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.
- (46) (54) 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.
- (47) (55) In Section 1609.1.1 a new exception number 5.7 is added as follows:
5.7. The wind design procedure as found in Section 1616 through 1624 of the 1997 Uniform Building Code may be used as an alternative wind design procedure for:
 (a) ~~items 1 through 3 listed in Table 16-H of the 1997 Uniform Building Code provided that the building or component being designed meets the limits for the Simplified Method as defined in ASCE 6.4.1.1 and 6.4.1.2 of ASCE 7; or~~
 (b) items 4 through 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.
- (48) (56) Section ~~1613.7~~ 1613.1.1 is added as follows:
~~1613.7~~ 1613.1.1 ASCE 12.7.2 and ~~12.14.18.1~~ 12.14.8.1 of Section 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/1000)

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 .

(49) (57) A new Section 1613.8 is added as follows:

1613.8 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.

(50) ~~Section 1805.5 is deleted and replaced with the following:~~

~~1805.5 Foundation walls. Concrete and masonry foundation walls shall be designed in accordance with Chapter 19 or 21, respectively. Foundation walls that are laterally supported at the top and bottom and within the parameters of Tables 1805.5(1) through 1805.5(5) are permitted to be designed and constructed in accordance with Sections 1805.5.1 through 1805.5.5. Concrete foundation walls may also be constructed in accordance with Section 1805.5.8.~~

(51) (58) A new section ~~1805.5.8~~ 1807.1.6.4 is added as follows:

~~1805.5.8~~ 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 ~~1805.5(6)~~ 1807.1.6.4.

(52) (59) Table ~~1805.5(6)~~ 1807.1.6.4 is added as follows:

Table ~~1805.5(6)~~ 1807.1.6.4, entitled "Empirical Concrete Foundation Walls, dated ~~January 1, 2007~~, published by the Department of Commerce, Division of Occupational and Professional Licensing is hereby adopted and incorporated by reference. Table ~~1805.5(6)~~ 1807.1.6.4 identifies foundation requirements for empirical walls.

(53) (60) A new 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 (1524 M).

(54) (61) In Section 2308.6 the following exception is added:

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.

(55) (62) 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, as amended in Section 1613.8, for installation in high seismic areas.

(56) (63) In Section 2902.1, the title for Table 2902.1 is deleted and replaced with the following and footnote e g is added as follows: Table 2902.1, Minimum Number of Required Plumbing Facilities^{a, eg}.

FOOTNOTE: e g. When provided, in public toilet facilities there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms.

(57) (64) Section 3006.5 Shunt Trip, the following exception is added:

Exception: Hydraulic elevators and roped hydraulic elevators with a rise of 50 feet or less.

(58) (65) A new section 3403.2.4 3401.6 is added as follows:

3403.2.4 3401.6 Parapet bracing, wall anchors, and other appendages. Buildings constructed prior to 1975 shall have parapet bracing, wall anchors, and appendages such as cornices, spires, towers, tanks, signs, statuary, etc. evaluated by a licensed engineer when said building is undergoing reroofing, or alteration of or repair to said feature. Such parapet bracing, wall anchors, and appendages 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 Subsection R156-56-701(2) 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.

(59) (66) Section 3406.4 3408.4 is deleted and replaced with the following:

3406.4 3408.4 Change in Occupancy. When a change in occupancy results in a structure being reclassified to a higher Occupancy 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 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 Subsection R156-56-701(2).
2. When a change of use results in a structure being reclassified from Occupancy Category I or II to Occupancy Category III and the structure is located in a seismic map area where S_{DS} 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 Category does not change.

(60) (67) The exception in 3409.4 3411.1 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, ~~except when an existing occupancy is changed to R-2 unless being altered or undergoing a change of occupancy classification.~~

(61) ~~In Section 3409.4, number 7 is added as follows:~~

- ~~7. When a change of occupancy in a building or portion of a building results in a Group R-2 occupancy as determined in section 1107.6.2, not less than 20 percent of the dwelling or sleeping units shall be Type B dwelling or sleeping units. These dwelling or sleeping units may be located on any floor of the building provided with an accessible route. Two percent, but not less than one, of the dwelling or sleeping units shall be Type A dwelling units.~~

(62) (68) The following referenced standard is added under NFPA in chapter 35:

TABLE

| Number | Title | Referenced in code Section number |
|-------------------|---|--------------------------------------|
| 720-05 | Recommended Practice Standard | 907.2.10, 907.2.10.5 |
| <u>720-09</u> | <u>for the Installation of Household Carbon Monoxide (CO) Detection and Warning Equipment</u> | <u>907.9</u> |

(69) The following referenced standard is added under UL in Chapter 35:

| Number | Title | Referenced in code Section number |
|------------------|--|--------------------------------------|
| <u>2034-2008</u> | <u>Standard of Single- and Multiple-station Carbon Monoxide Alarms</u> | <u>907.9</u> |

R156-56-802. Statewide Amendments to the IRC.

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

- (1) All statewide amendments to the IBC under Section R156-56-801, the NEC under Section R156-56-806, the IPC under Section R156-56-803, the IMC under Section R156-56-804, the IFGC under Section R156-56-805 and the IECC under Section R156-56-807 which may be applied to detached one and two family dwellings and multiple single family dwellings shall be applicable to the corresponding provisions of the IRC. ~~All references to the ICC Electrical Code are deleted and replaced with the National Electrical Code adopted under Section R156-56-701(1)(b).~~
- ~~(2) Section 106.3.2 is deleted and replaced with the following:
106.3.2 Previous approval. If a lawful permit has been issued and the construction of which has been pursued in good faith within 180 days after the effective date of the code and has not been abandoned, then the construction may be completed under the code in effect at the time of the issuance of the permit.~~
- ~~(3)~~ (2) In Section 109, a new section is added as follows:
R109.1.5 ~~Weather-resistive barrier and flashing~~ resistant exterior wall envelope inspections. An inspection shall be made of the ~~weather-resistive barrier~~ 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-resistant exterior wall envelope~~ resistive barrier.
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
R109.1.7 Final inspection.
- (4) (3) 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 structured 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.
- ~~(5) In Section R202, the definition of "Backsiphonage" is deleted and replaced with the following:
BACKSIPHONAGE: The backflow of potentially contaminated, polluted or used water into the potable water system as a result of the pressure in the potable water system falling below atmospheric pressure of the plumbing fixtures, pools, tanks or vats connected to the potable water distribution piping.~~

- (6) (4) In 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 Subsection 19-4-104(4), Utah Code Ann. (1953), as amended.
- (7) (5) In 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”).
- (8) ~~In Section R202 the following definition is added:
HEAT exchanger (Potable Water). A device to transfer heat between two physically separated fluids (liquid or steam), one of which is potable water.~~
- (9) (6) In 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 Titles 19-4 and 19-5, Utah Code Ann. (1953), as amended and the regulations of the public health authority having jurisdiction.
- (10) ~~In Section R202, the following definition is added:
S-Trap. A trap having it's weir installed above the inlet of the vent connection.~~
- (11) ~~In Section R202 the definition of “Water Heater” is deleted and replaced with the following:
WATER HEATER. A closed vessel in which water is heated by the combustion of fuels or electricity and is withdrawn for use externally to the system at pressures not exceeding 160 psig (1100 kPa (gage)), including the apparatus by which heat is generated, and all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit (99 degrees Celsius).~~
- (12) (7) 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 | 5920 ft. | | 43 | 62 |
| Box Elder County | | | | |
| Brigham City | 4300 ft. | | 30 | 43 |
| Tremonton | 4290 ft. | | 30 | 43 |
| Cache County | | | | |
| Logan | 4530 ft. | | 35 | 50 |
| Smithfield | 4595 ft. | | 35 | 50 |
| Carbon County | | | | |
| Price | 5550 ft. | | 30 | 43 |
| Daggett County | | | | |
| Manila | 5377 ft. | | 30 | 43 |
| Davis County | | | | |
| Bountiful | 4300 ft. | | 30 | 43 |
| Farmington | 4270 ft. | | 30 | 43 |
| Layton | 4400 ft. | | 30 | 43 |
| Fruit Heights | 4500 ft. | | 40 | 57 |
| Duchesne County | | | | |
| Duchesne | 5510 ft. | | 30 | 43 |
| Roosevelt | 5104 ft. | | 30 | 43 |
| Emery County | | | | |
| Castledale | 5660 ft. | | 30 | 43 |
| Green River | 4070 ft. | | 25 | 36 |
| Garfield County | | | | |
| Panguitch | 6600 ft. | | 30 | 43 |
| Grand County | | | | |
| Moab | 3965 ft. | | 25 | 36 |
| Iron County | | | | |

| | | | |
|------------------|----------|-----|-----|
| Cedar City | 5831 ft. | 30 | 43 |
| Juab County | | | |
| Nephi | 5130 ft. | 30 | 43 |
| Kane County | | | |
| Kanab | 5000 ft. | 25 | 36 |
| Millard County | | | |
| Millard | 5000 ft. | 30 | 43 |
| Delta | 4623 ft. | 30 | 43 |
| Morgan County | | | |
| Morgan | 5064 ft. | 40 | 57 |
| Piute County | | | |
| Piute | 5996 ft. | 30 | 43 |
| Rich County | | | |
| Woodruff | 6315 ft. | 40 | 57 |
| Salt Lake County | | | |
| Murray | 4325 ft. | 30 | 43 |
| Salt Lake City | 4300 ft. | 30 | 43 |
| Sandy | 4500 ft. | 30 | 43 |
| West Jordan | 4375 ft. | 30 | 43 |
| West Valley | 4250 ft. | 30 | 43 |
| San Juan County | | | |
| Blanding | 6200 ft. | 30 | 43 |
| Monticello | 6820 ft. | 35 | 50 |
| Sanpete County | | | |
| Fairview | 6750 ft. | 35 | 50 |
| Mt. Pleasant | 5900 ft. | 30 | 43 |
| Manti | 5740 ft. | 30 | 43 |
| Ephraim | 5540 ft. | 30 | 43 |
| Gunnison | 5145 ft. | 30 | 43 |
| Sevier County | | | |
| Salina | 5130 ft. | 30 | 43 |
| Richfield | 5270 ft. | 30 | 43 |
| Summit County | | | |
| Coalville | 5600 ft. | 60 | 86 |
| Kamas | 6500 ft. | 70 | 100 |
| Park City | 6800 ft. | 100 | 142 |
| Park City | 8400 ft. | 162 | 231 |
| Summit Park | 7200 ft. | 90 | 128 |
| Tooele County | | | |
| Tooele | 5100 ft. | 30 | 43 |
| Uintah County | | | |
| Vernal | 5280 ft. | 30 | 43 |
| Utah County | | | |
| American Fork | 4500 ft. | 30 | 43 |
| Orem | 4650 ft. | 30 | 43 |
| Pleasant Grove | 5000 ft. | 30 | 43 |
| Provo | 5000 ft. | 30 | 43 |
| Spanish Fork | 4720 ft. | 30 | 43 |
| Wasatch County | | | |
| Heber | 5630 ft. | 60 | 86 |

| | | | | |
|-------------------|----------|--------|----|--|
| Washington County | | | | |
| Central | 5209 ft. | 25 | 36 | |
| Dameron | 4550 ft. | 25 | 36 | |
| Leeds | 3460 ft. | 20 | 29 | |
| Rockville | 3700 ft. | 25 | 36 | |
| Santa Clara | 2850 ft. | 15 (1) | 21 | |
| St. George | 2750 ft. | 15 (1) | 21 | |
| Wayne County | | | | |
| Loa | 7080 ft. | 30 | 43 | |
| Hanksville | 4308 ft. | 25 | 36 | |
| Weber County | | | | |
| North Ogden | 4500 ft. | 40 | 57 | |
| Ogden | 4350 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.
- (13) (8) Section R301.6 is deleted and replaced with the following:
 R301.6 Utah Snow Loads. 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./1000)
 A_o = Base ground snow elevation from Table R301.2(5a) (ft./1000)
- 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) In Section R302.2 a new exception 1 is added as follows, the existing exception is changed to exception 2 and the following words are added to the beginning of the paragraph in exception 2.
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,
- (10) In 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.

