

UNIFORM BUILDING CODE COMMISSION  
MEETING

Agenda

July 9, 2025 9:00 AM

Join with Google Meet  
[meet.google.com/hoh-hysn-vve](https://meet.google.com/hoh-hysn-vve)

Join by phone  
(US) +1 240-558-8105 PIN: 460 862 945#

*Anchor Location  
Room North Conference Room  
Heber M Wells Building  
160 E 300 S*

1. Roll call
2. Approve the minutes from the June 11, 2025, meeting
3. Discuss repair of existing roofs (R904.1, R905.2.4 and R905.2.4.1)
4. Review proposed amendment for IRC Section R311.7.5
5. Review proposed amendment for IMC 1109.2.5
6. Review proposed amendments for IFGC 502.1 and 503.4.1
7. Review recommendation from the Mechanical Advisory Committee for the 2024 IMC, IFGC and IECC

Advisory Committee Reports  
Mechanical Advisory Committee 10-8-24, 1-14-25, 2-11-25, 3-11-25, 4-9-25, 5-20-25 and 6-10-25

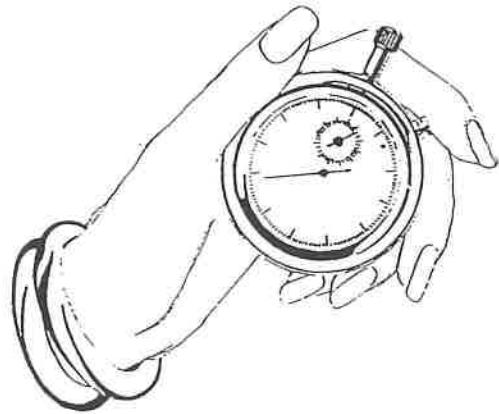
Next meeting date: August 13, 2025

Please call Sharon at 530-6163 if you do not plan on attending the meeting.



In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Jenna Mayne, ADA Coordinator, [jennamayne@utah.gov](mailto:jennamayne@utah.gov) 801-530-6256 at least three working days prior to the meeting. Division of Occupational and Professional Licensing, 160 East 300 South, Salt Lake City UT 84111, Phone 530-6628.

# Agenda Item #2



MINUTES

MINUTES  
UTAH  
UNIFORM BUILDING CODE COMMISSION

May 14, 2025

9:00

Convened: 9:02

Adjourned: 10:46

STAFF:

Stephen Duncombe, Bureau Manager  
Sharon Smalley, Board Secretary  
Nicole Herrera, Board Secretary

COMMISSIONERS:

Thomas Peterson,  
Josh Blazzard  
Lorianne Bisping (excused)  
Travis Dalley  
Trent Hunt  
Ken Adams  
Gary Bullock

Chris Hendrickson (absent)  
Art Anderson  
Dirk Burton (excused)  
Joerg Ruegemer  
Scott Carpenter  
Steve Dailey

VISITORS:

Ross Ford  
Bryce McConkie  
Troy Thompson  
Patrick Tomasino  
Don Simons  
Rob Durfee

Cathryn Nelson  
Jason Van Ausdal  
Casey Larson  
Jerry Thompson  
Chris Bowles  
Jeremy Haslam

MINUTES

A motion was made by Ken Adams to approve the minutes from the April 16, 2025, meeting as written. The motion was seconded by Gary Bullock and passed unanimously.

APPOINT LIAISON FOR THE  
PLUMBING/HEALTH ADVISORY  
COMMITTEE

Scott Carpenter volunteered to be the liaison for this committee.

**DISCUSS THE REQUIREMENTS  
FOR THE 40-HOUR PROFESSION-  
AL TRAINING FOR BUILDING OF-  
FICIALS (REFER TO 15A-1-202(16)**

Steve Duncombe reported that the Division is working on developing the requirements for the 40-hour class. The Division along with UABO is trying to create a framework of what the training should consist of. Patrick Tomasino spoke to those present about the format that has been developed so far. He reported that UABO has met with DOPL and HBA to try and develop the framework. He also reported that they have a rough outline for the training format, some dates set for the classes, and some locations set for where the training will be held. The courses will cover communication skills, delivering exceptional customer service, conflict resolution, dealing with difficult people and situations, inspector skills and the role of an inspector. Each category would consist of an 8-hour course. After completion of each course, a certificate will be issued. UABO would be responsible for maintaining a list of those who have completed the training.

Those present also discussed other avenues for training that could be accepted. An associates or higher degree in public administration, business administration, construction management or engineering technology could be accepted. Courses offered by ICC could also count for the 40-hour requirement.

The Commission agreed that if a course has already been taken that meets the qualifications, it could be counted towards the 40-hour requirement. The Commission agreed that if a class was taken after January 1, 2024, that meets the requirements, it could be counted. They would have to provide UABO with documentation for the class before it could be counted.

Steve Duncombe will draft the administrative rule covering the 40-hour requirements previously discussed. This draft will be sent to the Commission members prior to next month's meeting for them to review and then it will be finalized at the next meeting.

**DISCUSS THE REQUIREMENTS  
FOR LICENSING OF HOME IN**

The Building Inspector Licensing Board gave their recommendations for the requirements for the li

SPECTORS (REFER TO 15A-1-302(14)

censing of private home inspectors. Their recommendation is that the person has a current certification from either the American Society of Home Inspectors (ASHI), the International Association of Certified Home Inspectors (InterNACHI) or holds the Residential Combination Inspector certification from the International Code Council (ICC). They would also be required to maintain liability insurance in the amount of \$500,000 and errors and omissions insurance in the amount of \$500,000. A motion was made by Trent Hunt to approve the recommendation as presented. The motion was seconded by Scott Carpenter and passed unanimously. During the discussion on the motion, Trent Hunt amended his motion to add that the insurance certificate would have to have DOPL as the certificate holder. It was also recommended that the insurance be called general liability insurance. Scott Carpenter agreed with the modifications. Following the discussion, the amended motion to accept the requirements for licensing of private home inspectors passed unanimously.

REVIEW THE RECOMMENDATION FROM THE PLUMBING ADVISORY COMMITTEE FOR THE 2024 IPC AND ISPSC

Don Simons and Chris Bowles from the Plumbing – Health Advisory Committee covered the recommendations that the committee has made for the 2024 codes. The Commission reviewed and discussed each of the recommendations made by the committee.

During the review of Section 312.3 and the committee's recommendation to delete the current amendment, questions were raised as to the cost of requiring vacuum testing and the difficulty of locating leaks with the vacuum system. Following the discussion, a motion was made by Scott Carpenter to deny the recommendation and to keep the current amendment. The motion was seconded by Ken Adams and passed unanimously.

It was reported that the committee found no other major changes to the plumbing code. Following the review and discussion on the recommendations, a motion was made by Scott Carpenter to approve the recommendations excluding the deletion of Section 312.3 and to forward the recommendations to public hearing. The motion was seconded by Travis

Dalley and passed unanimously.

Don Simons outlined the recommendations that the committee made for the swimming pool and spa code. Following the review, a motion was made by Ken Adams to accept the recommendations for the amendments to the swimming pool and spa code. The motion was seconded by Scott Carpenter and passed unanimously.

The meeting adjourned at 10:46.

*Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.*

# Agenda Item #3

On 4/30/2025 10:14 AM, Dynamite Contractors wrote:

Dear UBCC,

I hope this message finds you well.

I am reaching out to seek the guidance of the Utah Uniform Building Code Commission regarding a matter that has presented challenges across multiple jurisdictions within the state. While we understand that enforcement of building codes is typically managed at the local level, the adoption of the 2021 International Residential Code (IRC) by the state—and its subsequent adoption by various jurisdictions—suggests that a consistent interpretation would benefit all stakeholders involved.

Our concern centers on the repair of existing roofs where the original shingle manufacturer cannot be identified. In such cases, we often rely on third-party laboratory testing (e.g., ITEL or NTS) to determine the shingle's origin. However, there are instances where these tests yield inconclusive results.

According to IRC Section R904.1, roofing materials must be installed in accordance with the manufacturer's instructions. Furthermore, Section R904.2 mandates that materials used must be compatible with each other. Major shingle manufacturers have advised against mixing their products with those of other manufacturers due to potential incompatibilities, such as differences in size, thickness, sealant placement, and nail strip locations. Additionally, these manufacturers have not conducted testing to ensure that their shingles, when combined with others, meet the performance requirements outlined in Sections R905.2.4 and R905.2.4.1 of the IRC.

Given that the existing shingles on a roof are from the same manufacturer and are inherently compatible, introducing shingles of unknown or different origin could compromise the roof's integrity. This scenario appears to conflict with IRC Section R102.7.1, which states that additions, alterations, or repairs shall not cause the existing structure to become less compliant with the code than it was before the work commenced.

In light of these considerations, we seek the Commission's opinion on the following:

- **do you agree that, under the current code, we cannot repair a roof when the original shingle manufacturer cannot be identified, since every major shingle manufacturer states their shingles are not compatible with other manufacturers?**

Our objective is to uphold the highest standards of safety and compliance for homeowners across Utah. A consistent interpretation from the Commission would greatly assist in achieving this goal and provide clarity for contractors operating in multiple jurisdictions.

Thank you for your time and consideration. We look forward to your guidance on this matter.

