

- IBC, Section 106, is deleted

- In IBC, Section 110, a new section is added as follows:

"[110.3.5.1, Weather-resistant exterior wall envelope. An inspection shall be made of the weather-resistant exterior wall envelope as required by Section 1403.2, and flashing as required by Section 1405.4 to prevent water from entering the weather-resistive barrier."

-IBC, Section 115.1, is deleted and replaced with the following:

"115.1 Authority. Whenever the building official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or other pertinent laws or ordinances or is dangerous or unsafe, the building official is authorized to stop work."

- In IBC, Section 202, the following definition is added for Ambulatory Surgical Center:

"AMBULATORY SURGICAL CENTER. A building or portion of a building licensed by the Utah Department of Health where procedures are performed that may render patients incapable of self preservation where care is less than 24 hours. See Utah Administrative Code R432-13."

- In IBC, Section 202, the definition for Foster Care Facilities is modified by changing the word "Foster" to "Child."

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

- In IBC, Section 202, the following definition is added for Residential Treatment/Support Assisted Living Facility: "RESIDENTIAL TREATMENT/SUPPORT ASSISTED LIVING FACILITY. See Section 308.1.2."

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

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

- In IBC, Section 305.2, the words "child care centers," are inserted after the word "supervision," and the following sentence is added at the end of the paragraph: "See Section 425 for special requirements for Day Care."

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

- A new IBC Section 305.2.4 is added as follows:

"305.2.4 Child Day Care - Residential Certificate or a Family License. Areas used for child day care purposes with a Residential Certificate R430-50 or a Family License, as defined in Utah Administrative Code, R430-90, Licensed Family Child Care, may be located in a Group R-2 or R-3 occupancy as provided in Section 310.5 or shall comply with the International Residential Code in accordance with Section R101.2."

- A new IBC Section 305.2.5 is added as follows:

"305.2.5 Child Care Centers. Areas used for Hourly Child Care Centers, as defined in Utah Administrative Code, R430-60, Child Care Center as defined in Utah Administrative Code, R430-100, or Out of School Time Programs, as defined in Utah Administrative Code, R430-70, may be classified as accessory occupancies."

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

- In IBC, Section 308.2, the word "FOSTER" is deleted and replaced with "CHILD."

- A new IBC Section 308.2.1 is added as follows:

"308.2.1 Assisted living facilities and related occupancies. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein. TYPE I ASSISTED LIVING FACILITY. A residential facility licensed by the Utah Department of Health that provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the assistance of another person. Occupancies. Limited capacity, type I assisted living facilities with two to five residents shall be classified as R-3 occupancies. Small, type I assisted living facilities with six to sixteen residents shall be classified as R-4 occupancies. Large, type I assisted living facilities with over sixteen residents shall be classified as I-1 occupancies. TYPE II ASSISTED LIVING FACILITY. A residential facility licensed by the Utah Department of Health that provides an array of coordinated supportive personal and health care services to residents who meet the definition of semi-independent. Semi-Independent. A person who is: A. Physically disabled but

able to direct his or her own care; or B. Cognitively impaired or physically disabled but able to evacuate from the facility with the physical assistance of one person. Occupancies. Limited capacity, type II assisted living facilities with two to five residents shall be classified as R-4 occupancies. Small, type II assisted living facilities with six to sixteen residents shall be classified as I-1 occupancies. Large, type II assisted living facilities with over sixteen residents shall be classified as I-2 occupancies. RESIDENTIAL TREATMENT/SUPPORT ASSISTED LIVING FACILITY. A residential treatment/support assisted living facility which creates a group living environment for four or more residents licensed by the Utah Department of Human Services, and provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the physical assistance of another person."

- In IBC, Section 308.3, the words "(see Section 308.2.1)" are added after the words "assisted living facilities"

- In IBC, Section 308.3.4, all of the words after the first International Residential Code are deleted.

- In IBC, Section 308.4, the following changes are made:

(a) The words "five persons" are deleted and replaced with the words "three persons." (b) The words "foster care facilities" are deleted and replaced with "child care facilities." (c) The words "(both intermediate care facilities and skilled nursing facilities)" are added after "nursing homes."

