

**Effective 7/1/2021**

**Superseded 7/1/2022**

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

- (1) In IRC, Section R102, a new Section R102.7.2 is added as follows: "R102.7.2 Physical change for bedroom window egress. A structure whose egress window in an existing bedroom is smaller than required by this code, and that complied with the construction code in effect at the time that the bedroom was finished, is not required to undergo a physical change to conform to this code if the change would compromise the structural integrity of the structure or could not be completed in accordance with other applicable requirements of this code, including setback and window well requirements."
- (2) In IRC, Section R108.3, the following sentence is added at the end of the section: "The building official shall not request proprietary information."
- (3) In IRC, Section 109:
  - (a) A new IRC, Section 109.1.5, is added as follows: "R109.1.5 Weather-resistant exterior wall envelope inspections. An inspection shall be made of the weather-resistant exterior wall envelope as required by Section R703.1 and flashings as required by Section R703.8 to prevent water from entering the weather-resistive barrier."
  - (b) The remaining sections are renumbered as follows: R109.1.6 Other inspections; R109.1.6.1 Fire- and smoke-resistance-rated construction inspection; R109.1.6.2 Reinforced masonry, insulating concrete form (ICF) and conventionally formed concrete wall inspection; and R109.1.7 Final inspection.
- (4) IRC, Section R114.1, is deleted and replaced with the following: "R114.1 Notice to owner. Upon notice from the building official that work on any building or structure is being prosecuted contrary to the provisions of this code or other pertinent laws or ordinances or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent or to the person doing the work; and shall state the conditions under which work will be permitted to resume."
- (5) In IRC, Section R202, the following definition is added: "ACCESSORY DWELLING UNIT: A habitable living unit created within the existing footprint of a primary owner-occupied single-family dwelling."
- (6) In IRC, Section R202, the following definition is added: "CERTIFIED BACKFLOW PREVENTER ASSEMBLY TESTER: A person who has shown competence to test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction under Utah Code, Subsection 19-4-104(4)."
- (7) In IRC, Section R202, the definition of "Cross Connection" is deleted and replaced with the following: "CROSS CONNECTION. Any physical connection or potential connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other either water of unknown or questionable safety or steam, gas, or chemical, whereby there exists the possibility for flow from one system to the other, with the direction of flow depending on the pressure differential between the two systems (see "Backflow, Water Distribution")."
- (8) In IRC, Section 202, the following definition is added: "ENERGY STORAGE SYSTEM (ESS). One or more devices, assembled together, that are capable of storing energy for supplying electrical energy at a future time."
- (9) In IRC, Section 202, in the definition for gray water a comma is inserted after the word "washers"; the word "and" is deleted; and the following is added to the end: "and clear water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without

objectionable odors; non-highly pigmented; and will not interfere with the operation of the sewer treatment facility."

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

(11) IRC, Figure R301.2(5), is deleted and replaced with R301.2(5) as follows:

"TABLE R301.2(5)			
GROUND SNOW LOADS FOR SELECTED LOCATIONS IN UTAH			
City/Town	County	Ground Snow Load (lb/ft <sup>2</sup> )	Elevation (ft)
Beaver	Beaver	35	5886
Brigham City	Box Elder	42	4423
Castle Dale	Emery	32	5669
Coalville	Summit	57	5581
Duchesne	Duchesne	39	5508
Farmington	Davis	35	4318
Fillmore	Millard	30	5138
Heber City	Wasatch	60	5604
Junction	Piute	27	6030
Kanab	Kane	25	4964
Loa	Wayne	37	7060
Logan	Cache	43	4531
Manila	Daggett	26	6368
Manti	Sanpete	37	5620
Moab	Grand	21	4029
Monticello	San Juan	67	7064
Morgan	Morgan	52	5062
Nephi	Juab	39	5131
Ogden	Weber	37	4334
Panguitch	Garfield	41	6630
Parowan	Iron	32	6007
Price	Carbon	31	5558
Provo	Utah	31	4541

Randolph	Rich	50	6286
Richfield	Sevier	27	5338
St. George	Washington	21	2585
Salt Lake City	Salt Lake	28	4239
Tooele	Tooele	35	5029
Vernal	Uintah	39	5384

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

1. Statutory requirements of the Authority Having Jurisdiction are not included in this state ground snow load table.
2. For locations where there is substantial change in altitude over the city/town, the load applies at and below the cited elevation, with a tolerance of 100 ft (30 m).
3. For other locations in Utah, see Bean, B., Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental Engineering Faculty Publications, Paper 3589, <http://utahsnowload.usu.edu/>, for ground snow load values.