Best regards,

# Agenda Item #4

UTAH DEPARTMENT OF COMMERCE  
DIVISION OF OCCUPATIONAL AND PROFESSIONAL LICENSING  
160 East 300 South Salt Lake City UT 84111  
PO Box 146741 Salt Lake City UT 84114-6741  
E-mail: b8@utah.gov  
Web: www.dopl.utah.gov

REQUEST FOR CODE AMENDMENT

Requesting Agency/Person: SYRACUSE CITY	Date: 5/13/2025
Street Address: 1979 W 1900S	
City, State, Zip SYRACUSE UT 84015	
Contact Person: BRIAN LEMMONS	Phone: 801-882-5437
Code to be Amended: (Include edition)	2021 IRC
Section: R311.7.5	
Section Title: STAIR TREADS AND RISERS	

AMENDMENT:

Type proposed amendment in rule change form. (Using strikeout on portions being removed and underline on all new wording.)

1. Include the entire section you wish to amend.
2. Attach additional sheets if necessary.

R311.7.5 HAS BEEN AMENDED OUT. I BELIEVE THIS  
SECTION OF CODE THAT STATES: "FOR THE PURPOSE  
OF THIS SECTION, DIMENSIONS AND DIMENSIONED SURFACES  
SHALL BE EXCLUSIVE OF CARPETS, RUGS OR RUNNERS."  
NEEDS TO BE IN THE CODE SO INSPECTORS ARE HELD  
TO AN ENFORCEABLE STANDARD. THIS WOULD MEAN STAIR  
RISER HEIGHTS ARE MEASURED AT THE 4 WAY NOT THE  
FINAL

Purpose of or Reason for the amendment: SOME INSPECTORS ACROSS THE STATE ARE FAILING A FINAL INSPECTION BECAUSE RISER HEIGHTS ARE NOT WITHIN THE 3/8" VARIANCE DUE TO DIFFERENT THICKNESS FLOORING, INTERIOR FLOORING CHANGES AND THE STAIR RISERS SHOULD NOT HAVE TO BE REBUILT EVERY TIME THIS HAPPENS

Cost or Savings Impact of Amendment:

THE COST SAVINGS IS FOR THE BUILDERS AT THE FINAL IF AN INSPECTOR SAYS THE UNFINISHED BASEMENT STAIRS NEED TO BE CHANGED BECAUSE THE RISER HEIGHT IS OFF. THIS IS ONLY THE CASE BECAUSE THEY ARE NOT FINISHED YET.

Compliance Costs for Affected Persons (APerson@ means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an agency.) (You must break out the impact cost to State Budget, Local Government and you must state aggregate cost to other persons {cost per person times number of persons affected}):

THIS IS UNKNOWN TO ME, I DO KNOW BUILDERS SHOULD NOT BE FAILED AT A FINAL AND MADE TO REBUILD STAIRS BECAUSE THEY ARE UNFINISHED.

Signature: 

Date: 5/13/2025

#### For Division Use:

Date Received:

**Committee Action:**

Approved       Denied  
 Approved with revisions  
 Referred to:  
 Tabled

**UBC Commission Decision for Hearing:**

Approved for hearing       Denied  
 Approved with revisions  
 Referred to:  
 Tabled

Date Filed:

Public Hearing Date:

**UBC Commission Decision for Adoption:**

Approved       Denied  
 Approved with revisions  
 Referred to:  
 Tabled

Effective Date:

## BUILDING PLANNING

that all persons will travel on stairs. However, the code recognizes that a prescribed location of a walkline is essential to safe stair design.

Changes in direction within a given stairway are typically accomplished by one of two means: a landing between stair flights or one or more winder treads. In scenarios where landings are not provided at changes in direction between flights of stairs, changes in the direction of travel at winder treads typically result in an arc for some portion of the walkline. This arc has a center point around which occupants travel, and the arc of the walkline at each of the winder treads at any given turn have the same center point, thus the code uses the term "concentric." As a user ascends or descends a flight, the turning at each winder tread step should be consistent through the turn.

At winder treads, the specific walkline location is determined by measuring 12 inches (305 mm) from the narrow side, or inside radius, of the "clear stair width," or the limit of where the foot might actually be placed at the narrow side of the winder tread [see Commentary Figures R311.7.5.2.1(1) and R311.7.5.2.1(2)]. The portion of treads that are on the side of guardrails or balustrades that are opposite the walkline, for example, are not considered part of the winder treads' "clear stair width." The "clear stair width" is only that portion of the stair width that is clear for passage. Portions of the stair beyond the clear width are inconsequential to use of the stair, consistent travel or location of the walkline.

For winder treads, Section R311.7.5.2.1 prescribes two critical dimensional requirements: a 10-inch minimum tread depth at the walkline and a 6-inch minimum tread depth at the narrow side of the clear width of the winder tread. Regulation at these two points controls the geometry of the turn. In order to establish consistently shaped winders, tread depths at turns must always be determined by measuring between the points formed where the arc that is the walkline, or the assumed arc of travel, intersect the nosings of adjacent treads, as measured horizontally and in a straight line.

The walkline of winder treads is unique as the only line or path of travel where winder tread depth is controlled by the same minimum tread depth as rectangular treads. At all other points, the tread depths of winder and rectangular treads differ.

The winder requirements of Section R311.7.5.2.1 recognize that winder tread depth need not be compared to rectangular tread depths for dimensional uniformity in the same flight if the code-prescribed walkline is located with the intent to provide a reasonable standard to followed by all users.

The language "and parallel to the direction of travel entering and exiting the turn" is intended to describe the straight portion of the occupant's path along the straight portions of stairways as they approach winder treads at a change in stair travel or direction.

It is important to note that, because winders must have a minimum tread depth of 6 inches (152 mm) in accordance with Section R311.7.5.2.1, they cannot meet at a common point on the walkline side of a guard or wall.

For completely curved stairways, each tread is a winder, the narrow side of each winder tread is an arc when viewed from above, and the walk line at the entire stair is an arc, without any straight portion [see Commentary Figure R311.7.5.2.1(2)].

For additional details related to winder treads, see the commentary to Section R311.7.5.2.1.

**R311.7.5 Stair treads and risers.** Stair treads and risers shall meet the requirements of this section. For the purposes of this section, dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.

- ❖ The riser height, tread depth and profile requirements for stairways are specified in Sections R311.7.5.1 through R311.7.5.3. These provisions facilitate smooth and consistent travel. This section provides dimensional ranges and tolerances for the component elements to allow the flexibility required to design and construct a stair or a flight of stairs, which are elements of a stairway. The allowed proportion of maximum riser height and minimum tread depth provides for a maximum angle of ascent, but there is no maximum tread depth or minimum riser height that would define a minimum angle for a stairway. Nor is the proportion of riser height to tread depth compared with the limitations of the length of the user's stride on stairways, which is significantly foreshortened from the user's stride on the level. For this reason, care should be taken when incorporating large tread depths or short risers to proportion the riser height and tread depth to avoid a step that is wide enough to require more than one step to cross or a short narrow step, which can be easily stepped over. With these same limitations for proportion in mind, by controlling the minimum depth of rectangular treads and the minimum depth and angularity of winder treads, these components can control the configuration of the plan of a flight of stairs to provide for smooth and consistent travel. Carpets, rugs and runners, like furniture, are frequently changed by the occupants and are not regulated by the code. For this reason, it is essential that the riser height and tread depth be regulated exclusive of these transitory surfaces to provide an enforceable standard. This practice minimizes the possible variation due to the removal of nonpermanent carpeting throughout the life of a structure and provides a standard enforcement methodology that will provide consistency across the built environment for all users. When owners or occupants add carpeting, rugs or runners, they need to be able to add it to all tread and landing surfaces in the stairway. It is important that the tread and landing surfaces are consistent and comply with the code prior to the addition of carpet. This methodology of enforcement makes it unnecessary to reconstruct floor and stair elevations in the stairway when nonpermanent carpet surfaces are changed that do not require a building permit and eliminates the resulting variations in the built environment that will not comply with the tolerances in Sections R311.7.5.1 and R311.7.5.2.

**R311.7.5.1 Risers.** The *riser* height shall be not more than  $7\frac{1}{4}$  inches (196 mm). The *riser* height 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  $\frac{1}{8}$  inch (9.5 mm). *Risers* shall be verti-

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.

- a 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).
- b 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."

- (19) In 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."
- (20) In IRC, Section R302.2, the following sentence is added at the end of the paragraph: "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."
- (21) 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."
- (22) In IRC, Section R302.5.1, the last sentence is deleted.
- (23) In IRC, Section R302.13, is deleted.
- (24) In IRC, Section R303.4, the following exception is added: "Exception: Dwelling units tested in accordance with Section N1102.4.1.2 (R402.4.1.2) which has an air tightness of 3.0 ACH (50) or greater do not require mechanical ventilation."
- (25) In IRC, Section R310.1, all words in the last sentence after "or to a yard or court", are deleted, and Exception 3 of this section is deleted.
- (26) In IRC, Section R310.7, in the exception, the words "or accessory dwelling units" are added after the words "sleeping rooms".
- (27) IRC, Sections R311.7.45 through R311.7.5.3, are deleted and replaced with the following:  
R311.7.5 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section, dimensions and dimensioned surfaces shall be exclusive of flooring finish materials.

"R311.7.45.1 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 Nosing. 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."

(28) In IRC, Section R312.2, is deleted.

(29) In 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."

(30) In IRC, Section R314.2.2, the words "accessory dwelling units," are added after the words "Where alterations, repairs."

(31) In IRC, Section R315.2.2, the words "accessory dwelling units," are added after the words "Where alterations, repairs."

(32) 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." (32) A new IRC, Section R328.12, is added as follows:

(33) "R328.12 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."