- (14) ~~Section R304.3 is deleted and replaced with the following:~~
~~R304.3 Minimum dimensions. Habitable rooms shall not be less than 7 feet (2134 mm) in any horizontal dimension.~~
~~Exception: Kitchens shall have a clear passageway of not less than 3 feet (914 mm) between counter fronts and appliances or counter fronts and walls.~~
- (15) (11) Section R311.5.3 R311.7.4 is deleted and replaced with the following:
R311.5.3 R311.7.4 Stair treads and risers.
R311.5.3.1 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).
R311.5.3.2 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).
R311.5.3.3 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 inches (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.
R311.7.4.4 Exterior wood/plastic composite stair treads. This subsection is not changed.
- (12) In Section R312.2 the words "adjacent fixed seating" are deleted.
- (13) Section R313 is deleted in its entirety.
- (16) ~~Section R313 is deleted and replaced with the following:~~
~~Section R313 SMOKE AND CARBON MONOXIDE ALARMS~~
~~R313.1 Single and multiple station smoke alarms. Single and multiple station smoke alarms shall be installed in the following locations:~~
1. ~~In each sleeping room.~~
2. ~~Outside of each separate sleeping area in the immediate vicinity of the bedrooms.~~
3. ~~On each additional story of the dwelling, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.~~

All smoke alarms shall be listed and installed in accordance with the provisions of this code and the household fire warning equipment provision of NFPA 72.

~~R313.2 Carbon monoxide alarms. In new residential structures regulated by this code that are equipped with fuel burning appliances, carbon monoxide alarms shall be installed on each habitable level. All carbon monoxide detectors shall be listed and comply with U.L. 2034 and shall be installed in accordance with provisions of this code and NFPA 720.~~

~~R313.3 Interconnection of alarms. When multiple alarms are required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. Approved combination smoke and carbon monoxide detectors shall be permitted.~~

~~R313.4 Power source. In new construction, the required 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 overcurrent protection. Alarms shall be permitted to be battery operated when installed in buildings without commercial power or in buildings that undergo alterations, repairs, or additions regulated by Section R313.5~~

~~R313.5 Alterations, repairs and additions. When interior alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be provided with alarms located as required for new dwellings; the alarms shall be interconnected and hard wired.~~

~~Exceptions:~~

- ~~1. Alarms in existing areas shall not be required to be interconnected and hard wired 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 and interconnection without the removal of interior finishes.~~
- ~~2. Repairs to the exterior surfaces of dwellings are exempt from the requirements of this section.~~

(14) 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) 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 U.L. 2034 and shall be installed in accordance with the provision of this code and NFPA 720.

(17) (16) In Section R403.1.6 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.

(18) (17) In Section R403.1.6.1 the following exception is added at the end of Item 2 and Item 3:
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.

(19) (18) New Sections R404.0, R404.0.1 and R404.0.2 are added before Section 404.1 as follows:
R404.0 This section may be used as an alternative to complying with Sections R404.1 through R404.1.5.1.

R404.0.1 Concrete and masonry foundation walls. Concrete and masonry foundation walls may be designed in accordance with IBC Chapters 19 or 21 respectively. Foundation walls that are laterally supported at the top and bottom within the parameters of IBC Tables 1805.5(1) through 1805.5(5) are permitted to be designed and constructed in accordance with IBC Sections 1805.5.1 through 1805.5.5. Concrete foundation walls may also be constructed in accordance with Section R404.0.2.

R404.0.2 Empirical foundation design. Buildings constructed with repetitive wood frame construction or repetitive cold formed steel structural member construction may be permitted to have concrete foundations constructed in accordance with IBC Table 1805.5(6). IBC Table 1805.5(6) entitled "Empirical Foundations Walls", dated January 1, 2007, published by the Department of Commerce, Division of Occupational and Professional Licensing, is hereby adopted and incorporated by reference. Table 1805.5(6) identifies foundation requirements for empirical walls.

In Section R404.1 the following exception is added:

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.

(20) Section R703.6 is deleted and replaced with the following:

R703.6 Exterior plaster.

R703.6.1 Lath. All lath and lath attachments shall be of corrosion resistant materials. Expanded metal or woven wire lath shall be attached with 1 1/2 inch long (38 mm), 11 gage nails having 7/16 inch (11.1 mm) head, or 7/8 inch long (22.2 mm), 16 gage staples, spaced at no more than 6 inches (152 mm), or as otherwise approved.

R703.6.2 Weather resistant barriers. Weather resistant barriers shall be installed as required in Section R703.2 and, where applied over wood based sheathing, shall include a weather-resistant vapor permeable barrier with a performance at least equivalent to two layers of Grade D paper.

R703.6.3 Plaster. Plastering with portland cement plaster shall be not less than three coats when applied over metal lath or wire lath and shall be not less than two coats when applied over masonry, concrete or gypsum backing. If the plaster surface is completely covered by veneer or other facing material or is completely concealed, plaster application need be only two coats, provided the total thickness is as set forth in Table R702.1(1). On wood-frame construction with an on-grade floor slab system, exterior plaster shall be applied in such a manner as to cover, but not extend below, lath, paper and screed. The proportion of aggregate to cementitious materials shall be as set forth in Table R702.1(3).

R703.6.3.1 Weep screeds. A minimum 0.019 inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 3 1/2 inches (89 mm) shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4 inches (102 mm) above the earth or 2 inches (51 mm) above paved areas and shall be of a type that will allow trapped water to drain to the exterior of the building. The weather resistant barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.

(21) In Section R703.8, number 8 is added as follows:

8. ~~At the intersection of foundation to stucco, masonry, siding, or brick veneer with an approved corrosive resistance flashing with a 1/2" drip leg extending past exterior side of the foundation.~~
- (19) Sections R612.2 through R612.4.2 are deleted.
- (20) Chapter 11 is deleted in its entirety and replaced with Chapter 11 of the 2006 International Residential Code and Chapter 4 of the 2006 International Energy Conservation Code.
- (21) Section M1411.6 is deleted in its entirety.
- (22) In Section M1502.4.4.1 the words "25 feet (7620 mm)" are deleted and replaced with "35 feet (10668 mm)."
- (22) (23) A new 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.
- (23) (24) 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 Sections 73-3-1 and 73-3-25, Utah Code Ann. (1953), as amended, 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.
- (24) (25) 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 within 300 feet of the property line in accordance with Section 10-8-38, Utah Code Ann, (1953), as amended; or an approved private sewage disposal system in accordance with Rule R317, Chapter 4, Utah Administrative Code, as administered by the Department of Environmental Quality, Division of Water Quality.
- (25) ~~Section P2603.2.1 is deleted and replaced with the following:
 P2603.2.1 Protection against physical damage. In concealed locations where piping, other than cast iron or galvanized steel, is installed through holes or notches in studs, joists, rafters, or similar members less than 1 1/2 inch (38 mm) from the nearest edge of the member, the pipe shall be protected by shield plates. Protective shield plates shall be a minimum of 1/16 inch-thick (1.6 mm) steel, shall cover the area of the pipe where the member is notched or bored, and shall be at least the thickness of the framing member penetrated.~~
- (26) In Section P2801.7 the word townhouses is deleted.
- (27) 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.
- (28) Table P2902.3 is deleted and replaced with the following:

TABLE P2902.3
 General Methods of Protection

| Assembly | Degree | Application | Installation Criteria |
|----------|--------|-------------|-----------------------|
|----------|--------|-------------|-----------------------|

(applicable standard) of Hazard
~~Air Gap~~ ~~High or~~ ~~Backsiphonage~~ ~~See Table P2902.3.1~~
 (ASME A112.1.2) ~~Low~~

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.

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.

Pressure High or Backsiphonage a. Shall not be

| | | | |
|--|----------------------------|----------------------------|--|
| Vacuum Breaker Assembly (ASSE 1020, USC-FCCCHR) | Low | 1/2" - 2" | <p>installed in an area that could be subjected to backpressure or back drainage conditions.</p> <p>b. Shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.</p> <p>c. Shall not be installed below ground or in a vault or pit.</p> <p>d. Shall be installed in a vertical position only.</p> |
| Spill Resistant Vacuum Breaker (ASSE 1056, USC-FCCCHR) | High or Low | Backsiphonage 1/4" - 2" | <p>a. Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.</p> <p>b. Shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.</p> <p>c. Shall not be installed below ground or in a vault or pit.</p> <p>d. Shall be installed in a vertical position only.</p> |
| Atmospheric Vacuum Breaker (ASSE 1001 USC FCCCHR, CSA CAN/CSA B64.1.1 | High or Low | Backsiphonage | <p>a. Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.</p> <p>b. Shall not be installed where it may be subjected to</p> |

General
Installation
Criteria

- ~~continuous pressure for more than 12 consecutive hours at any time.~~
- e. ~~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.~~

The assembly owner, when necessary, shall provide devices or structures to facilitate testing, repair, and/or maintenance and to insure 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.

(29) 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 |
|---|--------------------|---|--|
| <u>Air Gap</u> | <u>High or Low</u> | <u>Backsiphonage</u> | <u>See Table P2902.3.1 ASME A112.1.2</u> |
| Antisiphon-type Water Closet Flush Tank Ball Cock | Low | Backsiphonage | ASSE 1002 CSA CAN/ CSA-B125 |
| <u>Atmospheric Vacuum Breaker</u> | <u>High or Low</u> | <u>Backsiphonage</u> | <u>ASSE 1001 USC-FCCCHR, CSA CAN/CSA-B64.1.1</u> |
| | | a. <u>Shall not be installed in an area that could be subjected to backpressure or back drainage conditions.</u> | |
| | | b. <u>Shall not be installed where it may be subjected to continuous pressure for more than 12 consecutive hours at any time.</u> | |
| | | c. <u>Shall be installed a minimum of six inches above all downstream piping and the highest point of use.</u> | |
| | | d. <u>Shall be installed on the discharge (downstream) side of any valves.</u> | |
| | | e. <u>The AVB shall be installed in a vertical position only.</u> | |
| Dual check valve | Low | Backsiphonage | ASSE 1024 |

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

(30) ~~Section P3003.2.1 is added as follows:~~

~~Section P3003.2.1 Improper Connections. No drain, waste, or vent piping shall be drilled and tapped for the purpose of making connections.~~

(31) ~~(30)~~ In 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.

(32) ~~(31)~~ In 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.

(32) ~~In Section E3902.11 the following words are deleted:~~
~~family rooms, dining rooms, living rooms, parlors, libraries, dens, sunrooms, recreations rooms, closets, hallways, and similar rooms or areas~~

(33) Chapter 43 ~~44~~, Referenced Standards, is amended as follows:
The following reference standard is added:

TABLE

| <u>Standard reference number</u> | <u>Title</u> | <u>Referenced in code Section number</u> |
|---|--|--|
| USC-FCCCHR 9th 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 |

(34) In Chapter 43 ~~44~~, the following standard is added under NFPA as follows:

TABLE

| <u>Standard reference number</u> | <u>Title</u> | <u>Referenced in code section number</u> |
|----------------------------------|---|--|
| 720-05 | Recommended Practice Standard for the Installation of Household Carbon Monoxide (CO) Detection and Warning Equipment | R313.2 |
| 720-09 | Recommended Practice Standard for the Installation of Household Carbon Monoxide (CO) Detection and Warning Equipment | R315.3 |

(35) Appendix O of the IRC, Gray Water Recycling Systems, is deleted and replaced with Appendix C of the International Plumbing Code as amended herein.

R156-56-803. Statewide Amendments to the IPC.

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

(1) 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.

(~~1~~) (2) In Section 202, the definition for "Backflow Backpressure, Low Head" is deleted in its entirety.

(~~2~~) — ~~In Section 202, the definition for "Backsiphonage" is deleted and replaced with the following: Backsiphonage. The backflow of potentially contaminated, polluted or used water into the potable water system as a result of the pressure in the potable water system falling below atmospheric pressure of the plumbing fixtures, pools, tanks or vats connected to the potable water distribution piping.~~

(3) In 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 Subsection 19-4-104(4), Utah Code Ann. (1953), as amended.

(4) In 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").

(~~5~~) — ~~In Section 202, the following definition is added:
 Heat Exchanger (Potable Water). A device to transfer heat between two physically separated fluids (liquid or steam), one of which is potable water.~~

- (6) (5) In 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 Titles 19-4 and 19-5, Utah Code Ann. (1953), as amended and the regulations of the public health authority having jurisdiction.
- ~~(7) In Section 202, the following definition is added:
S Trap. A trap having its weir installed above the inlet of the vent connection.~~
- ~~(8) In Section 202, the definition for "Water Heater" is deleted and replaced with the following:
Water Heater. A closed vessel in which water is heated by the combustion of fuels or electricity and is withdrawn for use external to the system at pressures not exceeding 160 psig (1100 kPa (gage)), including the apparatus by which heat is generated, and all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit (99 degrees Celsius).~~
- (6) In Table 303.4, the item listed as Backflow prevention devices is modified as follows:
In the Third-Party Certified field the following is added after the word Required:
See footnote 1
In the Third-Party Tested field the following is added:
Required see footnote 1
Footnote 1 is added as follows:
1. Third party certification 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 R309-305-6.
- ~~(9) (7) Section 304.3 Meter Boxes is deleted.~~
- ~~(10) Section 305.5 is deleted and replaced with the following:
305.5 Pipes through or under footings or foundation walls. Any pipe that passes under or through a footing or through a foundation wall shall be protected against structural settlement.~~
- ~~(11) Section 305.8 is deleted and replaced with the following:
305.8 Protection against physical damage. In concealed locations where piping, other than cast-iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1 1/2 inches (38 mm) from the nearest edge of the member, the pipe shall be protected by shield plates. Protective shield plates shall be minimum of 1/16 inch thick (1.6 mm) steel, shall cover the area of the pipe where the member is notched or bored, and shall be at least the thickness of the framing member penetrated.~~
- ~~(12) Section 305.10 is added as follows:
Section 305.10 Improper Connections. No drain, waste, or vent piping shall be drilled and tapped for the purpose of making connections.~~
- ~~(13) (8) Section 311.1 is deleted.~~
- (14) (9) Section ~~312.9~~ 312.10 is deleted in its entirety and replaced with the following:
312.9 312.10 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.
- (15) (10) In Section 403.1 footnote e g is added as follows:

FOOTNOTE: e. g. When provided, in public toilet facilities there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms.

