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Governor
DEIDRE M. HENDERSON
Lieutenant Governor

State of Utah
Department of Commerce
Division of Occupational and Professional Licensing

MARGARET W. BUSSE
Executive Director

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Division Director

AUGUST 24, 2021

Adam Sweet
Office of Legislative Research and General Counsel
210 House Building
State Capitol Complex
Salt Lake City, UT 84114

RE: Utah Legislature Business and Labor Interim Committee

Dear Mr. Sweet:

Enclosed please find the recommendation pursuant to Title 15A-1-204 from the Uniform Building Code Commission (UBCC) for changes to Title 15A, the State Construction and Fire Codes Act.

A public hearing regarding the proposed amendments to the building codes was held at 9:00 a.m. on August 11, 2021, with an anchor location in the north conference room of the Heber M. Wells Building and virtually via Google Meet. The public was given the link to join the meeting in order to provide means by which interested persons and the public may remotely listen to or observe the open portions of the meeting.

Public comment was received and there was no opposition to the UBCC's recommendation to the proposed Utah code amendments.

The UBCC respectfully requests that this report be presented to the Business and Labor Interim Committee for consideration.

Sincerely,

Thomas Peterson

Thomas W. Peterson, Chair
Uniform Building Code Commission

UNIFORM BUILDING CODE COMMISSION

Report to the Utah Legislature
Business and Labor Interim Committee

August 24, 2021

Uniform Building Code Commission recommended changes to construction codes under Title 15A, State Construction and Fire Code Act

The following report has the full details and summary of proposed statewide amendments to the 2018 International Plumbing Code (IPC), the 2018 International Mechanical Code (IMC), and the 2015 International Residential Code (IRC), as approved by the Uniform Building Code Commission.

A public hearing regarding the proposed amendments was held at 9:00 a.m. on August 11, 2021, with an anchor location in the north conference room of the Heber M. Wells Building and virtually via Google Meet. The public was given the link to join the meeting in order to provide means by which interested persons and the public may remotely listen to or observe the open portions of the meeting.

This report has two parts:

Section A – Proposed Building Code Amendment Changes recommended by the Uniform Building Code Commission (UBCC). It should be noted that the proposed amendments are made with red text, strikethrough and underline as if making changes to existing statutes for easier identification of items that are recommended for changes.

Section B – A summary of the changes proposed in Section A. Included in the summary is a fiscal analysis of the recommendations.

Section A

Title 15A. State Construction and Fire Codes Act

Chapter 3
Statewide Amendments Incorporated as Part of State Construction Code
Part 2
Statewide Amendments to International Residential Code

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 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/ft2)	Elevation (ft)
Beaver	Beaver	35	5886
Brigham City	Box Elder	42	4423
Castle Dale	Emery	32	5669
Coalville	Summit	57	5581
Duchesne	Duchesne	39	5508
Farmington	Davis	35	4318
Fillmore	Millard	30	5138
Heber City	Wasatch	60	5604
Junction	Piute	27	6030
Kanab	Kane	25	4964

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

Note: To convert lb/ft2 to kN/m2, 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 ½ inch (12.7 mm) gypsum board of 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 315.2.2, 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:~~ A new IRC, Section 327 is added as follows: Section R327 Stationary Storage Battery Systems "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 27 is 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 Utah Code Page 80 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)~~(30) 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)~~(31) 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)~~(32)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)~~(33)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."

Amended by Chapter 102, 2021 General Session
Amended by Chapter 199, 2021 General Session

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

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

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

(3) In IRC, Section N1101.13 (R401.2), add Exception as follows:
"Exception: A project complies if the project demonstrates compliance, using the software RES Check 2012 Utah Energy Conservation Code, of:
(a) on or after January 1, 2017, and before January 1, 2019, "3 percent better than code";
(b) on or after January 1, 2019, and before January 1, 2021, "4 percent better than code"; and
(c) after January 1, 2021, "5 percent better than code.""

(4) In IRC, Table N1102.2 (R402.1.2), in the column titled MASS WALL R-VALUE, a new footnote j is added as follows: "j. Log walls complying with ICC400 and with a minimum average wall thickness of 5 inches or greater shall be permitted in Zones 5 through 8 when overall window glazing has a .31 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil), and all other component requirements are met."