- (12) IRC, Section R301.6, is deleted and replaced with the following: "R301.6 Utah Snow Loads. The snow loads specified in Table R301.2(5b) shall be used for the jurisdictions identified in that table. Otherwise, for other locations in Utah, see Bean, B., Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental Engineering Faculty Publications, Paper 3589, <http://utahsnowload.usu.edu/>, for ground snow load values."
- (13) In IRC, Section R302.2, the following sentence is added after the second sentence: "When an access/maintenance agreement or easement is in place, plumbing, mechanical ducting, schedule 40 steel gas pipe, and electric service conductors including feeders, are permitted to penetrate the common wall at grade, above grade, or below grade."
- (14) In IRC, Section R302.3, a new exception 3 is added as follows: "3. Accessory dwelling units separated by walls or floor assemblies protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent on each side of the wall or bottom of the floor assembly are exempt from the requirements of this section."
- (15) In IRC, Section R302.5.1, the words "self-closing device" are deleted and replaced with "self-latching hardware."
- (16) IRC, Section R302.13, is deleted.
- (17) In IRC, Section R303.4, the number "5" is changed to "3" in the first sentence.
- (18) In IRC, Section R310.6, in the exception, the words "or accessory dwelling units" are added after the words "sleeping rooms".
- (19) IRC, Sections R311.7.4 through R311.7.5.3, are deleted and replaced with the following:  
 "R311.7.4 Stair treads and risers. R311.7.5.1 Riser height. The maximum riser height shall be 8 inches (203 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).  
 R311.7.5.2 Tread depth. The minimum tread depth shall be 9 inches (228 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Winder treads shall have a minimum tread depth of 10 inches (254 mm) measured as above at a point

12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the greatest winder tread depth at the 12-inch (305 mm) walk line shall not exceed the smallest by more than 3/8 inch (9.5 mm).

R311.7.5.3 Profile. The radius of curvature at the leading edge of the tread shall be no greater than 9/16 inch (14.3 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosing shall not exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped from the underside of the leading edge of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch diameter (102 mm) sphere.

Exceptions.

1. A nosing is not required where the tread depth is a minimum of 10 inches (254 mm).
2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less."

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

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

(22) In IRC, Section R314.2.2, the words "or accessory dwelling units" are added after the words "sleeping rooms".

(23) In IRC, Section R315.2.2, the words "or accessory dwelling units" are added after the words "sleeping rooms".

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

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

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

(26) A new IRC, Section R315.7, is added as follows: " R315.7 Interconnection. Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section R315.1, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

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

(27) In IRC, Section R317.1.5, the period is deleted and the following language is added to the end of the paragraph: "or treated with a moisture resistant coating."

(28) In IRC, Section 326.1, the words "residential provisions of the" are added after the words "pools and spas shall comply with".