(16) ~~In Section 406.3, an exception is added as follows:~~

~~Exception: Gravity discharge clothes washers, when properly trapped and vented, shall be allowed to be directly connected to the drainage system or indirectly discharge into a properly sized catch basin, trench drain, or other approved indirect waste receptor installed for the purpose of receiving such waste.~~

(17) (11) A new section 406.4 is added as follows:

~~406.4 Automatic clothes washer metal safe pans. Metal safe Safe pans, when installed under automatic clothes washers, shall be installed in accordance with Section 504.7. ~~only be allowed to receive the unintended discharge from a leaking appliance, valve, supply hose, or overflowing waste water from the clothes washer standpipe. Clothes washer metal safe pans shall not be used as indirect waste receptors to receive the discharge of waste water from any other equipment, appliance, appurtenance, drain pipe, etc. Each safe pan shall be provided with an approved trap seal primer, conforming to ASSE 1018 or 1044 or a deep seal trap. The sides of the safe pan shall be no less than 1 1/2" high and shall be soldered at the joints to provide a water tight seal.~~~~

~~406.4.1 Safe pan outlet. The safe pan outlet shall be no less than 1 1/2" in diameter and shall be located in a visible and accessible location to facilitate cleaning and maintenance. The outlet shall be flush with the surface of the pan so as not to allow water retention within the pan.~~

(18) ~~Section 412.1 is deleted and replaced with the following:~~

~~412.1 Approval. Floor drains shall be made of ABS, PVC, cast iron, stainless steel, brass, or other approved materials that are listed for the use.~~

(19) (12) 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.

(20) ~~Section 418.1 is deleted and replaced with the following:~~

~~418.1 Approval. Sinks shall conform to ANSI Z124.6, ASME A112.19.1M, ASME A112.19.2M, ASME A112.19.3M, ASME A112.19.4M, ASME A112.19.9M, CSA B45.1, CSA B45.2, CSA B45.3, CSA B45.4 or NSF 2.~~

(21) ~~Section 504.6.2 is deleted and replaced with the following:~~

~~504.6.2 Material. Relief valve discharge piping shall be of those materials listed in Tables 605.4 and 605.5 and meet the requirements for Sections 605.4 and 605.5 or shall be tested, rated and approved for such use in accordance with ASME A112.4.1. Piping from safety pan drains shall meet the requirements of Section 804.1 and be constructed of those materials listed in Section 702.~~

(22) (13) In section Section 504.7.2 is deleted and replaced with the following is added at the end of the section:

~~504.7.2 Pan drain termination. The pan drain shall extend full size and terminate over a suitably located indirect waste receptor, floor drain or extend to the exterior of the building and terminate not less than 6 inches (152 mm) and not more than 24 inches (610 mm) above the adjacent ground surface. When permitted by the administrative authority 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.~~

(23) (14) A new 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, devices or equipment.

(24) (15) 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 Sections 73-3-1, 73-3-3, and 73-3-25, Utah Code Ann. (1953), as amended, 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.

- (25) (16) Sections 602.3.1, 602.3.2, 602.3.3, 602.3.4, 602.3.5 and 602.3.5.1 are deleted in their entirety.
- (26) (17) Section 604.4.1 is added as follows:
604.4.1 ~~Metering~~ 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.
- (27) (18) 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.
- (28) (19) 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.
- (30) (20) 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 |
|--|----------------------------|--|--|
| Air Gap (ASME A112.1.2) | High or Low | Backsiphonage | See Table 608.15.1 |
| 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" | <ul style="list-style-type: none"> 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 |

| | | | |
|---|--------------------|---|---|
| <p>Double Check Backflow Prevention Assembly (AWWA C510, USC-FCCCHR, ASSE 1015) Double Check Detector Assembly Backflow Preventer (ASSE 1048, USC-FCCCHR)</p> | <p>Low</p> | <p>Backpressure or Backsiphonage 1/2" - 16"</p> | <p>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.</p> |
| <p>Pressure Vacuum Breaker Assembly (ASSE 1020, USC-FCCCHR)</p> | <p>High or Low</p> | <p>Backsiphonage 1/2" - 2"</p> | <p>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.</p> |
| <p>Spill Resistant Vacuum Breaker (ASSE 1056, USC-FCCCHR)</p> | <p>High or Low</p> | <p>Backsiphonage 1/4" - 2"</p> | <p>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</p> |

- c. inches above all downstream piping and the highest point of use.
- d. Shall not be installed below ground or in a vault or pit.
- d. Shall be installed in a vertical position only.

- | | |
|---|--|
| <p>Atmospheric High or Backsiphonage</p> <p>Vacuum Low</p> <p>Breaker</p> <p>(ASSE 1001</p> <p>USC FCCCHR,</p> <p>CSA CAN/CSA B64.1.1</p> | <ul style="list-style-type: none"> 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. e. 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. |
|---|--|

General
Installation
Criteria

The assembly owner, when necessary, shall provide devices or structures to facilitate testing, repair, and/or maintenance and to insure 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.

(31) (21) 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 |
|---|------------------|---|---|
| Air Gap | High or Low | Backsiphonage | See Table 608.15.1 <u>ASME A112.1.2</u> |
| Antisiphon-type Water Closet Flush Tank Ball Cock | Low | Backsiphonage | ASSE 1002 CSA CAN/ CSA-B125 |
| Atmospheric Vacuum Breaker | High or Low | Backsiphonage a. Shall not be installed in an area that could be subjected to backpressure or back b. Shall not be installed where it may be subjected to continuous pressure | ASSE 1001 <u>USC-FCCCHR,</u> <u>CSA CAN/CSA-B64.1.1</u> |

- 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.

| | | | |
|---|------------------------|--|--------------------------------------|
| Dual check valve Backflow Preventer | Low | Backsiphonage or Backpressure 1/4" - 1" | ASSE 1024 |
| Backflow Preventer with Intermediate Atmospheric Vent | Low Residential Boiler | Backsiphonage or Backpressure 1/4" - 3/4" | ASSE 1012 CSA CAN/ CSA-B64.3 |
| Dual check valve type Backflow Preventer for Carbonated Beverage Dispensers/Post Mix Type | Low | Backsiphonage or Backpressure 1/4" - 3/8" | ASSE 1022 |
| Hose-connection Vacuum Breaker | Low | Backsiphonage 1/2", 3/4", 1" | ASSE 1011 CSA CAN/ CSA-B64.2 |
| Vacuum Breaker Wall Hydrants, Frost-resistant, Automatic Draining Type | Low | Backsiphonage 3/4", 1" | ASSE 1019 CSA CAN/ CSA-B64.2.2 |
| 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.
- (32) ~~In Section 608.3.1, the following sentence is added at the end of the paragraph:
All piping and hoses shall be installed below the atmospheric vacuum breaker.~~
- (29) (22) In Section 608.1 ~~608.6~~, the following sentence is added at the end of the paragraph:
~~Connection without an air gap between potable water piping and sewer connected waste shall not exist under any condition. Any connection between potable water piping and sewer-connected waste shall be protected by an air gap.~~
- (33) (23) Section 608.7 is deleted in its entirety.
- (34) ~~In Section 608.8, the following sentence is added at the end of the paragraph:
In addition each nonpotable water outlet shall be labeled with the words "CAUTION: UNSAFE WATER, DO NOT DRINK".~~
- (35) (24) In 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.
- (36) (25) 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 CAS CAN/CAS-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.
- (37) (26) Section 608.13.4 is deleted in its entirety.
- (38) (27) Section 608.13.9 is deleted in its entirety.
- (39) (28) Section 608.15.3 is deleted and replaced with the following:
608.15.3 Protection by a backflow preventer with intermediate atmospheric vent. ~~Opening and outlets~~ Connections to residential boilers only, without chemical treatment, shall be protected by a backflow preventer with an intermediate atmospheric vent.
- (40) (29) 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. ~~Ball cocks~~ 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. 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.
- (41) (30) ~~Section In section 608.15.4.2 is deleted and replaced with the following~~ is added after the first sentence:
608.15.4.2 ~~Hose connections. Sillcocks, hose bibbs, wall hydrants and other openings with a hose connection shall be protected by an atmospheric type or pressure type vacuum breaker or a permanently attached hose connection vacuum breaker. Add-on type 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.~~
- (42) (31) In 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 equipped with a backflow preventer with an intermediate atmospheric vent complying with ASSE 1012 or CSA CAN/CSA B64.3.
- (43) (32) 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.

(44) (33) In Section 608.16.4.1, add the following exception:

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.

(45) (34) 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.

(46) (35) 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.

~~(47) Section 608.16.9 is deleted and replaced with the following:~~

~~608.16.9 Dental pump equipment or water syringe. Where dental pumping equipment or water syringes 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, Section 608.13.5, Section 608.13.6 or Section 608.13.8.~~

(48) (36) 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.

(49) (37) Section 608.17 is deleted in its entirety.

(50) (38) 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 within 300 feet of the property line in accordance with Section 10-8-38, Utah Code Ann., (1953), as amended; or an approved private sewage disposal system in accordance with Rule R317-4, Utah Administrative Code, as administered by the Department of Environmental Quality, Division of Water Quality.

~~(51) Section 802.3.2 is deleted in its entirety and replaced with the following:~~

~~802.3.2 Open hub waste receptors. Waste receptors for clear water waste shall be permitted in the form of a hub or pipe extending not more than 1/2 inch above a water impervious floor and are not required to have a strainer.~~

(52) (39) 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.

- (53) (40) Section In section 904.1 is deleted and replaced with the following: where the number of inches is to be specified, 12 inches (304.8mm) is inserted.
~~904.1 Roof extensions. All open vent pipes that extend through a roof shall be terminated at least 12 inches (304.8 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extension shall be run at least 7 feet (2134 mm) above the roof.~~
- (54) (41) In Section 904.6, 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.
- (55) (42) In 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 installations when installed in accordance with Sections 702.2, 905.2 and 905.3 and provided with a wall clean out.
- (56) (43) In Section 917.8 the following exception is added:
 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.
- (44) In 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
 - (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
- (57) (45) 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.
- (58) (46) Section 1108 is deleted in its entirety.
- (59) ~~The Referenced Standard NFPA 99e-02 in Chapter 13 is deleted and replaced with NFPA 99e-05.~~
- (60) ~~The Referenced Standard NSF-2003e in Chapter 13 is amended to add Section 608.11 to the list of Referenced in code section number.~~
- (47) In Chapter 14, Referenced Standards, the following referenced standard is added under ASSE:

| <u>Standard reference number</u> | <u>Title</u> | <u>Referenced in code section number</u> |
|----------------------------------|---|--|
| 1072-2007 | <u>Performance Requirements for Barrier Type Floor Drain Trap Seal Protection Devices</u> | 1004.2 |

- (61) (48) In Chapter ~~13~~ 14, Referenced Standards, the following referenced standard is added:

TABLE

Standard

| <u>reference number</u> | <u>Title</u> | <u>Referenced in code section number</u> |
|---|--|--|
| USC- FCCCHR 9th 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 |
| (62) | Appendix C of the IPC, Gray Water Recycling Systems as amended herein shall not be adopted by any local jurisdiction until such jurisdiction has requested Appendix C as amended to be adopted as a local amendment and such local amendment has been approved as a local amendment under these rules. | |
| (63) | In jurisdictions which have adopted 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 Connection to the drainage system. All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the 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 provided for in Chapter 8. Exception: Bathtubs, showers, lavatories, clothes washers and laundry sinks shall not be required to discharge to the sanitary drainage system where such fixtures discharge to a gray water recycling system meeting all the requirements as specified in Appendix C as amended by these rules. | |
| (64) | Appendix C is deleted and replaced with the following, to be effective only in jurisdictions which have adopted Appendix C as amended as a local amendment under these rules: Appendix C, Gray Water Recycling Systems, C101 Gray Water Recycling Systems C101.1 General, recycling gray water within a building. In R1, R2 and R4 occupancies and one- and two-family dwellings, gray water recycling systems are prohibited. In commercial occupancies, recycled gray water shall only be utilized for the flushing of water closets and urinals that are located in the same building as the gray water recycling system, provided the following conditions are met: 1. Such systems comply with Sections C101.1 through C101.14 as amended by these rules. 2. The commercial establishment demonstrates that it has and will have qualified staff to oversee the gray water recycling systems. Qualified staff is defined as level 3 waste water treatment plan operator as specified by the Department of Environmental Quality. 3. Gray water recycling systems shall only receive non hazardous waste discharge of bathtubs, showers, lavatories, clothes washers and laundry sinks such as chemicals having a pH of 6.0 to 9.0, or non flammable or non combustible liquids, liquids without objectionable odors, non highly pigmented liquids, or other liquids that will not interfere with the operation of the sewer treatment facilities. C101.2 Permit required. A permit for any gray water recycling system shall not be issued until complete plans prepared by a licensed engineer, with appropriate data satisfactory to the Code Official, have been submitted and approved. No changes or connections shall be made to either the gray water recycling system or the potable water system within any site containing a gray water recycling system, without prior approved by the Code | |

- Official. A permit may also be required by the local health department to monitor compliance with this appendix for system operator standards and record keeping.
- ~~C101.3 Definition. The following term shall have the meaning shown herein.~~
- ~~GRAY WATER. Waste water discharged from lavatories, bathtubs, showers, clothes washers and laundry sinks.~~
- ~~C101.4 Installation. All drain, waste and vent piping associated with gray water recycling systems shall be installed in full compliance with this code.~~
- ~~C101.5 Gray Water Reservoir. Gray water shall be collected in an approved reservoir construction of durable, nonabsorbent and corrosion resistant materials. The reservoir shall be a closed and gas tight vessel. Gas tight access openings shall be provided to allow inspection and cleaning of the reservoir interior. 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 by the gray water, but not less than 50 gallons (189 L). The reservoir shall be sized to limit the retention time of gray water to 72 hours maximum.~~
- ~~C101.6 Filtration. Gray water entering the reservoir shall pass through an approved cartridge filter or other method approved by the Code Official.~~
- ~~C101.7 Disinfection. Gray water shall be disinfected by an approved method that employs one or more disinfectants such as chlorine, iodine or ozone. A minimum of 1 ppm free residual chlorine shall be maintained in the gray water recycling system reservoir. Such disinfectant shall be automatically dispensed. An alarm shall be provided to shut down the gray water recycling system if disinfectant levels are not maintained at the required levels.~~
- ~~C101.8 Makeup water. Potable water shall be supplied as a source of makeup water for the gray water recycling system. The potable water supply to any building with a gray water recycling system shall be protected against backflow by an RP backflow assembly installed in accordance with this code. There shall be full open valve on the makeup water supply to the reservoir. The potable water supply to the gray water reservoir shall be protected by an air gap installed in accordance with this code.~~
- ~~C101.9 Overflow. The reservoir shall be equipped with an overflow pipe of the same diameter as the influent pipe for the gray water. The overflow shall be directly connected to the sanitary drainage system.~~
- ~~C101.10 Drain. A drain shall be located at the lowest point of the reservoir and shall be directly connected to the sanitary drainage system. The drain shall be the same diameter as the overflow pipe required by Section C101.9 and shall be provided with a full open valve.~~
- ~~C101.11 Vent required. The reservoir shall be provided with a vent sized in accordance with Chapter 9 based on the size of the reservoir influent pipe.~~
- ~~C101.12 Coloring. The gray water shall be automatically dyed blue or green with a food grade vegetable dye before such water is supplied to the fixtures.~~
- ~~C101.13 Identification. All gray water distribution piping and reservoirs shall be identified as containing non-potable water. Gray water recycling system piping shall be permanently colored purple or continuously wrapped with purple colored Mylar tape. The tape or permanently colored piping shall be imprinted in black, upper case letters with the words "CAUTION: GRAY WATER, DO NOT DRINK."~~
- ~~All equipment areas and rooms for gray water recycling system equipment shall have a sign posted in a conspicuous place with the following text: TO CONSERVE WATER, THIS BUILDING USES GRAY WATER TO FLUSH TOILETS AND URINALS, DO NOT CONNECT TO THE POTABLE WATER SYSTEM. The location of the signage shall be determined by the Code Official.~~

C101.14 Removal from service. All gray water recycling systems that are removed from service shall have all connections to the reservoir capped and routed back to the building sewer. All gray water distribution lines shall be replaced with new materials.

C201.1 Outside the building. Gray water reused outside the building shall comply with the requirements of the Department of Environmental Quality Rule R317.

(49) Appendix C of the IPC, Gray Water Recycling Systems, is deleted and replaced with the following Appendix C, Gray Water Recycling Systems, which may be adopted by local jurisdictions only as provided under these rules:

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:

(a) 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 show 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.

R156-56-804. Statewide Amendments to the IMC.

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

- (1) Section 1101.10 is deleted in its entirety.

R156-56-805. Statewide Amendments to the IFGC.

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

- ~~(1) The following paragraph is added at the end of Section 305.1~~
~~305.1 General. After natural gas, space and water heating appliances have been adjusted for altitude and the Btu content of the natural gas, the installer shall apply a sticker in a visible location indicating that the proper adjustments to such appliances have been made. The adjustments for altitude and the Btu content of the natural gas shall be done in accordance with the manufacturer's installation instructions and the gas utility's approved practices.~~
- (2) (1) Chapter 4, Section 401 General, a new section 401.9 is added as follows:
401.9 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.

R156-56-806. Statewide Amendments to the NEC.

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

- (1) During the period of time when the adopted IRC has not yet incorporated the latest residential electrical provisions contained in the adopted NEC, the IRC provisions shall prevail as the adopted residential electrical standards applicable to installations applicable under the IRC. All other installations shall comply with the adopted NEC.
- (2) In Section 310.15(B)(6) 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).
- (3) In Section 338.10(B)(4)(a) the following words are added at the end of the first sentence after Section 334: excluding Section 334.80.

R156-56-807. Statewide Amendments to the IECC.

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

- (1) In Section 504.4, the following exception is added:
Exception: Heat traps, other than the arrangement of piping and fittings, shall be prohibited unless a means of controlling thermal expansion can be ensured as required in the IPC Section 607.3.

R156-56-808. Installation and Safety Requirements for Mobile Homes Built Prior to June 15, 1976.

- (1) Mobile homes built prior to June 15, 1976 which are subject to relocation, building alteration, remodeling or rehabilitation shall comply with the following:

- (a) Exits and egress windows
- (i) 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, 3283 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.
- (ii) 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.
- (b) Flame spread
- (i) 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.
- (ii) 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).
- (c) Smoke detectors
- (i) 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.
- (ii) 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.
- (d) Solid-fuel-burning stoves/fireplaces
- (i) 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).
 - (ii) 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.
 - (A) 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.
 - (B) 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.
 - (C) 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.
- (e) Electrical wiring systems
- (i) 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.
 - (ii) 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 National Electrical Code (NEC) Section 110-14.

- (f) Replacement furnaces and water heaters
 - (i) 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.
 - (ii) 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).
 - (iii) 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.
 - (A) 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.
 - (B) 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.

R156-56-820. Statewide Amendments to the IEBC.

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

- (1) In Section 101.5 the exception is deleted.
- (2) ~~Section R106.3.2 is deleted and replaced with the following:~~
~~R106.3.2 Previous approval. If a lawful permit has been issued and the construction of which has been pursued in good faith within 180 days after the effective date of the code and has not been abandoned, then the construction may be completed under the code in effect at the time of the issuance of the permit.~~
- (3) (2) In Section 202 the definition for existing buildings is deleted and replaced with the following:
EXISTING BUILDING. A building lawfully erected prior to January 1, 2002 under a prior adopted code, or one which is deemed a legal non-conforming building by the code official, and one which is not a dangerous building.
- (3) In Section 605.1, Exception number 3, the following is added at the end of the sentence:
“unless undergoing a change of occupancy classification.”
- (4) Section ~~606.2.2~~ 606.2.1 is deleted and replaced with the following:
~~602.2.2~~ 606.2.1 Parapet bracing, wall anchors, and other appendages. Buildings constructed prior to 1975 shall have parapet bracing, wall anchors, and appendages such as cornices, spires, towers, tanks, signs, statuary, etc. evaluated by a licensed engineer when said building is undergoing reroofing, or alteration of or repair to said feature. Such parapet bracing, wall anchors, and appendages shall be evaluated in accordance with the reduced International Building Code level seismic forces as specified in IEBC Section ~~506.1.1.3~~ 101.5.4.2 and design procedures of Section ~~506.1.1.4~~ 101.5.4. 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.
- (5) ~~Section 705.3.1.2 is deleted and replaced with the following:~~
- ~~705.3.1.2 Fire escapes required. When more than one exit is required, an existing fire escape complying with Section 705.3.1.2.1 shall be accepted as providing one of the required means of egress.~~
- ~~705.3.1.2.1 Fire escape access and details. Fire escapes shall comply with all of the following requirements:~~
- ~~1. Occupants shall have unobstructed access to the fire escapes without having to pass through a room subject to locking.~~
 - ~~2. Access to an existing fire escape shall be through a door, except that windows shall be permitted to provide access from single dwelling units or sleeping units in Group R-1, R-2, and I-1 occupancies or to provide access from spaces having a maximum occupant load of 10 in other occupancy classifications.~~
 - ~~3. Existing fire escapes shall be permitted only where exterior stairs cannot be utilized because of lot lines limiting the stair size or because of the sidewalks, alleys, or roads at grade level.~~
 - ~~4. Openings within 10 feet (3048 mm) of fire escape stairs shall be protected by fire assemblies having minimum 3/4 hour fire resistance ratings.
Exception: Opening protection shall not be required in buildings equipped throughout with an approved automatic sprinkler system.~~
 - ~~5. In all buildings of Group E occupancy, up to and including the 12th grade, buildings of Group I occupancy, rooming houses, and childcare centers, ladders of any type are prohibited on fire escapes used as a required means of egress.~~
- (6) ~~Section 906.1 is deleted and replaced with the following:~~
- ~~906.1 General. Accessibility in portions of buildings undergoing a change of occupancy classification shall comply with Section 605 and 912.8.~~
- (7) (5) Section 907.3.1 is deleted and replaced with the following:
- 907.3.1 Compliance with the International Building Code. When a building or portion thereof is subject to a change of occupancy such that a change in the nature of the occupancy results in a higher seismic occupancy based on Table 1604.5 of the International Building Code; or where such change of occupancy results in a reclassification of a building to a higher hazard category as shown in Table 912.4; or where a change of a Group M occupancy to a Group A, ETM E, F, M, R-1, R-2, or R-4 occupancy with two-thirds or more of the floors involved in Level 3 alteration work; or when such change of occupancy results in a design occupant load increase of 100% or more, the building shall conform to the seismic requirements of the International Building Code for the new seismic use group.
- Exceptions 1-4 remain unchanged.
5. Where the design occupant load increase is less than 25 occupants and the occupancy category does not change.
- (8) (6) In Section 912.7.3 exception 2 is deleted.
- (9) (7) In Section 912.8 number 7 is added as follows:
7. When a change of occupancy in a building or portion of a building results in a Group R-2 occupancy, not less than 20 percent of the dwelling or sleeping units shall be Type B dwelling or sleeping units. These dwelling or sleeping units may be located on any floor

of the building provided with an accessible route. Two percent, but not less than one unit, of the dwelling or sleeping units shall be Type A dwelling units.

R156-56-901. Local Amendments to the IBC.

The following are adopted as amendments to the IBC to be applicable to the following jurisdictions:

(1) City of Farmington:

(a) A new Section ~~(F)903.2.14~~ (F) 903.2.13 is added as follows:

~~(F)903.2.14~~ (F) 903.2.13 Group R, Division 3 Occupancies. An automatic sprinkler system shall be installed throughout every dwelling in accordance with NFPA 13-D, when any of the following conditions are present:

1. The structure is over two stories high, as defined by the building code;
2. The nearest point of structure is more than 150 feet from the public way;
3. The total floor area of all stories is over 5,000 square feet (excluding from the calculation the area of the basement and/or garage); or
4. The structure is located on a street constructed after March 1, 2000 that has a gradient over 12% and, during fire department response, access to the structure will be gained by using such street. (If the access is intended to be from a direction where the steep gradient is not used, as determined by the Chief, this criteria shall not apply).

Such sprinkler system shall be installed in basements, but need not be installed in garages, under eaves or in enclosed attic spaces, unless required by the Chief.