(5) In IRC, Section N1102.4.1 (R402.4.1), in the first sentence, the word "and" is deleted and replaced with the word "or."

(6) In IRC, Section N1102.4.1.1 (R402.4.1.1), the last sentence is deleted and replaced with the following: "Where allowed by the code official, the builder may certify compliance to components criteria for items which may not be inspected during regularly scheduled inspections."

(7) In IRC, Section N1102.4.1.2 (R402.4.1.2), the following changes are made:
(a) In the first sentence:
(i) "The building or dwelling unit" is deleted and replaced with "A single-family dwelling";
(ii) after January 1, 2019, replace the word "five" with "3.5"; and
(iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate Zones3 through 8" are deleted.
(b) The following sentence is inserted after the first sentence: "A multi-family dwelling and townhouse shall be tested and verified as having an air leakage rate of not exceeding five air changes per hour."
(c) In the third sentence, the word "third" is deleted.
(d) The following sentence is inserted after the third sentence: "The following parties shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed contractors who have completed training provided by Blower Door Test equipment manufacturers or other comparable training."

(8) In IRC, Section N1103.3.3 (R403.3.3):
(a) the exception for duct air leakage testing is deleted;
and (b) the exception for duct air leakage is replaced:
(i) on or after January 1, 2017, and before January 1, 2019, with the following: "Exception: The duct air leakage test is not required for systems with all air handlers and at least 65% of all ducts (measured by length) located entirely within the building thermal envelope.";
(ii) on or after January 1, 2019, and before January 1, 2021, with the following: "Exception: The duct air leakage test is not required for systems with all air handlers and at least

75% of all ducts (measured by length) located entirely within the building thermal envelope."; and

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

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

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

(a) in Subsection 1, the number 4 is changed to 8, the number 113.3 is changed to 170, the number 3 is changed to 6, the number 85 is changed to 114.6; and (b) in Subsection 2:

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

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

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

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

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

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

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

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

TABLE N1103.6.1 (R403.6.1)
MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM (CFM)
HRV or ERV	Any	1.2 cfm/watt	Any
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any

Bathroom, utility room	10	1.4 cfm/watt	<90
Bathroom, utility room	90	2.8 cfm/watt	Any

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

TABLE N1106.4 (R406.4)
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	65
5	69
6	68

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

(17) In IRC, Section M1402.1 the following is added at the end: "or UL/CSA 60335-2-40.

(18) In IRC, Section M1403 the word "ANCE" is deleted.

(17) IRC, Section M1411.8, is deleted.

(19) In IRC, Section M1412.1 the word "ANCE" is deleted.

(20) In IRC, Section M1413.1 the word "ANCE" is deleted.

Amended by Chapter 20, 2019 General Session

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

(1) A new IRC, Section P2602.3, is added as follows: "P2602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized, provided that the source has been developed in accordance with Utah Code, Sections 73-3-1 and 73-3-25, as administered by the Department of Natural Resources, Division of Water Rights. In addition, the quality of the water shall be approved by the local health department having jurisdiction."

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

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

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

lavatory to any side wall, partition, or obstruction." Remaining item numbers are renumbered accordingly.

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

(6) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly testing. The premise owner or the premise owner's designee shall have backflow prevention assemblies operation tested in accordance with administrative rules made by the Drinking Water Board at the time of installation, repair, and relocation and at least on an annual basis thereafter, or more frequently as required by the authority having jurisdiction. Testing shall be performed by a Certified Backflow Preventer Assembly Tester. The assemblies that are subject to this paragraph are the Spill Resistant Vacuum Breaker, the Pressure Vacuum Breaker Assembly, the Double Check Backflow Prevention Assembly, the Double Check Detector Assembly Backflow Preventer, the Reduced Pressure Principle Backflow Preventer, and Reduced Pressure Detector Assembly. Third-party certification for backflow prevention assemblies will consist of any combination of two certifications, laboratory or field. Acceptable third-party laboratory certifying agencies are ASSE, IAPMO, and USC-FCCCHR. USCFCCCHR currently provides the only field testing of backflow protection assemblies. Also see www.drinkingwater.utah.gov and rules made by the Drinking Water Board."