(34) In IRC, Section 403.1.3.5.3, an exception is added as follows: "Exception: Vertical steel in footings shall be permitted to be located while concrete is still plastic and before it has set. Where vertical steel resists placement or the consolidation of concrete around steel is

# Agenda Item #5

## M75-24

### IMC®: 1109.2.5

**Proponents:** Greg Johnson, Johnson & Associates Consulting Services, National Multifamily Housing Council (gjohnsonconsulting@gmail.com); Vladimir G. Kochkin, National Association of Home Builders - NAHB, NAHB (vkochkin@nahb.org); Andrew Klein, A S Klein Engineering, PLLC, BOMA International (andrew@asklein.com); Emily Toto, ASHRAE, ASHRAE (etoto@ashrae.org)

## 2024 International Mechanical Code

**Revise as follows:**

**1109.2.5 Refrigerant pipe shafts.** Refrigerant piping that penetrates two or more floor/ceiling assemblies shall be enclosed in a fire-resistance-rated shaft enclosure. The fire-resistance-rated shaft enclosure shall comply with Section 713 of the International Building Code.

**Exceptions:**

1. *Refrigeration* systems using R-718 refrigerant (water).
2. Piping in a direct refrigeration system ~~using Group A1 refrigerant~~ where the refrigerant quantity does not exceed the limits of Table 1103.1 for the smallest occupied space through which the piping passes.
3. Piping located on the exterior of the *building* where vented to the outdoors.

**Reason:** **JOHNSON:** This will make the IMC consistent with Section 9.12.1.5 of ASHRAE 15-2022. Note that IMC Section 1109.2.2 still requires piping protection, either within building elements or protective enclosures.

**TOTO:** This section was added to the IMC before the completion of the changes to ASHRAE 15. ASHRAE 15 removed the limitation in exception 2 as applying only to Group A1 refrigerants. It was determined that any refrigerant meeting the limitations of Table 1103.1 are safe to install without a shaft enclosure. This modification is consistent with ASHRAE 15-2022.

**Cost Impact:** Decrease

**Estimated Immediate Cost Impact:**

**JOHNSON:** Costs are estimated to be reduced by roughly \$1,000 per piping run per floor of an R-2 multifamily building.

**TOTO:** This may reduce the cost of construction by eliminating the shaft requirements for all refrigerants that do not exceed the safe limitations in the code. \$22,400 estimated avoided total cost per mechanical room.

**Estimated Immediate Cost Impact Justification (methodology and variables):**

**JOHNSON:** Lineal feet of shaft-wall system avoided estimated to be 20 feet. Height of ceiling estimated to be 9 feet. Cost of installed shaft system estimated to be \$7.00 per square foot.  $20 \times 9 \times \$7 = \$960$ . \$960 was rounded to \$1,000.

**TOTO:** This change provides a lower cost alternative to the installation of a pipe shaft. Assumed area of avoided shaft wall system = 10 ft high X 40 lineal ft (\$ sided enclosure) = 400 sf of shaft wall area. Assume shaft liner wall board is \$34 per sf (kamcoboston.com), assume shaft framing materials are \$8 per sf (schillings.com), assume \$4 per sf labor (forbes.com), = \$56 per sf for installed shaft wall without finishing.  $\$56 \text{ per sf} \times 400 \text{ sf} = \$22,400$  estimated avoided total cost per mechanical room.

**Estimated Life Cycle Cost Impact:**

**JOHNSON:** N/A

**Estimated Life Cycle Cost Impact Justification (methodology and variables):**

**JOHNSON:** N/A

# Agenda Item

## #6

UTAH DEPARTMENT OF COMMERCE  
DIVISION OF OCCUPATIONAL AND PROFESSIONAL LICENSING  
160 East 300 South Salt Lake City UT 84111  
PO Box 146741 Salt Lake City UT 84114-6741  
E-mail: b8@utah.gov  
Web: www.dopl.utah.gov

REQUEST FOR CODE AMENDMENT

Requesting Agency/Person: Centrotherm Eco Systems	Date: 9/9/2024
Street Address: 428 Hudson River Rd	
City, State, Zip: Waterford, NY, 12188	
Contact Person: Isaac Favata	Phone: 518 - 463 - 9226
Code to be Amended: 2021 International Fuel Gas Code - Utah (Include edition)	
Section: 502.1	
Section Title: Vents - General	

AMENDMENT:

Type proposed amendment in rule change form. (Using strikeout on portions being removed and underline on all new wording )

1. Include the entire section you wish to amend.
2. Attach additional sheets if necessary.

Vents, except as provided in Section 503.7, shall be listed and labeled. Type B and BW vents shall be tested in accordance with UL 441. Type L vents shall be tested in accordance with UL 641. Vents for Category II, and III, and IV appliances shall be tested in accordance with UL 1738. Plastic vents for Category IV appliances shall not be required to be listed and labeled where such vents are as specified by the appliance manufacturer and are installed in accordance with the appliance manufacturer's instructions.

Purpose of or Reason for the amendment:

The standard practice of using ASTM D1785 listed PVC in venting applications for Category IV appliances is unsafe. Currently, the code leaves the decision to do so up to the appliance manufacturers, but there is an oversight in that the ASTM D1785 standard explicitly states that it is not to be used in combustion gas venting. The standard goes further and refers to the UL 1738 standard as the gas venting standard in the United States. Misapplication of standard and material results in venting failures which can have fatal consequences. Attached with the sent email is a packet with extensive evidence in this regard and more.

Cost or Savings Impact of Amendment:

Potential minor increase in material cost of residential construction which may be offset by time/labor savings. Cost impact on commercial material will decrease cost of construction.

Compliance Costs for Affected Persons (APerson@ means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an agency.) (You must break out the impact cost to State Budget, Local Government and you must state aggregate cost to other persons {cost per person times number of persons affected}):

Negligible or non-existent other than initial training on what the standard means.

Signature:



Date: 9/9/2024

For Division Use:

Date Received:	
<b>Committee Action:</b> <input type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> Approved with revisions <input type="checkbox"/> Referred to: <input checked="" type="checkbox"/> Tabled	<b>UBC Commission Decision for Hearing:</b> <input type="checkbox"/> Approved for hearing <input type="checkbox"/> Denied <input type="checkbox"/> Approved with revisions <input type="checkbox"/> Referred to: <input checked="" type="checkbox"/> Tabled
Date Filed:	Public Hearing Date:
<b>UBC Commission Decision for Adoption:</b> <input type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> Approved with revisions <input type="checkbox"/> Referred to: <input checked="" type="checkbox"/> Tabled	Effective Date:

UTAH DEPARTMENT OF COMMERCE  
DIVISION OF OCCUPATIONAL AND PROFESSIONAL LICENSING  
160 East 300 South Salt Lake City UT 84111  
PO Box 146741 Salt Lake City UT 84114-6741  
E-mail: [b8@utah.gov](mailto:b8@utah.gov)  
Web: [www.dopl.utah.gov](http://www.dopl.utah.gov)

REQUEST FOR CODE AMENDMENT

Requesting Agency/Person: Centrotherm Eco Systems	Date: 9/9/2024
Street Address: 428 Hudson River Rd	
City, State, Zip Waterford, NY, 12188	
Contact Person: Isaac Favata	Phone: 518 - 463 - 9226
Code to be Amended: 2021 International Fuel Gas Code (Include edition)	
Section: 503.4.1	
Section Title: Vents - Plastic Piping	

AMENDMENT:

Type proposed amendment in rule change form. (Using strikeout on portions being removed and underline on all new wording.)

1. Include the entire section you wish to amend.
2. Attach additional sheets if necessary.

Where plastic piping is used to vent an appliance, the appliance shall be *listed* for use with such venting materials and the appliance manufacturer's installation instructions shall identify the specific plastic piping material. The plastic pipe venting materials shall be *labeled* in accordance with the product standards specified by the appliance manufacturer ~~or and~~ shall be *listed and labeled* in accordance with UL 1738.

Purpose of or Reason for the amendment:

The standard practice of using ASTM D1785 listed PVC in venting applications for Category IV appliances is unsafe. Currently, the code leaves the decision to do so up to the appliance manufacturers, but there is an oversight in that the ASTM D1785 standard explicitly states that it is not to be used in combustion gas venting. The standard goes further and refers to the UL 1738 standard as the gas venting standard in the United States. Misapplication of standard and material results in venting failures which can have fatal consequences. Attached with the sent email is a packet with extensive evidence in this regard and more.

Cost or Savings Impact of Amendment:

Potential minor increase in material cost of residential construction which may be offset by time/labor savings. Cost impact on commercial material will decrease cost of construction.

Compliance Costs for Affected Persons (APerson@ means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an agency.) (You must break out the impact cost to State Budget, Local Government and you must state aggregate cost to other persons {cost per person times number of persons affected}):

Negligible or non-existent other than initial training on what the standard means.

Signature:



Date: 9/9/2024

**For Division Use:**

Date Received:

**Committee Action:**

Approved       Denied  
 Approved with revisions  
 Referred to:  
 Tabled

**UBC Commission Decision for Hearing:**

Approved for hearing       Denied  
 Approved with revisions  
 Referred to:  
 Tabled

Date Filed:

Public Hearing Date:

**UBC Commission Decision for Adoption:**

Approved       Denied  
 Approved with revisions  
 Referred to:  
 Tabled

Effective Date:



## A Burning Question: What is Acidic Condensate?





**Who We Are**

Leading Designer and  
Manufacturer of Condensate  
Neutralizer Solutions to the  
Heating and Plumbing Industries

**ASA HARD**   
PROUD MEMBER OF AMERICAN SURGE ASSOCIATION

**IMARK GROUP**   
Plumber Drain & Ventilator Division

**CASPE**   
American Society of Heating, Refrigerating and Air-Conditioning Engineers

**PHCC**   
Plumbing Heating Cooling Contractors

**EXPLORE**   
Plumbing Heating Cooling Contractors



**Made in  
Massachusetts**

**Grown Revenue  
Every Year**

**Sales throughout  
all U.S. and Canada**

  
Established brand name nearly 20 years  
in the industry

  
Trusted by leading OEMs, engineers,  
contractors, and service technicians

  
Products are purpose-built, designed  
to perform in **heating and plumbing industries**

  
Broadest portfolio of solutions  
for residential and commercial installations

## Select Customers

Trusted by leading distributors, engineers, OEMs, and contractors for nearly 20 years



# High-Efficiency Heat and Acidic Condensate

Acidic condensate is a byproduct of the combustion process in a gas-fired, high-efficiency appliance (boiler, furnace, or water heater). This condensate can contain a concentration of nitric, sulfuric, sulfurous, and hydrochloric acids.