(b) A new Section ~~907.20~~ 907.9 is added as follows:

~~907.20~~ 907.9 Alarm Circuit Supervision. Alarm circuits in alarm systems provided for commercial uses (defined as other than one- and two-family dwellings and townhouses) shall have Class "A" type of supervision. Specifically, Type "B" or End-of-line resistor and horn supervised systems are not allowed.

(c) NFPA ~~13-02~~ 13-07 is amended to add the following new sections:

6.8.6 FDC Security Locks Required. All Fire Department connections installed for fire sprinkler and standpipe systems shall have approved security locks.

6.10 Fire Pump Disconnect Signs. When installing a fire pump, red plastic laminate signs shall be installed in the electrical service panel, if the pump is wired separately from the main disconnect. These signs shall state: "Fire Pump Disconnect ONLY" and "Main Breaker DOES NOT Shut Off Fire Pump".

~~14.1.1.5~~ 22.1.6 Plan Preparation Identification. All plans for fire sprinkler systems, except for manufacturer's cut sheets of equipment shall include the full name of the person who prepared the drawings. When the drawings are prepared by a registered professional engineer, the engineer's signature shall also be included.

~~15.1.2.5~~ 22.2.2.3 Verification of Water Supply:

~~15.1.2.5.1~~ 22.2.2.3.1 Fire Flow Tests. Fire flow tests for verification of water supply shall be conducted and witnessed for all applications other than residential unless directed otherwise by the Chief. For residential water supply, verification shall be determined by administrative procedure.

~~15.1.2.5.2~~ 22.2.2.3.2 Accurate and Verifiable Criteria. The design calculations and criteria shall include an accurate and verifiable water supply.

~~17.8.4~~ 24.2.3.7 Testing and Inspection of Systems. Testing and inspection of sprinkler systems shall include, but are not limited to:

Commercial:

FLUSH-Witness Underground Supply Flush;

ROUGH Inspection-Installation of Riser, System Piping, Head Locations and all Components, Hydrostatic Pressure Test;

FINAL Inspection-Head Installation and Escutcheons, Inspectors Test Location and Flow, Main Drain Flow, FDC Location and Escutcheon, Alarm Function, Spare Parts, Labeling of Components and Signage, System Completeness, Water Supply Pressure Verification, Evaluation of Any Unusual Parameter.

- (2) City of North Salt Lake
 A new Section ~~(F)903.2.14~~ (F) 903.2.13 is added as follows:
~~(F)903.2.14~~ (F)903.2.13 Group R, Division 3 Occupancies. An automatic sprinkler system shall be installed throughout every dwelling in accordance with NFPA 13-D, when the following condition is present:
1. The structure is over 6,200 square feet.
 Such sprinkler system shall be installed in basements, but need not be installed in garages, under eaves, or in enclosed attic spaces, unless required by the fire chief.
- (3) Park City Corporation
In Section 3409.2 Exception 3 is modified to read as follows:
 3. Designated as historic under a state or local historic preservation program.
- ~~(3)~~ (4) Park City Corporation and Park City Fire District:
- (a) Section (F)903.2 is deleted and replaced with the following:
 (F)903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the location described in this section.
 All new construction having more than 6,000 square feet on any one floor, except R-3 occupancy.
 All new construction having more than two (2) stories, except R-3 occupancy.
 All new construction having three (3) or more dwelling units, including units rented or leased, and including condominiums or other separate ownership.
 All new construction in the Historic Commercial Business zone district, regardless of occupancy.
 All new construction and buildings in the General Commercial zone district where there are side yard setbacks or where one or more side yard setbacks is less than two and one half (2.5) feet per story of height.
 All existing building within the Historic District Commercial Business zone.
 - (b) In Table 1505.1, the following is added as footnotes d and e:
 - d. Wood roof covering assemblies are prohibited in R-3 occupancies in areas with a combined rating of more than 11 using Tables 1505.1.1 and 1505.1.2 with a score of 9 for weather factors.
 - e. Wood roof covering assemblies shall have a Class A rating in occupancies other than R-3 in areas with a combined rating of more than 11 using Tables 1505.1.1 and 1505.1.2 with a score of 9 for weather factors. The owner of the building shall enter into a written and recorded agreement that the Class A rating of the roof covering assembly will not be altered through any type of maintenance process.

TABLE 1505.1.1
 WILDFIRE HAZARD SEVERITY SCALE

| RATING | SLOPE | VEGETATION |
|--------|---------------------------|-----------------------------|
| 1 | less than or equal to 10% | Pinion-juniper |
| 2 | 10.1 - 20% | Grass-sagebrush |
| 3 | greater than 20% | Mountain brush or softwoods |

TABLE 1505.1.2
PROHIBITION/ALLOWANCE OF WOOD ROOFING

| Rating | R-3 Occupancy | All Other Occupancies |
|-----------------------------|--|---|
| less than or equal to 11 | wood roof covering assemblies per Table 1505.1 are allowed | wood roof covering assemblies per Table 1505.1 are allowed |
| greater than or equal to 12 | wood roof covering is prohibited | wood roof covering assemblies with a Class A rating are allowed |

(c) Appendix C is adopted.

(5) Salt Lake City

(a) In Section 1008.1.9.7 an exception is added at the end as follows:

Exception: In International Airport areas designated as Group "A" Occupancies where national security interests are present, the use of panic hardware with delayed egress is allowed when all provision of 1008.1.9.7 are met and under item #4 1 second is changed to 2 seconds.

(4) (6) Sandy City

(a) Section (F)~~903.2.14~~ 903.2.13 is added as follows:

(F)~~903.2.14~~ 903.2.13 An automatic sprinkler system shall be installed in accordance with NFPA 13 throughout buildings containing all occupancies where fire flow exceeds 2,000 gallons per minute, based on Table B105.1 of the ~~2006~~ 2009 International Fire Code. Exempt locations as indicated in Section 903.3.1.1.1 are allowed.

Exception: Automatic fire sprinklers are not required in buildings used solely for worship, Group R Division 3, Group U occupancies and buildings complying with the International Residential Code unless otherwise required by the International Fire Code.

(b) Appendix L is added to the IBC and adopted as follows:

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

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

(i) In Section 504 of the IWUIC Class I IGNITION-RESISTANT CONSTRUCTION a new Section 504.1.1 is added as follows:

504.1.1 General. Subsections 504.5, 504.6, and 504.7 shall only be required on the exposure side of the structure, as determined by the Fire Marshal, where defensible space is less than 50 feet as defined in Section 603 of the 2006 International Wildland-Urban Interface Code.

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

R156-56-902. Local Amendments to the IRC.

The following are adopted as amendments to the IRC to be applicable to the following jurisdictions:

- (1) All local amendments to the IBC under Section R156-56-901, the NEC under Section R156-56-906, the IPC under Section R156-56-903, the IMC under Section R156-56-904, the IFGC under Section R156-56-905 and the IECC under Section R156-56-907 which may be applied to detached one and two family dwellings and multiple single family dwellings shall be applicable to the corresponding provisions of the IRC for the local jurisdiction to which the local amendment has been made. ~~All references to the ICC Electrical Code are deleted and replaced with the National Electrical Code adopted under Section R156-56-701(1)(b).~~
- (2) City of Farmington:
 - ~~R325~~ R324 Automatic Sprinkler Systems.
 - (a) Sections ~~R325.1~~ R324.1 and ~~R325.2~~ R324.2 are added as follows:
 - ~~R325.1~~ R324.1 When required. An automatic sprinkler system shall be installed throughout every dwelling in accordance with NFPA 13-D, when any of the following conditions are present:
 1. the structure is over two stories high, as defined by the building code;
 2. the nearest point of structure is more than 150 feet from the public way;
 3. the total floor area of all stories is over 5,000 square feet (excluding from the calculation the area of the basement and/or garage); or
 4. the structure is located on a street constructed after March 1, 2000 that has a gradient over 12% and, during fire department response, access to the structure will be gained by using such street. (If the access is intended to be from a direction where the steep gradient is not used, as determined by the Chief, this criteria shall not apply).
 - ~~R325.2~~ R324.2 Installation requirements and standards. Such sprinkler system shall be installed in basements, but need not be installed in garages, under eaves or in enclosed attic spaces, unless required by the Chief. Such system shall be installed in accordance with NFPA 13-D.
 - (b) In Chapter ~~43~~ 44, Referenced Standards, the following NFPA referenced standards are added as follows:

TABLE

| | |
|---------------------------------|--|
| ADD | |
| 13D-02 <u>13D-07</u> | Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes, as amended by these rules |
| 13R-02 <u>13R-07</u> | Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height |
| 101-03 | Life Safety Code |

- (c) NFPA ~~13D-02~~ 13D-07 is amended to add the following new sections:
 - 1.15 Reference to NFPA 13-D. All references to NFPA 13-D in the codes, ordinances, rules or regulations governing NFPA 13-D systems shall be read to refer to "modified NFPA 13-D" to reference the NFPA 13-D as amended by additional regulations adopted by Farmington City.
 - 4.6 Testing and Inspection of Systems. Testing and inspection of sprinkler systems shall include, but are not limited to:

Residential:

ROUGH Inspection-Verify Water Supply Piping Size and Materials, Installation of Riser, System Piping, Head Locations and all Components, Hydrostatic Pressure Test.

FINAL Inspection-Inspectors Test Flow, System Completeness, Spare Parts, Labeling of Components and Signage, Alarm Function, Water Supply Pressure Verification.

5.2.2.3 Exposed Piping of Metal. Exposed Sprinkler Piping material in rooms of dwellings shall be of Metal.

EXCEPTIONS:

- a. CPVC Piping is allowed in unfinished mechanical and storage rooms only when specifically listed for the application as installed.
- b. CPVC Piping is allowed in finished, occupied rooms used for sports courts or similar uses only when the ceiling/floor framing above is constructed entirely of non-combustible materials, such as a concrete garage floor on metal decking.

5.2.2.4 Water Supply Piping Material. Water Supply Piping from where the water line enters the dwelling adjacent to and inside the foundation to the fire sprinkler contractor point-of-connection shall be metal, suitable for potable plumbing systems. See Section 7.1.4 for valve prohibition in such piping. Piping downstream from the point-of-connection used in the fire sprinkler system, including the riser, shall conform to NFPA 13-D standards.

5.4 Fire Pump Disconnect Signs. When installing a Fire Pump, Red Plastic Laminate Signs shall be installed in the electrical service panel, if the pump is wired separately from the main disconnect. These signs shall state: "Fire Pump Disconnect ONLY" and "Main Breaker DOES NOT Shut Off Fire Pump".

7.1.4 Valve Prohibition. NFPA 13-d, Section 7.1 is hereby modified such that NO VALVE is permitted from the City Water Meter to the Fire Sprinkler Riser Control.

7.6.1 Mandatory Exterior Alarm. Every dwelling that has a fire sprinkler system shall have an exterior alarm, installed in an approved location. The alarm shall be of the combination horn/strobe or electric bell/strobe type, approved for outdoor use.

8.1.05 Plan Preparation Identification. All plans for fire sprinkler systems, except for manufacturer's cut sheets of equipment, shall include the full name of the person who prepared the drawings. When the drawings are prepared by a registered professional engineer, the engineer's signature shall also be included.

8.7 Verification of Water Supply:

8.7.1 Fire Flow Tests: Fire Flow Tests for verification of Water Supply shall be conducted and witnesses for all applications other than residential, unless directed otherwise by the Chief. For residential Water Supply, verification shall be determined by administrative procedure.

8.7.2 Accurate and Verifiable Criteria. The design calculations and criteria shall include an accurate and verifiable Water Supply.

(3) Morgan City Corp:

In Section R105.2 Work Exempt From Permit, the following is added:

10. Structures intended to house farm animals, or for the storage of feed associated with said farm animals when all the following criteria is met:

- a. The parcel of property involved is zoned for the keeping of farm animals or has grand fathered animal rights.

- b. The structure is setback not less than 50 feet from the rear or side of dwellings, and not less than 10 feet from property lines and other structures.
- c. The structure does not exceed 1000 square feet of floor area, and is limited to 20 feet in height. Height is measured from the average grade to the highest point of the structure.
- d. Before construction, a site plan is submitted to, and approved by the building official.

Electrical, plumbing, and mechanical permits shall be required when that work is included in the structure.

(4) Morgan County:

In Section R105.2 Work Exempt From Permit, the following is added:

10. Structures intended to house farm animals, or for the storage of feed associated with said farm animals when all the following criteria is met:

- a. The parcel of property involved is zoned for the keeping of farm animals or has grand fathered animal rights.
- b. The structure is set back not less than required by the Morgan County Zoning Ordinance for such structures, but not less than 10 feet from property lines and other structures.
- c. The structure does not exceed 1000 square feet of floor area, and is limited to 20 feet in height. Height is measured from the average grade to the highest point of the structure.
- d. Before construction, a Land Use Permit must be applied for, and approved, by the Morgan County Planning and Zoning Department.