(7) In IRC, Section P2902.1, the following subsections are added as follows:

"P2902.1.1 General Installation Criteria.

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

P2902.1.2 Specific Installation Criteria.

P2902.1.2.1 Reduced Pressure Principle ~~Blackflow~~ Backflow Prevention Assembly.

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

a. The assembly may not be installed in a pit.
b. The relief valve of the assembly shall not be directly connected to a waste disposal line, including a sanitary sewer, a storm drain, or a vent.
c. The assembly shall be installed in a horizontal position only, unless listed or approved for vertical installation in accordance with Section 303.4.
d. The bottom of the assembly shall be installed a minimum of 12 inches above the floor or ground.
e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

P2902.1.2.2 Double Check Valve Backflow Prevention Assembly.

A double check valve backflow prevention assembly shall be installed as follows:

a. The assembly shall be installed in a horizontal position only, unless listed or approved for vertical installation.
b. The bottom of the assembly shall be a minimum of 12 inches above the ground or floor.
c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance between all sides of the vault, including the floor and roof or ceiling, with adequate room for testing and maintenance.

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

A pressure vacuum break assembly or a spill resistant pressure vacuum breaker assembly shall be installed as follows:

a. The assembly shall not be installed in an area that could be subject to backpressure or back drainage conditions.
b. The assembly shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.
c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
d. The assembly shall not be installed below ground, in a vault, or in a pit.
e. The assembly shall be installed in a vertical position."

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

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

(10) IRC, Section P2910.5, is deleted and replaced with the following:

"P2910.5 Potable water connections.

When a potable water system is connected to a nonpotable water system, the potable water system shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 2901." (11) IRC, Section P2910.9.5, is deleted and replaced with the following:

"P2910.9.5 Makeup water.

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

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

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

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

(15) IRC, Section P3009, is deleted and replaced with the following:

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

Non potable systems utilized for subsurface irrigation for single-family residences shall comply with the requirements of R317-401, UAC, Graywater Systems."

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

(17) In IRC, Section P3104.4, the following sentence is added at the end of the paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain and floor sink installations when installed below grade in accordance with Chapter 30, and Sections P3104.2 and P3104.3. A wall cleanout shall be provided in the vertical vent."

Amended by Chapter 20, 2019 General Session

15A-3-206 Amendments to Chapters 37, 39, and 44 and Appendix F of IRC.

(1) In IRC, Section E3601.6.2, a new exception is added as follows: "Exception: An occupant of an accessory dwelling unit is not required to have access to the disconnect serving the dwelling unit in which they reside."

(2) In IRC, Section E3705.4.5, the following words are added after the word "assemblies": "with ungrounded conductors 10 AWG and smaller".

(3) In IRC, Section E3901.4.5, the last sentence in the exception is deleted and replaced with the following: "Receptacles mounted below the countertop in accordance with this exception shall not be located more than 14 inches from the bottom leading edge of the countertop."

(4) In IRC, Section E3901.9, the following exception is added:
"Exception: Receptacles or other outlets adjacent to the exterior walls of the garage, outlets adjacent to an exterior wall of the garage, or outlets in a storage room with entry from the garage may be connected to the garage branch circuit."

(5) IRC, Section E3902.16 is deleted.

(6) In Section E3902.17:
(a) following the word "Exception" the number "1." is added;
and (b) at the end of the section, the following sentences are added:
"2. This section does not apply for a simple move or an extension of a branch circuit or an outlet which does not significantly increase the existing electrical load. This exception does not include changes involving remodeling or additions to a residence."

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

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

(7) IRC, Chapter 44. is amended by deleting the standard for "ANCE".

(8) In IRC, Chapter 44 the standard for ASHRAE is modified by changing "2013" to "2019" and adding the words "3rd edition" after the word "Dehumidifiers".

(9) IRC, Chapter 44, the standard for UL is modified as follows:

(a) "2011" is changed to "2015" and the words "with revision through July 2015" are deleted

(b) "the word "ANCE" is deleted , "2012" is changed to "2019", "- 40" is added after "Part 2", the words "Motor Compressors" are deleted and replaced with "Electrical Heat Pumps, Air Conditioners and Dehumidifiers-3rd Edition.