- In IBC, Section 308.4.2, the word "five" is deleted and replaced with the word "three" in both places.

- In IBC, Section 308.6, the word "five" is deleted and replaced with the word "four"

-In IBC, Section 308.6.1, the following changes are made:

(a) The word "five" is deleted and replaced with the word "four" (b) The words "2-1/2 years or less of age" are deleted and replaced with "under the age of two" (c) The following sentence is added at the end: "See Section 427 for special requirements for Day Care."

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

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

- In IBC, Section 310.5.1, the words "other than Child Care" are inserted after the word "dwelling" in the first sentence and the following sentence is added at the end: "See Section 427 for special requirements for Child Day Care."

- A new IBC Section 310.5.3 is added as follows:

"310.5.3 Child Care. Areas used for child care purposes may be located in a residential dwelling unit under all of the following conditions and Section 427:

1. Compliance with Utah Administrative Code, R710-8, Day Care Rules, as enacted under the authority of the Utah Fire Prevention Board.
2. Use is approved by the Utah Department of Health, as enacted under the authority of the Utah Code, Title 26, Chapter 39, Utah Child Care Licensing Act, and in any of the following categories:
 - a. Utah Administrative Code, R430-50, Residential Certificate Child Care.
 - b. Utah Administrative Code, R430-90, Licensed Family Child Care.
3. Compliance with all zoning regulations of the local regulator."

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

- IBC Section 403.5.5 is deleted.

In IBC, Section 422.2, a new paragraph is added as follows:

"422.2 Separations: Ambulatory care facilities licensed by the Utah Department of Health shall be separated from adjacent tenants with a fire partition having a minimum one hour fire-resistance rating. Any level below the level of exit discharge shall be separated from the level of exit discharge by a horizontal assembly having a minimum one hour fire-resistance rating.

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

1. Such levels are under the control of the Ambulatory Care Facility.
2. Any hazardous spaces are separated by horizontal assembly having a minimum one hour fire-resistance rating."

- A new IBC Section [425] 427, Day Care, is added as follows:

427.1 Detailed Requirements. In addition to the occupancy and construction

requirements in this code, the additional provisions of this section shall apply to all Day Care in accordance with Utah Administrative Code R710-8 Day Care Rules.

427.2 Definitions.

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

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

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

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

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

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

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

427.3 Family Day Care.

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

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

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

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

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

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

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

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

427.3.7 Family Day Care units shall have single station smoke detectors in good operating condition on each level occupied by clients. Battery operated smoke detectors shall be

permitted if the facility demonstrates testing, maintenance, and battery replacement to insure continued operation of the smoke detectors.

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

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

427.4 Day Care Centers.

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

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

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

427.4.3.1 Child day care spaces for children over the age of 24 months may be located on the second floor of buildings equipped with automatic fire protection throughout and an automatic fire alarm system.

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

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

427.5 Requirements for all Day Care.

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

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

- In IBC, Section 504.4, a new section is added as follows:

"504.4.1 Notwithstanding the exceptions to Section 504.2, Group I-2 Assisted Living Facilities shall be allowed [to be two stories of] on each level of a two-story building of Type V-A construction when all of the following apply:

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

- IBC, Section (F)901.8, is deleted and replaced with the following:

"(F)901.8 Pump and riser room size. Fire pump and automatic sprinkler system riser rooms shall be designed with adequate space for all installed equipment necessary for the installation and to provide sufficient working space around the stationary equipment. Clearances around equipment shall be in accordance with manufacturer requirements and not less than the following minimum elements:

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

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

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

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

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

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

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

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

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

Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) constructed in accordance with the International Residential Code For One- and Two-Family Dwellings.
2. Single story Group R-1 occupancies with fire areas not more than 2,000 square feet that contain no installed plumbing or heating, where no cooking occurs, and constructed of Type I-A, I-B, II-A, or II-B construction."

- IBC, Sections (F)903.2.8.3 and (F)903.2.8.3.1, are renumbered to (F)903.2.8.1 and (F)903.2.8.1.1.

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

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

- IBC, Section(F)903.2.8.4, is deleted.