Electrical, plumbing, and mechanical permits shall be required when that work is included in the structure.

(5) City of North Salt Lake:

A new Section R324 us added as follows:

Section R324 Automatic Sprinkler System Requirements.

~~Sections R325.1 and R325.2 are added as follows:~~

~~R325.1~~ R324.1 When Required. An automatic sprinkler system shall be installed throughout every dwelling when the following condition is present:

- 1. The structure is over 6,200 square feet.

~~R325.2~~ R324.2 Installation requirements and standards. Such sprinkler system shall be installed in basements, but need not be installed in garages, under eaves, or in enclosed attic spaces, unless required by the fire chief. Such system shall be installed in accordance with NFPA 13-D.

(6) Park City Corporation:

Appendix P of the 2006 IRC is hereby adopted.

(7) Park City Corporation and Park City Fire District:

- (a) Section R905.7 is deleted and replaced with the following:

R905.7 Wood shingles. The installation of wood shingles shall comply with the provisions of this section.

Wood roof covering is prohibited in areas with a combined rating of more than 11 using the following tables with a score of 9 for weather factors.

TABLE
WILDFIRE HAZARD SEVERITY SCALE

| RATING | SLOPE | VEGETATION |
|--------|---------------------------|-----------------|
| 1 | less than or equal to 10% | Pinion-juniper |
| 2 | 10.1 - 20% | Grass-sagebrush |

3 greater than 20% Mountain brush or softwoods

PROHIBITION/EXEMPTION TABLE

| RATING | WOOD ROOF PROHIBITION |
|-----------------------------|---------------------------|
| less than or equal to 11 | wood roofs are allowed |
| greater than or equal to 12 | wood roofs are prohibited |

- (b) Section R905.8 is deleted and replaced with the following:
 R905.8 Wood Shakes. The installation of wood shakes shall comply with the provisions of this section. Wood roof covering is prohibited in areas with a combined rating of more than 11 using the following tables with a score of 9 for weather factors.

TABLE
 WILDFIRE HAZARD SEVERITY SCALE

| RATING | SLOPE | VEGETATION |
|--------|---------------------------|-----------------------------|
| 1 | less than or equal to 10% | Pinion-juniper |
| 2 | 10.1 - 20% | Grass-sagebrush |
| 3 | greater than 20% | Mountain brush or softwoods |

PROHIBITION/EXEMPTION TABLE

| RATING | WOOD ROOF PROHIBITION |
|-----------------------------|---------------------------|
| less than or equal to 11 | wood roofs are allowed |
| greater than or equal to 12 | wood roofs are prohibited |

- (c) Appendix K is adopted.
- (8) Sandy City
 A new Section ~~R325~~ R324 is added to the IRC as follows:
 Section ~~R325~~ R324 IGNITION RESISTANT CONSTRUCTION
~~R325.1~~ R324.1 General. Buildings and structures constructed in areas designated as Wildland-Urban Interface Areas by Sandy City shall be constructed using ignition resistant construction as determined by the Fire Marshal. Section 502 of the 2006 International Wildland-Urban Interface Code (IWUIC), as promulgated by the International Code Council, shall be used to determine Fire Hazard Severity. The provisions listed in Chapter 5 of the 2006 IWUIC, as modified herein, shall be used to determine the requirements for Ignition Resistant Construction.
 - (i) In Section 504 of the IWUIC Class I IGNITION-RESISTANT CONSTRUCTION a new Section 504.1.1 is added as follows:
 504.1.1 General. Subsections 504.5, 504.6, and 504.7 shall only be required on the exposure side of the structure, as determined by the Fire Marshal, where defensible space is less than 50 feet as defined in Section 603 of the 2006 IWUIC.
 - (ii) In Section 505 of the IWUIC Class 2 IGNITION-RESISTANT CONSTRUCTION Subsections 505.5 and 505.7 are deleted.

R156-56-903. Local Amendments to the IPC.

The following are adopted as amendments to the IPC to be applicable to the following jurisdictions:

- (1) Salt Lake City
 Appendix C of the IPC as specified and amended in R156-56-803(62), (63) and (64) (49)
- (2) South Jordan
 (a) Section ~~312.9.2~~ 312.10.2 is deleted and replaced with the following:

~~312.9.2~~ 312.10.2 Testing. Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, pressure vacuum breaker assemblies, reduced pressure detector fire protection backflow prevention assemblies, double check detector fire protection backflow prevention assemblies, hose connection backflow preventers, and spill-proof vacuum breakers shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The testing procedure shall be performed in accordance with one of the following standards: ASSE 5013, ASSE 5015, ASSE 5020, ASSE 5047, ASSE 5048, ASSE 5052, ASSE 5056, CSA B64.10 or CSA B64.10.1. Assemblies, other than the reduced pressure principle assembly, protecting lawn irrigation systems that fail the annual test shall be replaced with a reduced pressure principle assembly.

- (b) Section 608.16.5 is deleted and replaced with the following:
608.16.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by a reduced pressure principle backflow preventer.

R156-56-904. Local Amendment to the IMC.

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

None.

R156-56-905. Local Amendment to the IFGC.

The following are adopted as amendments to the IFGC to be applicable to the following jurisdictions:

None.

R156-56-906. Local Amendment to the NEC.

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

None.

R156-56-907. Local Amendment to the IECC.

The following are adopted as amendments to the IECC to be applicable to the following jurisdictions:

None.

R156-56-920. Local Amendment to the IEBC.

The following are adopted as amendments to the IEBC to be applicable to the following jurisdictions:

None.

Part 2

**Summary of Recommended Building Code and
Amendment Changes**

Under

UTAH UNIFORM BUILDING STANDARDS ACT

(as of 9/14/09)

Summary of Recommended Building Code and Amendment Changes Under
Uniform Building Standards Act
(Construction Codes)

This document is a summary of the proposed changes to the updated 2009 national codes and the amendments to those codes as approved by the Uniform Building Code Commission for publication for consideration at a public hearing to be held on October 15, 2009 at 9:00 AM in Room 1112 of the State Office Building, Salt Lake City, Utah.

These recommendations are subject to change after the public hearing before a final recommendation is made by the Uniform Building Code Commission to the Legislature.

This proposal recommends that the 2009 codes and amendments be adopted effective July 1, 2010.

The proposed changes are written with strikethrough and underline as if the changes are being made to existing rules, which previously adopted the building codes. The changes are shown in this format for easier identification of items that are recommended for change. It is anticipated that the Office of Legislative Research and General Counsel will convert the rule format shown to another format which can then be adopted by a the Legislature.

Overall Summary of Proposed Changes:

Pending the results of the public hearing, the Uniform Building Code Commission is recommending that most of the current amendments under the 2006 codes be carried forward as amendments to the updated 2009 codes. In some cases, technical changes such as numbering or rewording have been needed to coordinate with the 2009 edition of the national codes. In most of these cases, keeping the prior amendments does not substantially change the relevant construction standards.

Pending the results of the public hearing, the Uniform Building Code Commission is recommending that several current amendments be deleted. Most of these deletions are being recommended because the 2009 codes now adequately address the reason for the Utah amendment. Most of these deletions do not substantially change the relevant construction standards.

Several new amendments to the 2009 national codes are also being recommended. Most of these new amendments delete or replace new provisions contained in the 2009 codes, which the Uniform Building Code Commission has recommended to not be included in the updated Utah building codes.

These items recommended for deletion from the 2009 codes include the requirements:

- that fire sprinklers be installed in all residences;
- that arc fault circuit interrupters be installed throughout a residence;
- that electrical feeder lines have increased size requirements;
- that live load signs be posted in some buildings;
- that new guard rail height requirements be increased around fixed seating on decks;
- that residential energy efficiency requirements be increased;
- that luminous egress markings be placed in certain buildings;
- that locking type caps be placed on certain refrigerant equipment;
- that window location and opening restrictions be increased.

Some new amendments to the 2009 national codes are also being recommended. Most of these changes reduce burdensome requirements that have been added to the 2009 version of the national code to a more appropriate requirement level.

Summary of Individual Amendments:

Amendments to the specific editions of Uniform Building Standards:

R156-56-701(1), (2), and (3):

The changes in these subsections recommend changing the adopted codes from the 2006 International Code Council (ICC Codes) to the 2009 ICC Codes, together with update to the latest (2006) standard for Seismic Rehabilitation of Existing Building; with a recommended effective date of July 1, 2010.

R156-56-701[prior (3) deleted]:

This subsection (continuation of prior code until amended or appealed) is being deleted because the statute as modified by SB 211 addresses this issue and therefore this part of the existing rule is no longer needed.

R156-56-701(4):

The changes in this subsection are technical corrections to reference the International Residential Code rather than the International Building Code. The International Residential Code should have been referred to for these manufactured housing standards.

R156-56-701(7):

This subsection needs to be changed to reflect that subsection 58-56-4(2) controls the extent of applicability of the adopted codes. The prior reference to rulemaking is now inappropriate since the legislature now adopts the codes rather than the Uniform Building Code Commission and DOPL by rule. This amendment is needed because the national codes often contain administrative provisions which the Utah legislature has designated to be established and performed by the local compliance agencies, such as establishing a method of appeal and establishing the building inspection departments with authority over construction projects. The adopted codes may also contain provisions that involve requirements for existing buildings, which exceed the scope of subsection 58-56-4(2) or reference other codes which have not been adopted in Utah.

Amendments to the International Building Code:

R156-56-801 [prior (1) and (2) deleted]:

These amendments (deleting references to the ICC Electrical Code) are no longer needed because the International Building Code no longer references the ICC Electrical Code, which was not adopted in Utah.

R156-56-801(1) - section 106:

This amendment is recommended because this new section of the International Building Code was determined not to be necessary. The new code provision that was deleted required signs stating that engineering live loads must be posted throughout a building. The relevance or meaning of this information would not generally be known to most persons other than engineers. If needed, an engineer could determine the information from the building plans.

R156-56-801 [prior (3) deleted]:

This amendment (codes applicable to a project started before a new code is adopted) is no longer needed because it is adequately addressed in the 2009 codes.

R156-56-801(2) - section 110:

This subsection (weather resistant wall envelope and flashing) keeps the existing amendment with renumbering to coordinate with a change of numbering in the 2009 codes and makes technical language changes.

R156-56-801(3) - section 115.1:

This subsection (authority to stop work when work is dangerous, unsafe or does not follow codes) keeps the existing amendment with renumbering to coordinate with change of numbering in the 2009 codes.

R156-56-801(4) - section 202;

R156-56-801(5) - section 202;

R156-56-801(6) - section 304;

R156-56-801(7) - section 305.2;

R156-56-801(8) - section 308;

R156-56-801(9) - section 308.2;

R156-56-801(10) - section 308.3;

R156-56-801(11) - section 308.3.1;

R156-56-801(12) - section 308.5;

R156-56-801(13) - section 308.5.2;

R156-56-801(14) - section 310.1;

R156-56-801(15) - section 310.1;

R156-56-801(16) - section 310.1;

R156-56-801(17) - section 310.1;

R156-56-801(18) - section 310.2;

R156-56-801(20) - section 422.1;

R156-56-801(21) - section 422;

R156-56-801(22) - section 424;

R156-56-801(23) - section 504.2;

R156-56-801(24) - Table 508.4; and

R156-56-801(25) – section 707.5:

These subsections keep existing amendments, make technical changes or create new amendments needed to coordinate with requirements under other laws and rules. These amendments are part of coordinating requirements with federal laws, and statutes and rules under the Utah Department of Health and the Utah Department of Human Services, which regulate assisted living care facilities, health care facilities, ambulatory health care facilities, congregate living facilities, child care facilities and similar facilities.

R156-56-801(19) – section 403.5..5:

This amendment is deleting a new requirement in the 2009 code requiring luminous egress pathway markings that were found to be too burdensome and costly to justify.

R156-56-801(26) - section (F)902:

This is an existing amendment (clarifying requirements for record drawings) that is recommended to be carried forward.

R156-56-801(27) - section (F)903.2.2:

This is a new technical amendment (group B ambulatory health care facilities) that is recommended in order to clarify the wording in this section of the code. This amendment is part of coordinating requirements with federal laws or statutes and rules under the Utah Department of Health and the Utah Department of Human Services, which regulates assisted living care facilities, health care facilities, child care facilities and similar facilities.

R156-56-801(28) - section (F)903.2.4:

This subsection (group F-1 fire areas) keeps the existing amendment with renumbering to coordinate with the change of numbering in the 2009 code. The wording has been modified to coordinate with wording in the 2009 code.

R156-56-801(29) - section (F)903.2.7:

This subsection (Group M fire areas) keeps the existing amendment with technical changes and renumbering to coordinate with the change of numbering in the 2009 code.

R156-56-801(30) - section (F)903.2.8:

This subsection (Group R fire areas) keeps the existing amendment with renumbering to coordinate with the change of numbering in the 2009 code.