~~(8)~~(10) In IRC, Chapter 44, is amended by adding the following reference standard: "UL 9540-20: Energy Storage Systems and Equipment: R327.1, R327.2 and R327.6."

~~(6)~~(10)

(a) When passive radon controls or portions thereof are voluntarily installed, the voluntary installation shall comply with Appendix F of the IRC.

(b) An additional inspection of a voluntary installation described in Subsection (9)(a) is not required.

Amended by Chapter 102, 2021General Session
Amended by Chapter 199, 2021 General Session

Part 3
Statewide Amendments to International Plumbing Code

15A-3-306 Amendments to Chapter 6 of IPC.

(1) IPC, Section 602.3, is deleted and replaced with the following: "602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized provided that the source has been developed in accordance with Utah Code, Sections 73-3-1, 73-3-3, and 73-3-25, as administered by the Department of Natural Resources, Division of Water Rights. In addition, the quality of the water shall be approved by the local health department having jurisdiction. The source shall supply sufficient quantity of water to comply with the requirements of this chapter."

(2) IPC, Sections 602.3.1, 602.3.2, 602.3.3, 602.3.4, 602.3.5, and 602.3.5.1, are deleted.

(3) A new IPC, Section 604.4.1, is added as follows: "604.4.1 Manually operated metering faucets for food service establishments. Self closing or manually operated metering faucets shall provide a flow of water for at least 15 seconds without the need to reactivate the faucet."

(4) IPC, Section 606.5, is deleted and replaced with the following: "606.5 Water pressure booster systems. Water pressure booster systems shall be provided as required by Section 606.5.1 through 606.5.11."

(5) A new IPC, Section 606.5.11, is added as follows: "606.5.11 Prohibited installation. In no case shall a booster pump be allowed that will lower the pressure in the public main to less than the minimum water pressure specified in Utah Administrative Code R309-105-9."

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

(7) In IPC, Section 608.1, the following subsections are added as follows: "608.1.1 General Installation Criteria.

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

608.1.2 Specific Installation Criteria.

608.1.2.1 Reduced Pressure Principle ~~Blackflow~~ Backflow Prevention Assembly.

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

a. The assembly shall not be installed in a pit or below grade where the relief port could be submerged in water or where fumes could be present at the relief port discharge.
b. The relief valve of the assembly shall not be directly connected to a waste disposal line, including a sanitary sewer, storm drain, or vent.
c. The assembly shall be installed in a horizontal position, unless the assembly is listed or approved for vertical installation in accordance with Section 303.4.
d. The bottom of each assembly shall be installed a minimum of 12 inches above the ground or the floor.
e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

608.1.2.2 Double Check Valve Backflow Prevention Assembly.

A double check valve backflow prevention assembly shall be installed as follows:

a. The assembly shall be installed in a horizontal position unless the assembly is listed or approved for vertical installation.
b. The bottom of the assembly shall be a minimum of 12 inches above the ground or the floor.
c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance around all sides of the vault, including the floor and roof or ceiling, with adequate room for testing and maintenance.

608.1.2.3 Pressure Vacuum Breaker Assembly and Spill Resistant Pressure Vacuum Breaker Assembly.

A pressure vacuum breaker assembly and spill resistant pressure vacuum breaker assembly shall be installed as follows:

a. The assembly shall not be installed in an area that could be subject to backpressure or back drainage conditions.
b. The assembly shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.
c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
d. The assembly shall not be installed below ground or in a vault or pit.
e. The assembly shall be installed in a vertical position."