- IBC, Section (F)903.2.9, condition 2, is deleted and replaced with the following:

"2. A Group S-1 fire area is located more than three stories above the lowest level of fire department vehicle access."

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

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

- IBC, Sections (F)904.12.3, (F)904.12.3.1, (F)904.12.4, and (F)904.12.4.1, are deleted.

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

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

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

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

- In IBC, Section (F)907.2.3 Group E the first sentence is deleted and rewritten as follows: "A manual fire alarm system that activates the occupant notification system in accordance with Section (F)907.5 shall be installed, in accordance with Section (F)907.6 and administrative rules made by the State Fire Prevention Board in Group E occupancies."

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

"(F)915 Where required. Group I-1, I-2, I-4, and R occupancies located in a building containing a fuel-burning appliance or in a building that has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 or UL 2075 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage, ventilated in accordance with Section 404 of the International Mechanical Code, shall not be considered an attached garage. A minimum of one carbon monoxide alarm shall be installed on each habitable level.

(F)915.1 Interconnection. Where more than one carbon monoxide alarm is required to be installed within Group I-1, I-2, I-4, or R occupancies, the carbon monoxide alarm shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms. Physical interconnection of carbon monoxide alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

(F)915.2 Power source. In new construction, required carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Carbon monoxide alarms with integral strobes that are not equipped with a battery backup shall be connected to an emergency electrical system. Carbon monoxide alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions.

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

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

(F)915.3 Group E. A carbon monoxide detection system shall be installed in new buildings that contain Group E occupancies in accordance with IFC, Chapter 9, Section 915. A carbon monoxide detection system shall be installed in existing buildings that contain Group E occupancies in accordance with IFC, Chapter 11, Section 1103.9.

(F)915.3.1 Where required. In Group E occupancies, a carbon monoxide detection system shall be provided where a fuel-burning appliance, a fuel-burning fireplace, or a fuel-burning forced air furnace is present.

(F)915.3.2 Detection equipment. Each carbon monoxide detection system shall be installed in accordance with NFPA 720 and the manufacturer's instructions and be listed as complying with, for single station detectors, UL 2034 and, for system detectors, UL 2075.

(F)915.3.3 Locations. Each carbon monoxide detection system shall be installed in the locations specified in NFPA 720.

(F)915.3.4 Combination detectors. A combination carbon monoxide/smoke detector is an acceptable alternative to a carbon monoxide detection system if the combination carbon monoxide/smoke detector is listed in accordance with UL 2075 and UL 268.

(F)915.3.5 Power source. Each carbon monoxide detection system shall receive primary power from the building wiring if the wiring is served from a commercial source. If primary power is interrupted, each carbon monoxide detection system shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than that required for overcurrent protection.

(F)915.3.6 Maintenance. Each carbon monoxide detection system shall be maintained in accordance with NFPA A carbon monoxide detection system that becomes inoperable or begins to produce end of life signals shall be replaced."

- In IBC, Section 1010.1.9.6, a new number 9 is added as follows:

"9. The secure area or unit with special egress locks shall be located at the level of exit discharge in Type V construction."

- In IBC, Section 1011.5.2, exception 3 is deleted and replaced with the following:

"3. In Group R-3 occupancies, within dwelling units in Group R-2 occupancies, and in Group U occupancies that are accessory to a Group R-3 occupancy, or accessory to individual dwelling units in Group R-2 occupancies, the maximum riser height shall be 8 inches (203 mm) and the minimum tread depth shall be 9 inches (229 mm). The minimum winder tread depth at the walk line shall be 10 inches (254 mm), and the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 10 inches (254 mm)."

- In IBC, Section 1011.11, a new exception 5 is added as follows:

"5. In occupancies in Group R-3, as applicable in Section 101.2 and in occupancies in Group U, which are accessory to an occupancy in Group R-3, as applicable in Section 101.2, handrails shall be provided on at least one side of stairways consisting of four or more risers."

- In IBC, Section 1013.5, the words ", including when the building may not be fully occupied[.]" are added at the end of the sentence.

- IBC, Section 1025, is deleted.

- In IBC, Section 1029.14, exception 2 is deleted.