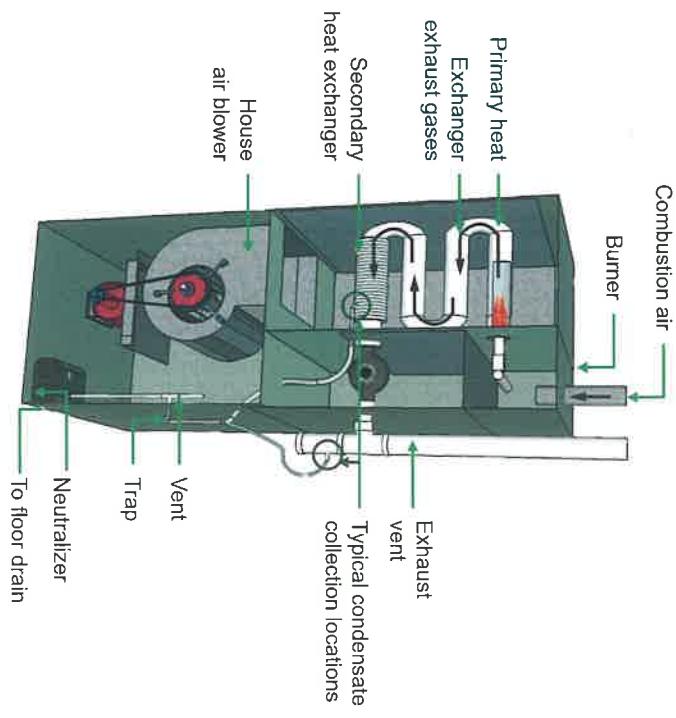
## How condensate is formed:

① High-efficiency appliances extract heat from the exhaust gases through a condensing phase

② Heat is released from the gases

③ Vapor in the gases meets the dew point and condenses into a liquid condensate

④ Condensate collects in the appliance and must be discharged



# Emerging Condensing Technology

## Trend toward higher efficiency condensing boilers<sup>1</sup>

Although high-efficiency appliances are a relatively recent innovation, they are quickly becoming the preferred appliance for commercial and residential buildings due to state and national efficiency mandates for appliances and the growing natural gas infrastructure in the U.S.



### How condensate is formed:

- ⑤ However, many installers are unaware of the associated acidic condensate and how to treat it
- ⑤ Many installers connect these condensing appliances directly to the plumbing system, potentially causing catastrophic damage both to the property's facilities and to wastewater infrastructure
- ⑤ Condensing appliances expel nearly 9 billion gallons of acidic condensate per year

# Regulations Driving Condensing Installations



DIVE BRIEF

Proposed gas furnace efficiency rule expected to move 9% of customers toward electric heat: DOE



DIVE BRIEF

DOE finalizes efficiency standards for pool pumps and commercial water heaters, proposes boiler rules

The three efficiency rules could save consumers more than \$1 billion in utility bills every year, the agency said.

Published 09/07/2023



DIVE BRIEF

DOE updates water heater rule for first time in two decades

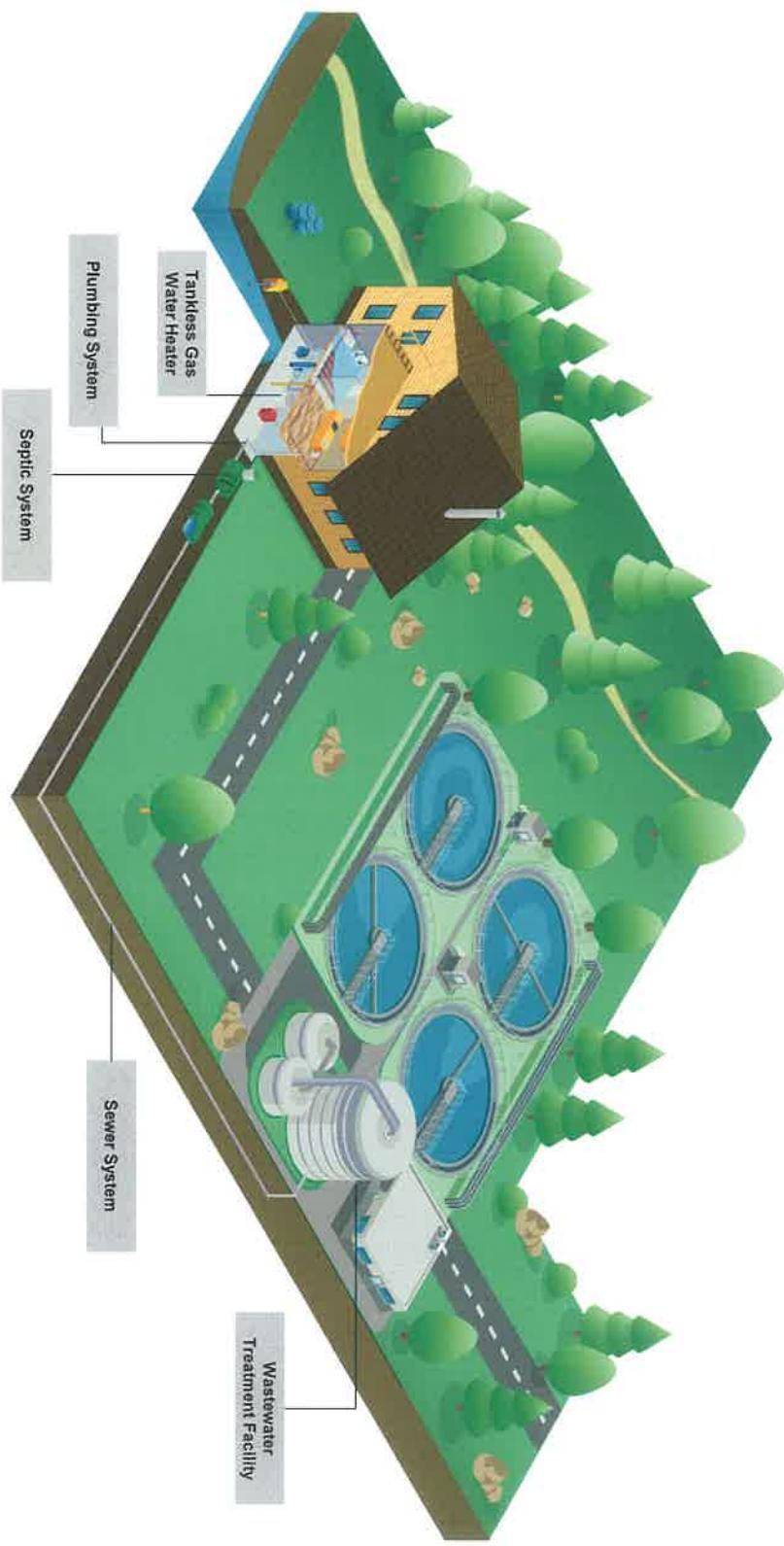
By Miranda Willson 05/05/2022

DIVE BRIEF

New residential water heater standards will save consumers \$11.4B annually, cut energy usage: DOE

Published 07/24/2023

# Damage Acidic Condensate Causes



## Damage Acidic Condensate Causes

Acidic condensate can cause extensive damage, including:



Erosion of floors, drains, and concrete foundations



Corrosion of pipes in homes and other buildings

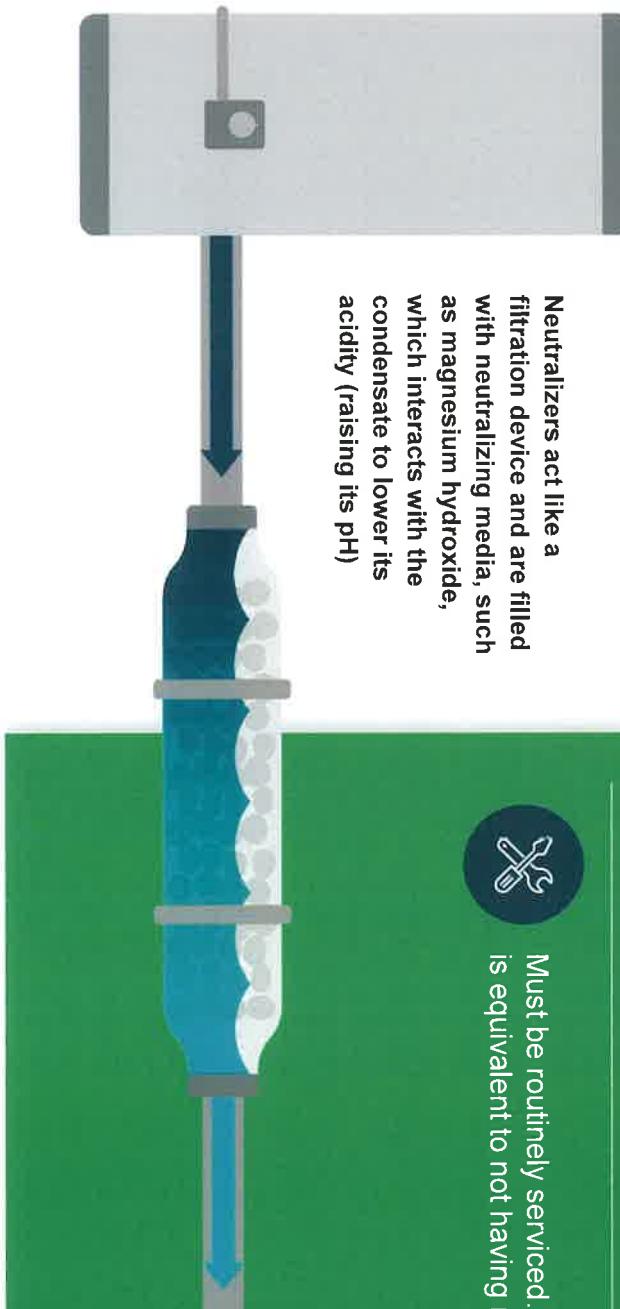


Pollution of surrounding environment and groundwater



Destruction of wastewater infrastructure, including sewers, pipes, and septic systems