- (29) In IRC, Section R327.1 is deleted and replaced with the following: "327.1 General. Energy storage systems (ESS) shall comply with the provisions of this section.  
Exceptions:  
1. ESS listed and labeled in accordance with UL 9540 and marked "For use in residential dwelling units", where installed in accordance with the manufacturer's instruction and NFPA 70.  
2. ESS less than 1kWh (3.6 megajoules)."
- (30) In IRC, Section R327.2 is deleted and replaced with the following: "327.2 Equipment listings. ESS shall be listed and labeled in accordance with UL 9540.  
Exception: Where approved, repurposed unlisted battery systems from electric vehicle are allowed to be installed outdoors or in detached sheds located not less than 5 feet (1524 mm) from exterior walls, property lines and public ways."
- (31) In IRC, Section R327.3 is deleted and replaced with the following: "327.3 Installation. ESS shall be installed in accordance with the manufacturer's instructions and their listing."
- (32) In IRC, Section R327, a new section 327.3.1 is added as follows: "327.3.1 Spacing. Individual units shall be separate from each other by not less than three feet (914 mm) except where smaller separation distances are documented to be adequate based on large-scale fire testing complying with Section 1206.2.3 of the adopted International Fire Code."
- (33) In IRC, Section 327.4 is deleted and replaced with the following: "327.4 Locations. ESS shall be installed only in the following locations:  
1. Detached garages and detached accessory structures.  
2. Attached garages separated from the dwelling unit living space in accordance with Section R302.6.  
3. Outdoors or on the exterior side of exterior walls located not less than 3 feet (914 mm) from doors and windows directly entering the dwelling unit.  
4. Enclosed utility closets, basements, storage or utility spaces within dwelling units with finished or noncombustible walls and ceilings. Walls and ceilings of unfinished wood-framed construction shall be provided with not less than 5/8-inch (15.9 mm) Type X gypsum wallboard.  
ESS shall not be installed in sleeping rooms, or closets or spaces opening directly into sleeping rooms."
- (34) In IRC, Section 327.5 is deleted and replaced with the following: "327.5 Energy ratings. Individual ESS units shall have a maximum rating of 20 kWh. The aggregate rating of the ESS shall not exceed:  
1. 40 kWh within utility closets, basements, and storage or utility spaces.  
2. 80 kWh in attached or detached garages and detached accessory structures.  
3. 80 kWh on exterior walls.  
4. 80 kWh outdoors on the ground.  
ESS installations exceeding the permitted individual or aggregate ratings shall be installed in accordance with Sections 1206.2.1 through 1206.2.12 of the adopted International Fire Code."
- (35) In IRC, Section 327.6 is deleted and replaced with the following: "327.6 Electrical installation. ESS shall be installed in accordance with NFPA 70. Inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL 9540 listing. Systems connected to the utility grid shall use inverters listed for utility interaction."
- (36) In IRC, Section 327, a new section 327.7 is added as follows: "327.7 Fire detection. Rooms and areas within dwelling units, basements, and attached garages in which ESS are installed shall be protected by smoke alarms in accordance with Section R314. A heat detector, listed and interconnected to the smoke alarms, shall be installed in locations within dwelling units and attached garages where smoke alarms cannot be installed based on their listing."

- (37) In IRC, Section 327, a new section 327.8 is added as follows: "327.8 Protection from impact. ESS installed in a location subject to vehicle damage shall be protected by approved barriers."
- (38) In IRC, Section 327, a new section 327.9 is added as follows: "327.9 Ventilation. Indoor installations of ESS that include batteries that produce hydrogen or other flammable gasses during charging shall be provided with mechanical ventilation in accordance with Section M1307.4."
- (39) In IRC, Section 327, a new section 327.10 is added as follows: "327.10 Electric vehicle use. The temporary use of an owner or occupant's electric-powered vehicle to power a dwelling unit while parked in an attached or detached garage or outdoors shall comply with the vehicle manufacturer's instructions and NFPA 70."
- (40) In IRC, Section 327, a new section 327.11 is added as follows: "327.11 Signage. A sign located on the exterior of the dwelling shall be installed at a location approved by the authority having jurisdiction which identifies the battery chemistry included in the ESS. This sign shall be of sufficient durability to withstand the environment involved and shall not be handwritten."
- (41) In IRC, Section R403.1.6, a new Exception 3 is added as follows: " 3. When anchor bolt spacing does not exceed 32 inches (813 mm) apart, anchor bolts may be placed with a minimum of two bolts per plate section located not less than 4 inches (102 mm) from each end of each plate section at interior bearing walls, interior braced wall lines, and at all exterior walls."
- (42) In IRC, Section R403.1.6.1, a new exception is added at the end of Item 2 and Item 3 as follows: "Exception: When anchor bolt spacing does not exceed 32 inches (816 mm) apart, anchor bolts may be placed with a minimum of two bolts per plate section located not less than 4 inches (102 mm) from each end of each plate section at interior bearing walls, interior braced wall lines, and at all exterior walls."
- (43) In IRC, Section R404.1, a new exception is added as follows: "Exception: As an alternative to complying with Sections R404.1 through R404.1.5.3, concrete and masonry foundation walls may be designed in accordance with IBC Sections 1807.1.5 and 1807.1.6 as amended in Section 1807.1.6.4 and Table 1807.1.6.4 under these rules."
- (44) In IRC, Section R405.1, a new exception is added as follows: "Exception: When a geotechnical report has been provided for the property, a drainage system is not required unless the drainage system is required as a condition of the geotechnical report. The geological report shall make a recommendation regarding a drainage system."