R156-56-801(31) - section (F)903.2.9:

This subsection (Group S-1 fire areas) keeps the existing amendment with renumbering to coordinate with the change of numbering in the 2009 code. It has been modified in order to coordinate with wording in the 2009 code.

R156-56-801(32) - section (F)903.2.10:

This subsection (group S-2 fire areas) keeps the existing amendment with technical changes and renumbering to coordinate with the change of numbering in the 2009 code.

R156-56-801(33) - section (F)903.2.10.1

This subsection (fire areas over 5,000 square feet) keeps the existing amendment with renumbering to coordinate with the change of numbering in the 2009 code.

R156-56-801(34) - section (F)903.2.11

This subsection (commercial cooking systems) modifies and keeps the existing amendment with renumbering to coordinate with the change of numbering in the 2009 code.

R156-56-801(35) - subsections (F)904.11.3 to (F)904.11.4.1:

This is a new amendment (commercial cooking systems) deleting sections of the code that are not needed and coordinates provisions with the amendment under section (F)903.2.11.

R156-56-801 [prior (26) deleted]:

This amendment (smoke and carbon monoxide alarms) is no longer needed as smoke alarms are adequately addressed in the 2009 code and the carbon monoxide alarms provisions are simplified and carried forward under the amendment to section (F)907.9.

R156-56-801(36) - section (F)907.9:

This subsection (carbon monoxide alarms) modifies, simplifies and keeps the existing amendment and is renumbered to coordinate with the change of the numbering in the 2009 code.

R156-56-801[prior (27), (28), and (29) deleted]:

These amendments (areas or refuge and controlled egress) are no longer needed as they are adequately addressed in the 2009 code.

R156-56-801(37) - section 1008.1.9.6:

This is a new amendment (group I-1 and I-2 areas) that is recommended to coordinate with the statute and rule requirements of the Utah Department of Health and the Utah Department of Human Services.

R156-56-801(38) - section 1009.4.2:

This subsection (stair geometry) keeps the existing amendment with renumbering to coordinate with change of numbering in the 2009 code. This is the stair rise and run amendment that was hotly debated several years ago. It was decided at that time to stay with the stair requirement that has been in Utah codes for quite some time rather than to change to new requirements placed in the International Building Code.

R156-56-801(39) - section 1009.12:

This subsection (handrail requirements) keeps the existing amendment with renumbering to coordinate with the change of numbering in the 2009 code.

R156-56-801[prior (32) deleted]:

This subsection (non circular handrail requirements) is recommended to be deleted as it is adequately addressed in the 2009 code.

R156-56-801(40) - section 1013.2:

This is a new amendment that is being recommended to delete additional guard height requirements when adjacent fixed seating is installed. This requirement in the 2009 code was found to be too restrictive.

R156-56-801(41) - section 1013.2:

This subsection (minimum guard heights) keeps the existing amendment with the exception renumbered to coordinate with a change in the 2009 code.

R156-56-801(42) - section 1015.2.2:

This subsection (exit doorway spacing) keeps an existing amendment.

R156-56-801(43) - section 1024:

This is a new amendment recommending the deletion of a new requirement in the 2009 code because it was determined that the requirement is too costly and too burdensome. This section of the code was a new section requiring luminous egress path markings be placed in certain buildings.

R156-56-801(44) - section 1109.7.1:

This subsection (platform lift requirements) keeps the existing amendment.

R156-56-801(45) - section 1208.4 :

This subsection (minimum living space) keeps the existing amendment.

R156-56-801[prior (37) deleted]:

This amendment (flashing requirements) is no longer needed as it is adequately covered in the 2009 code.

R156-56-801(46) - Table 1604.5:

This is a new amendment that is recommended for approval. This is recommended to coordinate with the requirements of the Utah Department of Health.

R156-56-801(47) - section 1605.2.1:

This subsection (roof configurations) keeps the existing amendment.

R156-56-801(48) - section 1605.3.1:

This subsection keeps the existing amendment. This is part of the Utah snow load requirements. The national codes defer determining snow load requirements to the individual state. Snow load requirements have been important in Utah because of the many areas in Utah where construction needs added protection for snow loads.

R156-56-801[prior (40) deleted]:

This amendment (deck load requirements) is no longer needed as it is adequately covered in the 2009 code.

R156-56-801(49) - section 1608.1;

R156-56-801(50) - section 1608.1.1;

R156-56-801(51) - section 1608.1.2;

R156-56-801(52) - Table 1608.1.2(a) and Table 1608.1.2(b);

R156-56-801(53) - section 1608.1.3;

R156-56-801(54) - section 1608.2;

R156-56-801(56) - section 1613.1.1:

These subsections keep existing amendments with some technical corrections and renumbering to coordinate with changes in numbering in the 2009 codes. These amendments are part of the Utah snow load requirements.

R156-56-801(55) - section 1609.1.1;

This subsection (wind design procedure for signs) keeps an existing amendment with technical updates to clarify that this amendment is allowed only for signs and free standing walls.

R156-56-801 (57) - section 1613.8:

This subsection (penetration of ceiling tile) keeps an existing amendment.

R156-56-801[prior (50) deleted]:

This amendment (foundation walls) is no longer needed as it is adequately covered in the 2009 code.

R156-56-801(58) - section 1807.1.6.4:

This subsection (empirical concrete foundations) keeps an existing amendment with renumbering to coordinate with the change of numbering in the 2009 codes and makes technical language changes.

R156-56-801(59) - Table 1807.1.6.4:

This subsection (empirical concrete foundations) keeps an existing amendment with renumbering to coordinate with the change of numbering in the 2009 codes and makes technical language changes.

R156-56-801(60) - section 2306.1.5:

This subsection keeps an existing amendment. This is part of Utah snow load requirements.

R156-56-801(61) - section 2308.6:

This subsection (foundation plates or sills) keeps an existing amendment.

R156-56-801(62) - section 2506.2.1:

This subsection (ceiling panel materials) keeps an existing amendment.

R156-56-801(63) - section 2902.1:

This subsection (minimum plumbing facilities) keeps an existing amendment.

R156-56-801(64) - section 3006.5:

This subsection (shunt trip) keeps an existing amendment.

R156-56-801(65) - section 3401.6:

This subsection (parapet bracing) keeps an existing amendment with renumbering to coordinate with the change of numbering in the 2009 code.

R156-56-801(66) - section 3408.4:

This subsection (change of occupancy) keeps an existing amendment with renumbering to coordinate with the change of numbering in the 2009 code.

R156-56-801(67) - section 3411.1:

This subsection (type B dwelling or sleeping units) keeps an existing amendment with renumbering to coordinate with the change of numbering in the 2009 code. There are some technical changes in the wording.

R156-56-801[prior 61 deleted]:

This amendment (change of occupancy) is no longer needed because it is adequately addressed in the 2009 code.

R156-56-801(68) - Chapter 35:

This subsection (referenced standards) keeps an existing amendment with technical changes and renumbering.

R156-56-801(69) - Chapter 35:

This is a new amendment (referenced standards) that is recommended. This is necessary to correspond with the carbon monoxide alarm amendment.

Amendments to the International Residential Code:

R156-56-802(1):

This subsection keeps an existing amendment but is modified because the IRC no longer makes a reference to the ICC Electrical Code which was not adopted in Utah.

R156-56-802[prior (2) deleted]:

This amendment (prior approval) is no longer needed as it is adequately covered in the 2009 code.

R156-56-802(2) - section R109:

This subsection (weather resistant barrier and flashing) keeps an existing amendment.

R156-56-802(3) - section R114.1:

This subsection (authority to stop work when work is dangerous, unsafe or does not follow codes) keeps an existing amendment.

R156-56-802[prior (5) deleted]:

This amendment (backsiphonage) is no longer needed as it is adequately covered in the 2009 code.

R156-56-802(4) - section R202:

This subsection (certified backflow preventer assembly testing) keeps an existing amendment that coordinates with Department of Environmental Quality requirements.

R156-56-802(5) - section R202:

This subsection (cross connection) keeps an existing amendment that coordinates with Department of Environmental Quality requirements.

R156-56-802[prior (8) deleted]:

This amendment (heat exchanger) is no longer needed as it is adequately covered in the 2009 code.

R156-56-802(6) - section R202:

This subsection (potable water) keeps an existing amendment that coordinates with the Department of Health requirements.

R156-56-802[prior (10) and (11) deleted]:

These amendments (s-trap and water heater) are no longer needed as they are adequately covered in the 2009 code.

R156-56-802(7) - Table R301.2(5a) and Table R301.2(5b):

R156-56-802(8) - section R301.6:

These subsections keep existing amendments. This is part of the Utah snow load requirements. The national codes defer determining snow load requirements to the individual state. Snow load requirements have been important in Utah because of the many areas in Utah where construction needs added protection for snow loads.

R156-56-802(9) - section R302.2:

R156-56-802(10) - section R302.2.4:

These are new amendments (2 hour fire wall requirements) that are necessary to return the fire wall requirements to a 2 hour fire wall instead of a 1 hour fire wall. The reduction was allowed in the 2009 national code because the 2009 code required fire sprinklers in all residences. Since this requirement for fire sprinklers is being deleted by a Utah amendment, this 2 hour fire wall provision needs to be put back into the code if fire sprinklers are not installed.

R156-56-802 [prior (14) deleted]:

This amendment (minimum dimensions) is no longer needed as it was determined to be too burdensome and is adequately covered in the 2009 code.

R156-56-802(11) - section R311.7.4:

This subsection keeps an existing amendment. This is the stair rise and run amendment that was hotly debated several years ago. It was decided at that time to stay with the stair requirement that has been in Utah codes for quite some time rather than to change to new requirements placed in the IRC code.

R156-56-802(12) - section R312.2:

This is a new amendment to delete a new requirement in the IRC. This section of the new code was determined to be too restrictive regarding guard heights when adjacent fixed seating is installed.

R156-56-802(13) - section R313:

This is a new amendment to delete a new requirement in the IRC requiring fire sprinklers in all residences. This new requirement was determined to be too burdensome and the change has not been supported by adequate studies.

R156-56-802[prior 16 deleted]:

This amendment (smoke and carbon monoxide alarms) is being deleted and replaced with subsection (14) which has been modified and simplified.

R156-56-802(14) - section R315.1:

This is a new amendment (carbon monoxide alarms) that is a modification and simplification of a previous amendment in subsection (16).

R156-56-802(15) - section R315.3:

This is a new amendment (alarm requirements) that is a modification and simplification of a previous amendment in prior subsection (16).

R156-56-802(16) - section R403.1.6:

R156-56-802(17) - section R403.1.6.1:

These subsections (anchor bolt spacing) keep existing amendments.

R156-56-802(18) - section R404.1:

This subsection (concrete masonry foundation walls) keeps an existing amendment with modifications and simplification to the wording.

R156-56-802[prior (20) deleted]:

This amendment (exterior plaster) is no longer needed as it is now adequately addressed in the 2009 code.

R156-56-802[prior (21) deleted]:

This amendment (flashing) is no longer needed as it is adequately covered in the 2009 code.

R156-56-802(19) - section 612.2 to 612.4.2:

This subsection deletes new requirements in the 2009 code regarding window installations limitations and protections from opening that were too burdensome.

R156-56-802(20) – chapter 11:

This subsection deletes the energy conservation provisions of the 2009 International Residential Codes and replaces it with the provisions contained in the 2006 International Residential Code and the corresponding chapter of the 2006 International Energy Conservation Code. There has not been adequate studies in this area to justify a recommendation to adopt these provisions. The advisory committees have been requested to study this issue during the next year.

R156-56-802(21) - section M1411.6:

This is a new amendment recommended to delete a new section of the 2009 code because it was determined to be unnecessary. This new section required locking type caps be placed on certain

refrigerant circuit access ports even though they were not required by the manufacturer's specifications.

R156-56-802(22) - section M1502.4.4.1 :

This is a new amendment that is being added to increase potential dryer vent length from 25 feet to 35 feet. This amendment allows dryer vents be as long as permitted by the manufacturer's specifications.

R156-56-802(23) - section G2401.2:

This subsection (meter protection) keeps an existing amendment that is needed to protect meters from ice or snow.

R156-56-802(24) - section P2602.3:

This subsection (water supply) keeps an existing amendment. This amendment coordinates with requirements from the Utah Department of Natural Resources, Division of Water Rights.

R156-56-802(25) - section P2602.4:

This subsection (sewer required) keeps an existing amendment. This amendment coordinates with requirements from the Department of Environmental Quality.

R156-56-802[prior (25) deleted]:

This amendment (protective shield plates) is no longer needed as it is adequately covered in the 2009 code.

R156-56-802(26) - section P2801.7:

This subsection (water heater seismic bracing) keeps an existing amendment.