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

(9) In IPC, Section 608.6, the words "with the potential to create a condition of either contamination or pollution or" are added after the word "substances."
(10) In IPC, Section 608.7, the following sentence is added at the end of the paragraph: "Any connection between potable water piping and sewer-connected waste shall be protected by an air gap in accordance with Section 608.14.1."
(11) IPC, Section 608.8, is deleted and replaced with the following: " 608.8 Stop and Waste Valves installed below grade. Combination stop-and-waste valves shall be permitted to be installed underground or below grade. Freeze proof yard hydrants that drain the riser into the ground are considered to be stop-and-waste valves and shall be permitted. A stop-and-waste valve shall be installed in accordance with a manufacturer's recommended installation instructions."
(12) IPC, Section 608.14.3, is deleted and replaced with the following: “608.14.3 Backflow preventer with intermediate atmospheric vent. Backflow preventers with intermediate atmospheric vents shall conform to ASSE 1012 or CSA CAN/CSA-B64.3. These devices shall be permitted to be installed on residential boilers, without chemical treatment, where subject to continuous pressure conditions, and humidifiers in accordance with Section 608.17.10. The relief opening shall discharge by air gap and shall be prevented from being submerged."
(13) IPC, Section 608.14.4, is deleted.
(14) IPC, Section 608.16.3, is deleted and replaced with the following: “608.16.3 Protection by a backflow preventer with intermediate atmospheric vent. Connections to residential boilers only, without chemical treatment, and humidifiers shall be protected by a backflow preventer with an intermediate atmospheric vent."
(15) IPC, Section 608.16.4, is deleted and replaced with the following: “608.16.4 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type or pressure type vacuum breakers. Vacuum breakers shall not be installed under exhaust hoods or similar locations that will contain toxic fumes or vapors. Fill valves shall be set in accordance with Section 425.3.1. Atmospheric Vacuum Breakers - The critical level of the atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above the flood level rim of the fixture or device. Pipe-applied vacuum breakers shall be installed not less than 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served. No valves shall be installed downstream of the atmospheric vacuum breaker. The atmospheric vacuum breaker shall not be installed where it may be subjected to continuous pressure for more than 12 consecutive hours at any time. Pressure Vacuum Breaker - The critical level of the pressure vacuum breaker shall be set a minimum of 12 inches (304 mm) above the flood level of the fixture or device."
(16) In IPC, Section 608.16.4.2, the following is added after the first sentence: "Add-on-backflow prevention devices shall be non-removable. In climates where freezing temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow preventer shall be used."
(17) In IPC, Section 608.17.1.2, the words "or ASSE 1024" are deleted.
(18) IPC, Section 608.17.2, is deleted and replaced as follows: " 608.17.2 Connections to boilers. The potable supply to a boiler shall be protected by an air gap or a reduced

pressure principle backflow preventer, complying with ASSE 1013, CSA B64.4 or AWWA C511.

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

(19) In IPC, Section 608.17.4.1, a new exception is added as follows: "Exception: All class 1 and2 systems containing chemical additives consisting of strictly glycerine (C.P. or U.S.P. 96.5 percent grade) or propylene glycol shall be protected against backflow with a double check valve assembly. Such systems shall include written certification of the chemical additives at the time of original installation and service or maintenance."

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

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

(22) A new IPC, Section 608.17.11, is added as follows: " 608.17.11 Automatic and coin operated car washes. The water supply to an automatic or coin operated car wash shall be protected in accordance with Section 608.14.1 or Section 608.14.2."

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

Amended by Chapter 20, 2019 General Session

Part 4
Statewide Amendments to International Mechanical Code

15A-3-402 Amendments to Chapters 1 through 5 of IMC.

(1) In IMC, Table 403.3.1.1, note h is deleted and replaced with the following:

"h. 1. A nail salon shall provide each manicure station where a nail technician files or shapes an acrylic nail, as defined by rule by the Division of Occupational and Professional Licensing, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, with:

a. a source capture system equipped with, at minimum, a MERV 8 particulate filter and an activated carbon filter that is capable of filtering and recirculating air to inside space at a rate not less than 50 cfm per station; or

b. a source capture system capable of exhausting not less than 50 cfm per station.

c. A nail salon that complies with Note h.l.a or h.l.b is not required to comply with the labeling, listing, or testing requirements described in International Mechanical Code sections 301.7 or 301.8.

2. For a source capture system described in paragraph 1, the source capture system inlets for exhausting or recirculating air shall be located in accordance with Section 502.20.

3. Where one or more exhausting source capture systems described in paragraph 1 operate continuously during occupancy, the source capture system exhaust rate shall be permitted to be applied to the exhaust flow rate required by Table 403.3.1.1 for the nail salon.

4. The requirements of this note apply to:

a. an existing nail salon that remodels the nail salon after July 1, 2017;

b. a new nail salon that begins construction after July 1, 2017; and

c. all nail salons beginning on July 1, 2020."