- In IBC, Section 1109.8, the following words "shall be capable of operation without a key and" are inserted in the second sentence between the words "lift" and "shall".

- In IBC, Section 1208.4, subparagraph 1 is deleted and replaced with the following:

"1. The unit shall have a living room of not less than 165 square feet (15.3 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."

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

- In IBC, Section 1605.2, in the portion of the definition for the value of f_2 , the words "and 0.2 for other roof configurations" are deleted and replaced with the following:

" $f_2 = 0.20 + 946 .025(A-5)$ 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./1,000)."

- In IBC, Sections 1605.3.1 and 1605.3.2, exception 2 in each section is deleted and 950 replaced with the following: "2. Flat roof snow loads of 30 pounds per square foot (1.4 kNm²) or less need not be combined with seismic loads. Where flat roof snow loads exceed 30 952 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./1,000)

P_f = Design roof snow load, psf.

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

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

- A new IBC, Section 1608.1.1, is added as follows:

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

- In IBC, Section 1608.1.2, a new section is added as follows:

"1608.1.2 Utah Snow Loads. The snow loads specified in Table 1608.1.2(b) shall be used for the jurisdictions identified in that table. Otherwise, the ground snow load, P_g , to be used in the determination of design snow loads for buildings and other structures shall be determined by using the following formula: $P_g = (P_o^2 + S^2(A-A_o)^2)^{0.5}$ for A greater than A_o , and $P_g = P_o$ for A less than or equal to A_o .

WHERE:

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

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

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

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

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

The building official may round the roof snow load to the nearest 5 psf. The ground snow load, P_g , may be adjusted by the building official when a licensed engineer or architect submits data substantiating the adjustments. Where the minimum roof live load in accordance with Section [1607.11] 1607.12 is greater than the design roof snow load, such roof live load shall be used

for design, however, it shall not be reduced to a load lower than the design roof snow load. Drifting need not be considered for roof snow loads less than 20 psf."

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

"TABLE NO. 1608.1.2(a)			
STATE OF UTAH - REGIONAL SNOW LOAD FACTORS			
COUNTY	P _o	S	A _o
Beaver	43	63	6.2
Box Elder	43	63	5.2
Cache	50	63	4.5
Carbon	43	63	5.2
Daggett	43	63	6.5
Davis	43	63	4.5
Duchesne	43	63	6.5
Emery	43	63	6.0
Garfield	43	63	6.0
Grand	36	63	6.5
Iron	43	63	5.8
Juab	43	63	5.2
Kane	36	63	5.7

Millard	43	63	5.3
Morgan	57	63	4.5
Piute	43	63	6.2
Rich	57	63	4.1
Salt Lake	43	63	4.5
San Juan	43	63	6.5
Sanpete	43	63	5.2
Sevier	43	63	6.0
Summit	86	63	5.0
Tooele	43	63	4.5
Uintah	43	63	7.0
Utah	43	63	4.5
Wasatch	86	63	5.0
Washington	29	63	6.0
Wayne	36	63	6.5
Weber	43	63	4.5

TABLE NO. 1608.1.2(B)
REQUIRED SNOW LOADS FOR SELECTED UTAH CITIES AND TOWNS ^{1,2}

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

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

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

- A new IBC, Section 1608.1.3, is added as follows: "1608.1.3 Thermal Factor. The value for the thermal factor, C_t , used in calculation of P_f shall be determined from Table 7.3 in ASCE 7. Exception: Except for unheated structures, the value of C_t need not exceed 1.0 when ground snow load, P_g is calculated using Section 1608.1.2 as amended."

- IBC, Section 1608.2, is deleted and replaced with the following: "1608.2 Ground Snow Loads. The ground snow loads to be used in determining the design snow loads for roofs in states other than Utah are given in Figure 1608.2 for the contiguous United States and Table 1608.2 for Alaska. Site-specific case studies shall be made in areas designated CS in figure 1608.2. Ground snow loads for sites at elevations above the limits indicated in Figure 1608.2 and for all sites within the CS areas shall be approved. Ground snow load determination for such sites

shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2-percent annual probability of being exceeded (50-year mean recurrence interval). Snow loads are zero for Hawaii, except in mountainous regions as approved by the building official."