R156-56-802(27) - section P2902.1.1:

This subsection (backflow assembly testing) keeps an existing amendment. This amendment coordinates with requirements from the Department of Environmental Quality.

R156-56-802(28) - Table P2902.3:

This subsection (methods of protections) keeps an existing amendment, with part of this amendment moved to Table 2902.3a. This amendment coordinates with requirements from the Department of Environmental Quality.

R156-56-802(29) - Table P2902.3a:

This subsection (specialty backflow devices) keeps an existing amendment, with part of the amendment moved from Table P2902.3. This amendment coordinates with requirements from the Department of Environmental Quality.

R156-56-802[prior (30) deleted]:

This amendment (improper connections) is no longer needed as it is adequately covered in the 2009 code.

R156-56-802(30) - section P3103.6:

This subsection (vent terminals) keeps an existing amendment.

R156-56-802(31) - section P3104.4:

This subsection (horizontal dry vents) keeps an existing amendment.

R156-56-802(32) - section E3902.11:

This is a new amendment that is being recommended for approval. The requirement is being modified to keep the arc fault circuit interrupter requirement the same as is contained in the 2006 code, which only required this interrupter in bedrooms rather than throughout a house. The new requirement was determined to not have had adequate study or experience to justify the additional requirements.

R156-56-802(33) - Chapter 44:

This subsection keeps an existing amendment with technical corrections.

R156-56-802(34) - Chapter 44:

This subsection keeps an existing amendment with technical updates.

R156-56-802(35) - Appendix O:

This is a new amendment that is being recommended for approval. This would delete the requirements for gray water contained in the 2009 code and replaces them with requirements, which coordinate with requirements of Utah Department of Health and the Utah Department of Environmental Quality, and to correspond with an updated amendment to the International Plumbing Code.

Amendments to the International Plumbing Code

R156-56-803(1):

This is a new amendment that is being recommended for clarification that the International Private Sewage Disposal Code is not being adopted. The International Private Sewage Disposal Code is printed in the same book with the in the 2009 International Plumbing Code but is not part of the code that has been adopted.

R156-56-803(2) - section 202:

This subsection (backflow backpressure) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803[prior (2) deleted]:

This amendment (backsiphonage) is no longer needed as it is now adequately covered in the 2009 code.

R156-56-803(3) - section 202:

This subsection (certified backflow prevention assembly tester) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803(4) - section 202:

This subsection (cross connection) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803[prior (5) deleted]:

This amendment (heat exchanger) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803(5) - section 202:

This subsection keeps an existing amendment (potable water) that has been in place to correlate with the requirements of the Department of Health.

R156-56-803 [prior (7) deleted]:

This amendment (s-trap) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803 [prior (8) deleted]:

This amendment (water heater definition) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803(6) - Table 303.4:

This is a new amendment to correlate with the requirements of the Department of Environmental Quality, Division of Drinking Water.

R156-56-803(7) - section 304.3:

This subsection (meter boxes) keeps an existing amendment.

R156-56-803 [prior (10), (11) and (12) deleted]:

These amendments (pipes through footings or foundations, piping protection, and improper connections) are no longer needed as they are adequately covered in the 2009 code.

R156-56-803(8) - section 311.1:

This subsection (toilet facilities for workers) keeps an existing amendment.

R156-56-803(9) - section 312.10:

This subsection (backflow assembly testing) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality. The section number has been changed to correspond to renumbering in the 2009 code.

R156-56-803(10) - section 403.1:

This subsection (number of toilet facilities) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Health.

R156-56-803[prior (16) deleted]:

This amendment (gravity discharge clothes washers) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803(11) - section 406.4:

This subsection (automatic clothes washer safe pans) modifies and keeps an existing amendment with renumbering to correlate with the numbering in the 2009 code and with technical changes.

R156-56-803[prior (18) deleted]:

This amendment (floor drains) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803(12) - section 412.5:

This subsection (public toilet room drains) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Health.

R156-56-803[prior (20) and (21) deleted]:

These amendments (approval – sinks and piping material) are no longer needed as they are adequately covered in the 2009 code.

R156-56-803(13) - section 504.7.2:

This subsection (pan drain termination) modifies and keeps an existing amendment but with technical changes.

R156-56-803(14) - section 504.7.3:

This subsection (water heater pan) keeps an existing amendment.

R156-56-803(15) - section 602.3:

This subsection (water supply) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Natural Resources, Division of Water Rights.

R156-56-803(16) - section 602.3.1 to 602.3.5.1:

This subsection (water sources, quantity, quality, disinfection and pumps) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Natural Resources, Division of Water Rights and the local health department.

R156-56-803(17) - section 604.4.1:

This subsection (metering faucets) makes technical changes and keeps an existing amendment that has been in place to correlate with the requirements of the Department of Health.

R156-56-803(18) - section 606.5:

This subsection (water pressure booster systems) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803(19) - section 606.5.11:

This subsection (booster pumps) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803(20) - Table 608.1:

This subsection (methods of protection) moves provisions from Table 608.1 to 608.1.1 and keeps the existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803(21) - Table 608.1.1:

This subsection (backflow devices) moves provisions from Table 608.1 to 608.1.1 and keeps the existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803[prior (32) deleted]:

This amendment (atmospheric vacuum breaker) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803(22) - section 608.6:

This subsection (air gap connection protection) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality. The subsection number has been changed to coordinate with numbering in the 2009 code.

R156-56-803(23) - section 608.7:

This subsection (hot water supply system) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803[prior (34) deleted]:

This amendment (labels on non potable water lines) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803(24) - section 608.11:

This subsection (painting of water tanks) keeps an existing amendment with technical changes in the wording.

R156-56-803(25) - section 608.13.3:

This subsection (backflow preventer) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality. There has been a technical change in the wording.

R156-56-803(26) - section 608.13.4:

This subsection (barometric loop) keeps an existing amendment.

R156-56-803(27) - section 608.13.9:

This subsection (chemical dispenser backflow) keeps an existing amendment.

R156-56-803(28) - section 608.15.3:

This subsection (backflow preventer) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality. There has been a technical change in the wording.

R156-56-803(29) - section 608.15.4:

This subsection (protection by a vacuum breaker) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality. There has been a technical change in the wording.

R156-56-803(30) - section 608.15.4.2:

This subsection (hose connections) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality. There has been a technical change in the wording.

R156-56-803(31) - section 608.16.2:

This subsection (connections to boilers) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality. There has been a technical change in the wording.

R156-56-803(32) - section 608.16.3:

This subsection (heat exchangers) keeps an existing amendment.

R156-56-803(33) - section 608.16.4.1:

This subsection (chemical additives in fire sprinkler systems) keeps an existing amendment.

R156-56-803(34) - section 608.16.7:

This subsection (chemical dispensers) keeps an existing amendment.

R156-56-803(35) - section 608.16.8:

This subsection (portable cleaning equipment) keeps an existing amendment.

R156-56-803[prior (47) deleted]:

This amendment (dental pump equipment) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803(36) - section 608.16.11:

This subsection (car washes) keeps an existing amendment.

R156-56-803(37) - section 608.17:

This subsection (protection of water supplies) keeps an existing amendment.

R156-56-803(38) - section 701.2:

This subsection (sewer required) keeps an existing amendment that has been in place to correlate with the requirements of the Department of Environmental Quality.

R156-56-803[prior (51) deleted]

This amendment (open hub waste receptors) is no longer needed as it is adequately covered in the 2009 code.

R156-56-803(39) - section 901.3:

This subsection (chemical waste vent system) keeps an existing amendment.

R156-56-803(40) - section 904.1:

This subsection (roof extensions) keeps an existing amendment with technical changes in the wording.

R156-56-803(41) - section 904.6:

This subsection (vents through a wall) keeps an existing amendment.

R156-56-803(42) - section 905.4:

This subsection (horizontal dry vents) keeps an existing amendment.

R156-56-803(43) - section 917.8:

This subsection (air admittance valves) keeps an existing amendment.

R156-56-803(44) - section 1002.4:

This is a new amendment that is being recommended for approval. This will allow for different methods for maintaining a trap seal.

R156-56-803(45) - section 1104.2:

This subsection (combining storm and sanitary drains) keeps an existing amendment.

R156-56-803(46) - section 1108:

This subsection (combining storm and sanitary drains) keeps an existing amendment.

R156-56-803[prior (59) and (60) deleted]:

These amendments (referenced standards) are no longer needed as they are adequately covered in the 2009 code.

R156-56-803(47) - Chapter 14:

This is a new amendment that is being recommended for approval. It is necessary to add a reference standard that is used in the amendment in subsection (44).

R156-56-803(48) - Chapter 14:

This subsection (referenced standards) keeps an existing amendment with technical changes to the wording.

R156-56-803[prior (62), (63), and (64) deleted]:

These amendments are no longer needed as they have been replaced with a new amendment in subsection (49).

R156-56-803(49) - Appendix C:

This is a new amendment that is being recommended for approval. It will replace the prior amendments (62) to (64). This amendment correlates requirements with Utah Department of Health and the Utah Department of Environmental Quality that allows for gray water recycling systems in commercial and residential areas.

Amendments to the International Mechanical Code:

R156-56-804(1) – section 1101.10

This is a new amendment recommended to delete a new section of the 2009 code because it was determined to be unnecessary. This new section required locking type caps be placed on certain refrigerant circuit access ports even though they were not required by the manufacturer's specifications.

Amendments to the International Fuel Gas Code:

R156-56-805[prior (1) deleted]:

This amendment (altitude adjustments to gas appliances) is no longer needed as it is adequately covered in the 2009 code.

R156-56-805(1) - Chapter 4, section 401:

This subsection (meter protection) keeps an existing amendment.

Amendments to the National Electrical Code:

R156-56-806(1):

This is a new amendment that is being recommended for approval to coordinate provisions of the IRC and the NEC. This amendment is needed to clarify which code is effective when the IRC has not yet incorporated provisions of the latest NEC. This occurs because these codes are updated and published on a different three year cycle.

R156-56-806(2) - section 310.15(B)(6):

R156-56-806(3) - section 338.10(B)(4)(a):

These are new amendments recommended for approval. These changes are needed because the requirement for feeder lines in the 2009 codes was found to be too burdensome and has already been recommended for deletion from the 2012 codes.

Amendments to the International Energy Conservation Code:

R156-56-807(1) - section 504.4:

This subsection (heat traps) keeps an existing amendment that will correlate this subsection with requirements in the IPC.

It should be noted that while the 2009 International Energy Conservation Code is recommended for adoption, it is not recommended to be applicable to one and two family residences under the International Residential Code. The 2009 International Residential Code (IRC) is recommended to be adopted but with deletion of chapter 11 of the 2009 IRC and replaced with chapter 11 of the 2006 IRC. Chapter 11 of the IRC is derived from the International Energy Conservation Code. See IRC amendment in this regard at R156-56-802(20).

Amendments to Installation and Safety requirements for Mobile Homes:

R156-56-808:

This section keeps an existing amendment that provides requirement for when mobile homes built prior to 1976 are relocated, altered, remodeled, or rehabilitated.

Amendments to the International Existing Building Code

R156-56-820(1) - section 101.5:

This subsection (compliance methods) keeps an existing amendment.

R156-56-820[prior (2) deleted]:

This amendment (previous approval) is no longer needed as it is adequately covered in the 2009 code.

R156-56-820(2) - section 202:

This subsection (existing building definition) keeps an existing amendment with technical changes in the wording.

R156-56-820(3) - section 605.1:

This is a new amendment (type B dwelling or sleeping units) making a technical correction to clarify when this exception is applicable.

R156-56-820(4) - section 606.2.1:

This subsection (parapet bracing) keeps an existing amendment with numbering changes to correlate with numbering changes in the 2009 code.

R156-56-820[prior (5) and (6) deleted]:

These amendments (fire escapes and accessibility) are no longer needed as they are adequately covered in the 2009 code.

R156-56-820(5) - section 907.3.1:

This subsection (compliance required with change of occupancy) keeps an existing amendment.

R156-56-820(6) - section 912.7.3:

This subsection (vertical shafts) keeps an existing amendment.

R156-56-820(7) - section 912.8:

This subsection (change of occupancy requirements) keeps an existing amendment.

Local Amendments to the International Building Code

R156-56-901:

This subsection contains local amendments to the IBC that have been requested by the local jurisdictions identified in the subsections, which have been approved by the Uniform Building Code Commission.

Local Amendments to the International Residential Code

R156-56-902:

This subsection contains local amendments to the IRC that have been requested by the local jurisdictions identified in the subsection, which have been approved by the Uniform Building Code Commission.

Local Amendments to the International Plumbing Code

R156-56-903:

This subsection contains local amendments to the IPC that have been requested by the local jurisdiction identified in the subsections, which have been approved by the Uniform Building Code Commission.