## The Easy Solution

A condensate neutralizer is a reliable, purpose-built solution that works with high-efficiency appliances to safely treat and discharge condensate. JMW® condensate neutralizers ensure the safe treatment of condensate in compliance with industry, federal, state, and local codes to protect homes/buildings and the environment



Designed in a variety of configurations and capacities



Low-cost solution relative to costly problem  
(i.e. property damage or operational shutdown)



Must be routinely serviced... not maintaining is equivalent to not having neutralizer

Neutralizers act like a filtration device and are filled with neutralizing media, such as magnesium hydroxide, which interacts with the condensate to lower its acidity (raising its pH)

## What Does the Code Say?

Regulatory bodies have begun to address the issue of untreated acidic condensate.

Similar to other wastewater streams, many plumbing codes now require that property owners treat condensate before discharging it into the plumbing system



The International Plumbing Code (Section 803.1) considers condensate neutralizers to be essential:

**"[A] neutralizing device [is] required for corrosive wastes. Corrosive liquids, spent acids or other harmful chemicals ... shall not be discharged into the plumbing system without being thoroughly diluted, neutralized or treated by passing through an approved dilution or neutralizing device."**



The Environmental Protection Agency (Section 403.5(b)(2)) prohibits discharge of corrosive pollutants:

**"Pollutants which will cause corrosive structural damage to the [Publicly Owned Treatment Works], but in no case Discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such Discharges."**

## Protect Facilities



Property owners often aren't aware of the risks involved with acidic condensate



The effects of untreated acidic condensate can develop quickly, corroding copper, iron pipes, or floor drains in a matter of months, not years



Condensate neutralizers are relatively inexpensive yet they can save customers from such expensive property damage

# Protect the Environment



Many property owners upgrade to high-efficiency heating systems specifically to reduce their impact on the environment

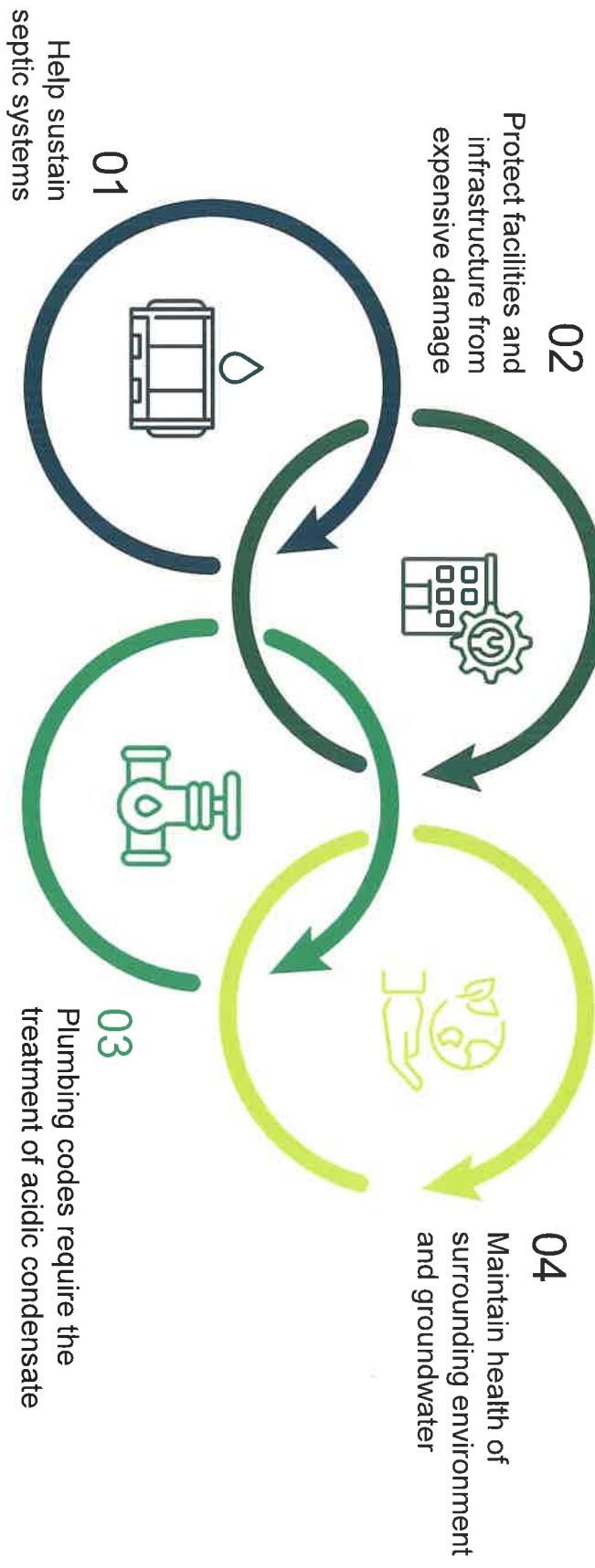


Without treatment, acidic condensate from a condensing heating appliance can cause damage to the surrounding environment (e.g. vegetation, ground water)

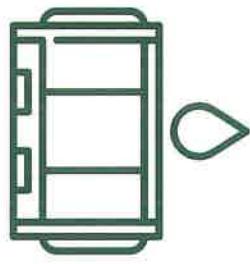


Condensate neutralizers ensure that high-efficiency heating systems fulfill their environmental promise

# Missing Piece to Every Condensing Installation



# The Power of an Effective Neutralizer



Early neutralizer solutions were essentially crude and inept instruments, often just a large box filled with marble or limestone chips

Then, companies, such as JMW Alkaline Technologies<sup>®</sup>, created innovative, purpose-built neutralization solutions that were extremely effective, specifically for heating and plumbing installations

JMW<sup>®</sup> Neutralizer Design = effective, long-lasting media + maximum "Soak Time" + minimal footprint

Soak time: adequate surface area to maximize interaction of condensate with pH Power Pellets<sup>®</sup> to neutralize before being released.

## The Power of an Effective Neutralizer



JJM® pH Power Pellets®,  
the proprietary neutralizing  
media found exclusively in  
JJM® products



The pH Power Pellets® are  
non-toxic, with magnesium  
hydroxide as the active  
ingredient

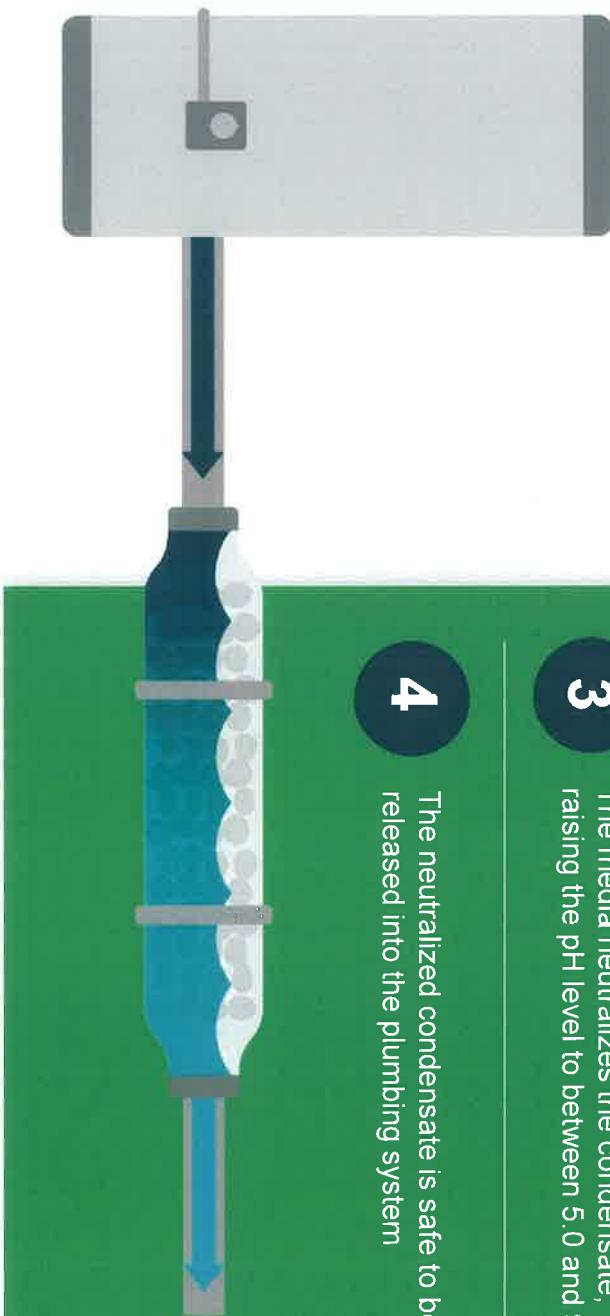


JJM® neutralizer +  
pH Power Pellets®  
= Complete Solution



# How Condensate Neutralization Works

Condensate neutralizers essentially act as a filter that raises the pH of the condensate, ensuring it can be safely discharged from the home or building. Neutralizers contain media that interacts with the condensate to lower its acidity (raise its alkalinity).