- A new IBC, Section 1613.1.1, is added as follows: "1613.1.1 ASCE 12.7.2 and 12.14.8.1 of Chapter 12 of ASCE 7 referenced in Section 1613.1, Definition of W, Item 4 is deleted and replaced with the following:

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

WHERE:

W_s = Weight of snow to be included in seismic calculations

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

P_f = Design roof snow load, psf.

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

- A new IBC, Section [1613.5] 1613.7, is added as follows: " [1613.5] 1613.7 ASCE 7, Section 13.5.6.2.2 paragraph (e) is modified to read as follows:

(e) Penetrations shall have a sleeve or adapter through the ceiling tile to allow for free movement of at least 1 inch (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."

- A new IBC, Section 1807.1.6.4, is added as follows:

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

- A new IBC, Table 1807.1.6.4 is added as follows:

"TABLE 1807.1.6.4

EMPIRICAL FOUNDATION WALLS (1,7,8)							
	Top Edge Support	Min. Thickness	Vertical Steel (2)	Horizontal Steel (3)	Steel at Openings (4)	Max. Lintel Length	Min. Lintel Length
	None	6"	(5)	2- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
	None	6"	#4@32"	3- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
	None	6"	#4@32"	4- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	3'(914 mm)	2" for each foot of opening width; min. 6"
	Floor or roof Diaphragm (6)	8"	#4@24"	5- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
	Floor or roof Diaphragm (6)	8"	#4@24"	6- #4 Bars	2- #4 Bars above 1- #4 Bar each side	6'(1,829 mm)	2" for each foot of opening

					1- #4 Bar below		width; min. 6"
	Floor or roof Diaphragm (6)	8"	#4@16"	7- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
Over 9'(2,743 mm), Engineering required for each column							
Footnotes:							
(1) Based on 3,000 psi (20.6 Mpa) concrete and 60,000 psi (414 Mpa) reinforcing steel.							
(2) To be placed in the center of the wall, and extended from the footing to within three inches (76 mm) of the top of the wall; dowels of #4 bars to match vertical steel placement shall be provided in the footing, extending 24 inches (610 mm) into the foundation wall.							
(3) One bar shall be located in the top four inches (102 mm), one bar in the bottom four inches (102 mm) and the other bars equally spaced between. Such bar placement satisfies the requirements of Section 1805.9. Corner reinforcing shall be provided so as to lap 24 inches (610 mm).							
(4) Bars shall be placed within two inches (51 mm) of the openings and extend 24 inches (610 mm) beyond the edge of the opening; vertical bars may terminate three inches (76 mm) from the top of the concrete.							

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

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

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

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

- A new IBC, Section 1905.1.9, is added as follows:

"1905.1.9 ACI 318, Table 4.2.1." Modify ACI 318, Table [4.2.1] 19.3.1.1 to read as follows:

In the portion of the table designated as "Conditions", the following Exposure category and class is deleted and replaced with the following:

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

- A new IBC, Section 2306.1.5, is added as follows:

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

- In IBC, Section [2308.6] 2308.3.1, a new exception, 3, is added as follows:

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

- IBC, Section 2506.2.1, is deleted and replaced with the following: "2506.2.1 Other materials.

Metal suspension systems for acoustical and lay-in panel ceilings shall conform with ASTM C635 listed in Chapter 35 and Section 13.5.6 of ASCE 7, as amended in Section 1613.5, for installation in high seismic areas."

-In IBC [P] Table 2902.1 the following changes are made:

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

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

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

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

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

- A new IBC, Section [P]2902.7, is added as follows:

"[P]2902.7 Toilet Facilities for Workers. Toilet facilities shall be provided for construction workers and such facilities shall be maintained in a sanitary condition. Construction worker toilet facilities of the nonsewer type shall conform to ANSI Z4.3."

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

- In IBC, Chapter 35, the referenced standard ICCA117.1-09, Section 606.2, Exception 1 is modified to include the following sentence at the end of the exception: "The minimum clear floor space shall be centered on the sink assembly."

- The following referenced standard is added under UL in IBC, Chapter 35:

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