(2) In IMC, Section 502.20 is deleted and rewritten as follows:

"502.20 Manicure stations. A nail salon that files or shapes an acrylic nail shall provide each manicure station with a source capture system in accordance with Table 403.3.1.1, note h. For a manicure table that does not have factory-installed source capture system inlets for recirculating or exhausting air, a nail salon shall provide the manicure table with inlets for recirculating or exhausting air located not more than 12 inches (305 mm) horizontally and vertically from the point of any acrylic chemical application.

Exception: Section 502.20 applies to a manicure station in:

a. an existing nail salon that remodels the nail salon after July 1, 2017;

b. a new nail salon that begins construction after July 1, 2017; and

c. all nail salons beginning on July 1, 2020."

(3) In IMC, Section 908.1 the following words are added at the end of the last sentence: "or UL/CSA 60335-2-40."

(4) In IMC, Section 918.1 the following words are added after "1995": "or UL/CSA60335-2-40".

(5) In IMC, Section 918.2 the following words are added at the end of the sentence: "or UL/CSA 60335-2-40".

(6) In IMC, Section 1101.2 the word "or" is deleted and the following is added at the end of the first sentence: or UL/CSA 60335-2-40.

(7) In IMC, Section 1101.6 the following is added at the end: "High probability systems utilizing A2L refrigerants shall comply with ASHRAE 15.

(8) IMC Chapter 15 Reference Standards is amended as follows:

(a) ASHRAE 15-2013 is changed to 15-2019

(b) ASHRAE 34-2013 is changed to 34-2019

(c) The following standards are added:

CSA C22.2 No. 60335-2-40-2019 Household and Similar Electrical Appliances Safety – Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers – 3rd Edition

UL 60335-2-40 2019 Household and Similar Electrical Appliances - Safety- Part 3-40. Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers- 3rd Edition

Amended by Chapter 441, 2020 General Session

Section B

Uniform Building Code Commission - Summary of recommended amendments to construction codes under Title 15A, State Construction and Fire Code Act. Includes fiscal analysis where there is a cost increase or cost savings.

Overall Summary of Proposed Changes:

The advisory committees recommend that most of the current amendments under the 2018 be carried forward as amendments to the updated codes. In some cases, technical changes such as numbering or rewording have been needed to coordinate with the current codes. In most of these cases, keeping prior amendments does not substantially change the relevant construction standards.

2020 ICC Code Proposed Statewide Amendments Summary and Fiscal Analysis

Statute - Code Section	Proposed Amendment	Fiscal Impact
15A-3-202		
IRC Section R327.2 IRC Section 327.2 IRC Section 327.3 IRC Section 327.3.1 IRC Section 327.4 IRC Section 327.5 IRC Section 327.6 IRC Section 327.7 IRC Section 327.8	These changes are recommended as the 2015 IRC does not have a Section R327. As such, the language needs to be updated in order to indicate the addition of a new section.	No cost or savings impact.

IRC Section 327.9 IRC Section 327.10 IRC Section 327.11		
15A-3-203		
IRC Section M1402.1 IRC Section M1403 IRC Section M1412.1 IRC Section M1413.1	These changes are recommended in order to bring the reference standards up to the current editions. The latest edition of UL/CDA 60335-2-40 is the 3rd Edition – 2019. The references to ANCE are proposed to be removed since ANCE withdrew from the 3rd Edition and is no longer associated with the standard.	No cost impact. May provide cost savings to projects and allow more flexibility with construction.
15A-3-205		
IRC Section P2902.1.2.1	These changes are recommended as the respective words are not included in the section of the 2015 IRC. Additionally, includes a correction for the word “Backflow”.	No cost or savings impact.
15A-3-206		
IRC Chapter 44	These changes are recommended in order to bring the reference standards up to the latest edition.	No cost or savings impact.
15A-3-306		
IPC Section 608.1.2.1	This change is recommended as a correction for the word “Backflow”.	No cost or savings impact.
15A-3-402		
IMC Section 908.1 IMC Section 918.1 IMC Section 918.2 IMC Section 1101.2 IMC Section 1101.6 IMC Chapter 15	These amendments are recommended in order to bring the reference standards up to the latest editions.	No cost or savings impact.