## 1

Acidic condensate leaves the high-efficiency appliance and slowly enters the neutralizer

## 2

Condensate makes contact with the media and "soak time" begins

## 3

The media neutralizes the condensate, raising the pH level to between 5.0 and 9.5 pH

## 4

The neutralized condensate is safe to be released into the plumbing system

# Sizing Condensate Neutralizers

Gallons Per Hour of condensate is the fundamental factor.



Raw gas stream composition



Heating days



System design



Operating site conditions or configuration



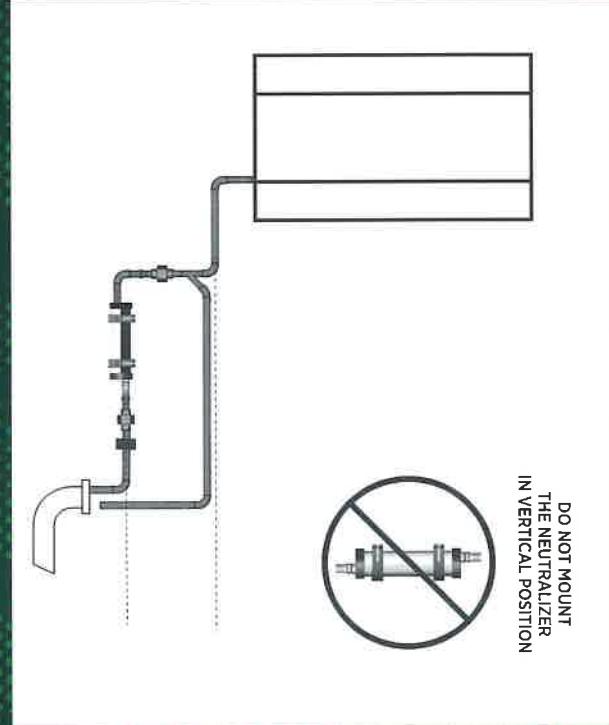
Operating hours of the heating equipment



Extreme peaks in condensate production can impact the soak time necessary for safe condensate neutralization

# Installing Condensate Neutralizers

Upon start-up or retroactively during appliance maintenance



# Maintenance of Condensate Neutralizers



JJM® condensate neutralizers must be routinely serviced every 6-12 months to remain effective.



Service technicians should build this service into **annual preventative maintenance** of the appliance to ensure continued protection and code compliance.



By routinely replacing the JJM® pH Power Pellets®, operators can ensure JJM® condensate neutralizers continue protecting facilities and the environment from the corrosive acidic condensate produced by today's high-efficiency, gas-fired appliances.



# JJM® Solutions for Residential and Commercial Installations

JJM® condensate neutralizers are designed to perform in residential and commercial installations of high-efficiency, gas-fired appliances.

JJM® has the broadest portfolio of condensate neutralizers with over 15 different neutralizers – a solution for every condensing appliance installation.



20



NBT-Series

- Versatile line of tank neutralizers that are easily serviceable with a removable lid
- Residential and Commercial
- 300-3,500 MBH



V-Series

- Vertical mount solution, ideal for wall-hung boilers, tankless water heaters
- Residential
- 200 MBH



K-Series

- Compact inline tube design with lowest inlet on the market and proprietary end-cap design
- Residential and Commercial
- 300-3,500 MBH



JM-Series

- Heavy-duty inline tube neutralizers built tough from PVC components
- Commercial
- 4,000-5,000 MBH



NB-Series

- Heavy-duty tank neutralizers where a small footprint is warranted
- Commercial
- 2,000-12,000 MBH



pH Power Pellets®

- Our proprietary media found exclusively in JJM® products
- Non-toxic and shelf-stable
- Individual refill kits
- Replace at least every 12 months

# The Opportunity



## Complete Installation

Ensure a complete installation on every high-efficiency, gas heating appliance.



## Thought Leadership

Be a thought leader for contractors by helping ensure installations are **code compliant** and fulfill environmental promise.



## Significant Growth

Regulations and innovations driving the proliferation of condensing technology in next five years.



## Contact Us

Kyle Emmons

[k.emmons@jmalkalinetech.com](mailto:k.emmons@jmalkalinetech.com)

[jmalkalinetech.com](http://jmalkalinetech.com)

For more information and resources visit:

<https://jmalkalinetech.com/Resources>



# Unified RFP for Fingerprinting Services for the Utah Department of Commerce

## 1. Introduction

The Utah Department of Commerce (Department) seeks a contract with multiple fingerprinting vendors possessing geographically diverse locations across Utah and nationwide (potentially international). The chosen vendors will provide all services, equipment, and processing necessary to acquire live scan fingerprints and securely transmit them to the Utah Bureau of Criminal Identification (BCI) on behalf of various divisions within the Department of Commerce. The Department will reserve the right to fingerprint.

## 2. Background

Within the Utah Department of Commerce, the Division of Professional Licensing (DOPL), Division of Real Estate (DRE) and the Division of Consumer Protection (DCP) require fingerprint-based background checks for licensing and regulatory purposes. This RFP aims to establish a comprehensive and efficient fingerprinting process accessible to applicants across the Department's divisions.

## 3. Scope of Work and Requirements

The Vendor shall:

### 3.1 Cost:

- Offer all services at no cost to the Department.

Deliverable: Submit a Fee Schedule detailing the costs of ALL services to the Applicants. Fee schedules should not include BCI/FBI fees. BCI/FBI fees will be collected by the Department of Commerce.

### 3.2 Customer Service:

- Designate a contract manager for direct support to Department of Commerce personnel.
- Offer quality customer service and support to applicants and Department of Commerce personnel.

Deliverable 1: Submit a job description of the contract manager, including the number of other contracts managed, and a detailed explanation of the support process (phone numbers, email addresses).

Deliverable 2: Submit support plans for Department personnel and applicants, including policies and procedures for handling complaints and customer service issues.

### **3.3 BCI Security:**

- Maintain security over fingerprint data during collection, transmission, and storage, meeting all BCI requirements and regulations, including UCJIS and CJIS compliance.

Deliverable: Submit policies and procedures covering all aspects of fingerprint data security, including data encryption methods, security certifications, and compliance documentation.

### **3.4 Department Authorization:**

- The Vendor shall agree to fingerprint an applicant only after the applicant produces either a digital or printed copy of the Fingerprint Authorization Form from Commerce, to the Vendor.

Deliverable: Submit a detailed explanation of the verification process and required documentation.

### 3.5 Fingerprint Redo's:

- Have a clear policy regarding fingerprint rejections and redo's. If the vendor is at fault for the error, the applicable division will email the vendor and the vendor will need to contact the applicant for rescheduling and provide 2 physical FD-258 cards to the applicable division for no cost to the applicant or to the division.

Deliverable 1: ~~Submit your HAVE A redo policy, specifying any additional fees for the applicant. Describe the process for notifying the appropriate division of the rejection if notified, and the resubmission process of fingerprints.~~

Deliverable 2: ~~Maintain at minimum a 98% accuracy rate.~~

### 3.6 Accommodations:

- ADA(Americans with Disabilities Act): Comply with the ADA. All accommodation denials must be approved by the requesting division's personnel.  
**NEED PROCESS**
  -
- ELL (English Language Learners): Adhere to all division policies regarding ELL accommodations.

Deliverable 1: Document agreement to ELL compliance and submit a policy for requesting accommodations, including a list of available accommodations (at the Candidate's cost).

Deliverable 2: Document agreement to ADA compliance and submit a policy for requesting accommodations, including a list of available accommodations (at the Vendor's cost).

### 3.7 Privacy Protection:

- Safeguard all Personally Identifiable Information (PII) (Utah Code 63D-2-102(6)) with appropriate confidentiality measures.
- Provide a privacy disclosure (Utah Code 63G-2-601) explaining what information is collected, why, and how it will be used/shared. Address Utah Code 63A-19-402 (collection of PII) and adhere to the principle of collecting minimal necessary data (63A-19-401(2)(c)).
- All PII collection must be approved in advance by the requesting division.
- Contact the requesting division for approval before using any third-party providers who will access candidate PII.

Deliverable 1: Submit a privacy safeguards policy, employee training plan (Utah Code 63A-19-401), and a plan of action for PII incidents (Utah Code 63A-19-405).

Deliverable 2: Submit the privacy statement, describing how and when it will be shared, and address data minimization.

Deliverable 3: Submit a table of datasets collected from each candidate.

Deliverable 4: Provide a list of third-party providers with their legal business name and privacy policy, and a procedure for notifying the division of any changes to this list.

### **3.8 Quality Assurance:**

- Provide each requesting division a daily report on an excel spreadsheet, using the Authorization to Fingerprint Form as a reference, the report should at minimum include:
  - Name and Aliases of Candidate
  - PersonID
  - Agency Code

Deliverable: Describe the reporting process (frequency, format, data elements) and indicate whether customized reports are possible.

### **3.9 Vendor Qualifications:**

- Employees with adequate training in fingerprinting processes/regulations.
- Vendor locations in Utah must maintain geographically diverse fingerprinting locations throughout Utah. These locations should be within 30 miles of any city with a population of 10,000 or greater. Acceptable locations are kiosks, mobile units, and brick-and-mortar are acceptable with appropriate BCI-compliant security. If using any of these, self service is not allowed.
- Vendor locations outside of Utah must maintain geographically diverse fingerprinting locations.

- Offer fingerprinting at least five days a week (excluding holidays) and for at least eight hours per day.
- As mentioned in the introduction, the Department reserves the right to fingerprint and use multiple vendors.

**Deliverable 1:** Submit a list of locations with days/hours of operation, number and type of fingerprint stations, accessibility information, and a commitment to update this list within 48 hours of any changes.

**Deliverable 2:** Provide information on company experience, references from other clients, and staff training/certification programs.

**Deliverable 3:** Written acknowledgement that the Department reserves the right to fingerprint and that there will be multiple vendors chosen.

### **3.10 Innovation:**

- Actively pursue and integrate new trends in innovation for delivering, creating, securing, and maintaining state licensing.

**Deliverable:** Provide a report outlining implemented innovations from the last year, their impact, and recommendations for future innovations.

### **3.11 Compliance with State Laws and Rules:**

- Comply with all applicable requirements of the Utah Code and the Utah Administrative Code.

Deliverable: Submit a statement acknowledging agreement with this requirement.

### **3.12 Fingerprinting Process:**

- **Applicant Scheduling:** Implement a uniform scheduling plan (online and phone/email) with appointment confirmations, rescheduling/cancellation procedures, walk-in policy, and payment methods (applicant or division). Provide screenshots of online scheduling if applicable.
- **Fingerprint Collection:**
  - Verify applicant fingerprinting authorization via the division's letter of authorization and billing code.
  - Verify applicant identity using a valid government-issued photo ID.
  - Input all required applicant data into the fingerprint card data entry field.
- **Fingerprint Transmission:**
  - Securely transmit fingerprints to BCI (or other designated agencies) immediately after processing.
  - Follow live scan procedures for resubmitting rejected scans.

Deliverable 1: Detail the procedures for verifying applicant authorization and identity, followed by clear instructions for fingerprint collection and secure transmission.

Deliverable 2: Online appointment link or other documentation showing your online appointment as well as walk-in policies.

### **3.13 Live Scan Device Requirements:**

- Equipment must accurately scan fingerprints and securely transmit data to BCI.
- Equipment must capture tenprints, flat and rolled impressions. (FD-258 format)
- Equipment must be FBI-certified (IAFIS IQS Appendix F).
- Each device must connect and securely transmit through the State of Utah WAN, using web service transmission per Utah specifications, encrypted with SSL.
- Vendor must regularly update devices to ensure current table information.

Deliverable: Vendor will Provide written proof of FBI- certification, capabilities of their machines to take 10 print fingerprints, 4 flat, flat thumbs, then rolled.

### **3.14 Continuity of Services:**

- ~~Provide phase in/phase out training and cooperation for up to 90 days after contract termination/expiration, at no cost to the Department of Commerce.~~
- ~~Negotiate a phase in/phase out plan with any successor, subject to approval from the relevant division.~~
- ~~Maintain sufficient experienced personnel during the transition.~~
- **Vendors must submit a copy of their annual report showing accuracy rates, reasons for rejections, number of people fingerprinted by each Division and the Department as a whole.**

Deliverable 1: Provide a comprehensive Transition Management Plan & Execution Report, you will demonstrate your commitment to a smooth and successful transition.

Deliverable 2: **Vendor will need to submit a current annual report showing accuracy rates for the RFP, and every year after will submit an annual report with the information required above, to ensure all deliverables continue to be met.**

# Agenda Item #7

## Part 1 General Provisions

### **15A-2-101 Title -- Adoption of code.**

- (1) This chapter is known as the "Adoption of State Construction Code."
- (2) In accordance with Chapter 1, Part 2, State Construction Code Administration Act, the Legislature repeals the State Construction Code in effect on July 1, 2010, and adopts the following as the State Construction Code:
  - (a) this chapter;
  - (b) Chapter 3, Statewide Amendments Incorporated as Part of State Construction Code;
  - (c) Chapter 4, Local Amendments Incorporated as Part of State Construction Code; and
  - (d) Chapter 6, Additional Construction Requirements.

Amended by Chapter 95, 2023 General Session

### **15A-2-102 Definitions.**

As used in this chapter, Chapter 3, Statewide Amendments Incorporated as Part of State Construction Code, and Chapter 4, Local Amendments Incorporated as Part of State Construction Code:

- (1) "HUD Code" means the Federal Manufactured Housing Construction and Safety Standards Act, as issued by the Department of Housing and Urban Development and published in 24 C.F.R. Parts 3280 and 3282 (as revised April 1, 1990).
- (2) "IBC" means the edition of the International Building Code adopted under Section 15A-2-103.
- (3) "IEBC" means the edition of the International Existing Building Code adopted under Section 15A-2-103.
- (4) "IECC" means the edition of the International Energy Conservation Code adopted under Section 15A-2-103.
- (5) "IFGC" means the edition of the International Fuel Gas Code adopted under Section 15A-2-103.
- (6) "IMC" means the edition of the International Mechanical Code adopted under Section 15A-2-103.
- (7) "IPC" means the edition of the International Plumbing Code adopted under Section 15A-2-103.
- (8) "IRC" means the edition of the International Residential Code adopted under Section 15A-2-103.
- (9) "ISPSC" means the edition of the International Swimming Pool and Spa Code adopted under Section 15A-2-103.
- (10) "NEC" means the edition of the National Electrical Code adopted under Section 15A-2-103.
- (11) "UWUI IWUI" means the edition of the Utah International Wildland Urban Interface Code adopted under Section 15A-2-103.

Amended by Chapter 95, 2023 General Session

**15A-2-103 Specific editions adopted of construction code of a nationally recognized code authority.**

(1) Subject to the other provisions of this part, the following construction codes are incorporated by reference, and together with the amendments specified in Chapter 3, Statewide Amendments Incorporated as Part of State Construction Code, and Chapter 4, Local Amendments Incorporated as Part of State Construction Code, are the construction standards to be applied to building construction, alteration, remodeling, and repair, and in the regulation of building construction, alteration, remodeling, and repair in the state:

- (a) the ~~2021~~ 2024 edition of the International Building Code, including Appendices C and J, issued by the International Code Council;
- (b) the 2021 edition of the International Residential Code, issued by the International Code Council;
- (c) Appendix AQ of the 2021 edition of the International Residential Code, issued by the International Code Council;
- (d) the ~~2021~~ 2024 edition of the International Plumbing Code, issued by the International Code Council;
- (e) the ~~2021~~ 2024 edition of the International Mechanical Code, issued by the International Code Council;
- (f) the ~~2021~~2024 edition of the International Fuel Gas Code, issued by the International Code Council;
- (g) the 2023 edition of the National Electrical Code, issued by the National Fire Protection Association;
- (h) the ~~2021~~ 2024 edition of the International Energy Conservation Code, issued by the International Code Council;
- (i) the ~~2021~~ 2024 edition of the International Existing Building Code, issued by the International Code Council;
- (j) subject to Subsection 15A-2-104(2), the HUD Code;
- (k) subject to Subsection 15A-2-104(1), Appendix AE of the 2021 edition of the International Residential Code, issued by the International Code Council;
- (l) subject to Subsection 15A-2-104(1), the 2005 edition of the NFPA 225 Model Manufactured Home Installation Standard, issued by the National Fire Protection Association;
- (m) subject to Subsection (3), for standards and guidelines pertaining to plaster on a historic property, as defined in Section 9-8a-302, the U.S. Department of the Interior Secretary's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; and
- (n) the residential provisions of the 2021 edition of the International Swimming Pool and Spa Code, issued by the International Code Council; and
- (o) Modular Building Institute Standards 1200 and 1205, issued by the International Code Council, except as modified by provisions of this title governing modular units.

(2) ~~Consistent with Title 65A, Chapter 8, Management of Forest Lands and Fire Control, the Legislature adopts the 2006 edition of the Utah the 2024 International Wildland Urban Interface Code, issued by the International Code Council, with the alternatives or amendments approved by the Utah Division of Forestry, Fire, and State Lands, as a construction code that may be adopted by a local compliance agency by local ordinance or other similar action as a local amendment to the codes listed in this section.~~

(3) The standards and guidelines described in Subsection (1)(m) apply only if:

- (a) the owner of the historic property receives a government tax subsidy based on the property's status as a historic property;
- (b) the historic property is wholly or partially funded by public money; or (c) the historic property is owned by a government entity.

Amended by Chapter 505, 2024 General Session

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

- (1) The following are the installation standards for manufactured housing for new installations or for existing manufactured or mobile homes that are subject to relocation, building alteration, remodeling, or rehabilitation in the state:
  - (a) The manufacturer's installation instruction for the model being installed is the primary standard.
  - (b) If the manufacturer's installation instruction for the model being installed is not available or is incomplete, the following standards apply:
    - (i) Appendix E of the 2021 edition of the IRC, as issued by the International Code Council for installations defined in Section AE101 of Appendix E; or
    - (ii) if an installation is beyond the scope of the 2021 edition of the IRC as defined in Section AE101 of Appendix E, the 2005 edition of the NFPA 225 Model Manufactured Home Installation Standard, issued by the National Fire Protection Association.
  - (c) A manufacturer, dealer, or homeowner is permitted to design for unusual installation of a manufactured home not provided for in the manufacturer's standard installation instruction, Appendix E of the 2021 edition of the IRC, or the 2005 edition of the NFPA 225, if the design is approved in writing by a professional engineer or architect licensed in Utah.
  - (d) For a mobile home built before June 15, 1976, the mobile home shall also comply with the additional installation and safety requirements specified in Chapter 3, Part 8, Statewide Amendments to International Existing Building Code.
- (2) Pursuant to the HUD Code Section 604(d), a manufactured home may be installed in the state that does not meet the local snow load requirements as specified in Chapter 3, Part 2, Statewide Amendments to International Residential Code, except that the manufactured home shall have a protective structure built over the home that meets the IRC and the snow load requirements under Chapter 3, Part 2, Statewide Amendments to International Residential Code.

Amended by Chapter 95, 2023 General Session

Amended by Chapter 209, 2023 General Session

**15A-2-105 Scope of application.**

- (1) To the extent that a construction code adopted under Section 15A-2-103 establishes a local administrative function or establishes a method of appeal which pursuant to Section 15A-1-207 is designated to be established by the compliance agency:
  - (a) that provision of the construction code is not included in the State Construction Code; and
  - (b) a compliance agency may establish provisions to establish a local administrative function or a method of appeal.
- (2)

- (a) To the extent that a construction code adopted under Subsection (1) establishes a provision, standard, or reference to another code that by state statute is designated to be established or administered by another state agency, or a local city, town, or county jurisdiction:
  - (i) that provision of the construction code is not included in the State Construction Code; and
  - (ii) the state agency or local government has authority over that provision of the construction code.
- (b) Provisions excluded under this Subsection (2) include:
  - (i) the International Property Maintenance Code;
  - (ii) the International Private Sewage Disposal Code, authority over which is reserved to the Department of Health and Human Services and the Department of Environmental Quality;
  - (iii) the International Fire Code, authority over which is reserved to the board, pursuant to Section 15A-1-403;
  - (iv) a day care provision that is in conflict with Title 26B, Chapter 2, Part 4, Child Care Licensing, authority over which is designated to the Department of Health and Human Services; and
  - (v) a wildland urban interface provision that goes beyond the authority under Section 15A-1-204, for the State Construction Code, authority over which is designated to the Division of Forestry, Fire, and State Lands or to a local compliance agency.
- (3) If a construction code adopted under Subsection 15A-2-103(1) establishes a provision that exceeds the scope described in Chapter 1, Part 2, State Construction Code Administration Act, to the extent the scope is exceeded, the provision is not included in the State Construction Code.

Amended by Chapter 209, 2023 General Session

Amended by Chapter 327, 2023 General Session

## **Chapter 3 Statewide Amendments Incorporated as Part of State Construction Code**

### **Part 1 Statewide Amendments to International Building Code**

#### **15A-3-101 General provision.**

The amendments in this part are adopted as amendments to the IBC to be applicable statewide.

Enacted by Chapter 14, 2011 General Session

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

- (1) IBC, Section 106, is deleted.
- (2) In IBC, Section 110, a new section is added as follows: " 110.3.13, Weather-resistant exterior wall envelope. An inspection shall be made of the weather-resistant exterior wall envelope as required by Section 1404.2 and flashing as required by Section 1404.4 to prevent water from entering the weather-resistive barrier."

(3) IBC, Section 115.1, is deleted and replaced with the following: "115.1 Authority. Whenever the building official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or other pertinent laws or ordinances or is dangerous or unsafe, the building official is authorized to stop work."

(4) In IBC, Section 202, the following definition is added for Ambulatory Surgical Center: "AMBULATORY SURGICAL CENTER. A building or portion of a building licensed by the Department of Health and Human Services where procedures are performed that may render patients incapable of self-preservation where care is less than 24 hours. See Utah Administrative Code R432-13."

(5) In IBC, Section 202, the definition for "Approved" is modified by adding the words "or independent third-party licensed engineer or architect and submitted to the building official" after the word "official."

(6) In IBC, Section 202, the definition for "Approved Agency" is modified by deleting the words "where such agency has been approved by the building official."

(7) In IBC, Section 202, the definition for "Approved Fabricator" is modified by adding the words "or approved by the state of Utah or a licensed engineer" after the word "code."

(8) In IBC, Section 202, the definition for "Approved Source" is modified by adding the words "or licensed engineer" after the word "official."

(9) In IBC, Section 202, the following definition is added for Assisted Living Facility, Residential Treatment and Support: "ASSISTED LIVING FACILITY, RESIDENTIAL TREATMENT AND SUPPORT. A residential facility that provides a group living environment for four or more residents licensed by the Department of Health and 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.  
ASSISTED LIVING FACILITY, TYPE I. A residential facility licensed by the Department of Health and Human Services that provides a protected living arrangement, assistance with activities of daily living, and social care to two or more ambulatory, non-restrained persons who are capable of mobility sufficient to exit the facility without the assistance of another person.  
ASSISTED LIVING FACILITY, TYPE II. A residential facility licensed by the Department of Health and Human Services that provides an array of coordinated supportive personal and health care services to two or more residents who are:  
(i) Physically disabled but able to direct his or her own care; or  
(ii) Cognitively impaired or physically disabled but able to evacuate from the facility, or to a zone or area of safety, with the physical assistance of one person.  
ASSISTED LIVING FACILITY, LIMITED CAPACITY. A Type I or Type II assisted living facility having two to five residents.  
ASSISTED LIVING FACILITY, SMALL. A Type I or Type II assisted living facility having six to sixteen residents.  
ASSISTED LIVING FACILITY, LARGE. A Type I or Type II assisted living facility having more than sixteen residents."

(10) In IBC, Section 202, the following definition is added for Ballistic Glass: "Ballistic Glass":  
Glass certified at a minimum level of:  
(i) Underwriters Laboratories Standard UL752-23, Standard for Bullet-Resisting Equipment, Threat Level UL-RF-E from Table C1 (Legacy Level 7) (2023) or  
(ii) ASTM F3279-24, Standard Test Method for Ballistic Resistant Security Glazing Materials,

Threat and Performance Level 4, Ballistic Test Identity (BTI) R1-T1-C5-21 under Table 1, Ballistic Criteria (2021).

(10)(11) In IBC, Section 202, the following definition is added for Child Care Facility: "CHILD CARE FACILITY. A facility where care and supervision is provided for four or more children for less than 24 hours a day and for direct or indirect compensation in place of care ordinarily provided in their home."

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

(13) In IBC, Section 202, the following definition is added for "Security Glazing": "Security Glazing". A clear or tinted durable material applied to glass doors and windows that enhances the structural integrity of the glass by preventing it from shattering and falling to the ground when impacted by an object and meets the minimum standard established by:

(i) ASTM F3561, Standard Test Method for Forced-Entry-Resistance of Fenestration Systems After Simulated Active Shooter Attack, minimum level 3 of Table 2, Potential Energy of Impactor and Drop Height (2023) or

(ii) ANSI Z97.1-15(R20) American National Standard for safety glazing materials used in buildings safety performance specifications and methods of test, must meet the durability requirements of Section 5.3 and 5.4.

(12)(14) In IBC, Section 304.1, the words "and technical colleges who also educate high school students as part of their student body" are added after the words "Educational occupancies for students above the 12th grade including higher education laboratories."

(13)(15) In IBC, Section 305, Sections 305.2 through 305.2.3 are deleted and replaced with the following:

"305.2 Group E, child care facilities. This group includes buildings and structures or portions thereof occupied by four or more children 2 years of age or older who receive educational, supervision, child care services or personal care services for fewer than 24 hours per day. See Section 429 Day Care, for special requirements for day care.

305.2.1 Within places of religious worship. Rooms and spaces within places of religious worship providing such day care during religious functions shall be classified as part of the primary occupancy.

305.2.2 Four or fewer children. A facility having four or fewer children receiving such day care shall be classified as part of the primary occupancy.

305.2.3 Four or fewer children in a dwelling unit. A facility such as the above within a dwelling unit and having four or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

305.2.4 Child day care -- residential child care certificate or a license. Areas used for child day care purposes with a residential child care certificate, as described in Utah Administrative Code, R430-50, Residential Certificate Child Care, or a residential child care license, as described 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 Sections 310.3 and 310.4 or shall comply with the International Residential Code in accordance with Section R101.2.

305.2.5 Child care centers. Each of the following areas may be classified as accessory occupancies, if the area complies with Section 508.2:

1. Hourly child care center, as described in Utah Administrative Code, R381-60 Hourly Child Care Centers;

2. Child care centers, as described in Utah Administrative Code, R381-100, Child Care Centers;
3. Out-of-school-time programs, as described in Utah Administrative Code, R381-70, Out of School Time Child Care Programs; and
4. Commercial preschools, as described in Utah Administrative Code, R381-40, Commercial Preschool Programs."

~~(14)~~(16) In IBC, Table 307.1(1), footnote "d" is added to the row for Explosives, Division 1.4G in the column titled STORAGE - Solid Pounds (cubic feet).

~~(15)~~(17) In IBC, Section 308.2, in the list of items under "This group shall include," the words "Type-I Large and Type-II Small, see Section 308.2.5" are added after "Assisted living facilities."

~~(16)~~(18) In IBC, Section 308.2.4, all of the words after the first International Residential Code are deleted.

~~(17)~~(19) A new IBC, Section 308.2.5, is added as follows:

"308.2.5 Assisted living facilities. A Type I, Large assisted living facility is classified as occupancy Group I-1, Condition 1. A Type II, Small assisted living facility is classified as occupancy Group I-1, Condition 2. See Section 202 for definitions."

~~(18)~~(20) IBC, Section 308.3, is deleted and replaced with the following:

"308.3 Institutional Group I-2. Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than four persons who are incapable of self-preservation. This group shall include, but not be limited to the following: Assisted living facilities, Type-II Large, see Section 308.3.3

Child care facilities

Foster care facilities

Detoxification facilities

Hospitals

Nursing homes (both intermediate care facilities and skilled nursing facilities)

Psychiatric hospitals"

~~(19)~~(21) In IBC, Section 308.3.2, ~~the number "five" is deleted and replaced with the number "four" in each location~~ all the wording following the word "Group" is deleted and replaced with the words "R4 Condition 2."

~~(20)~~(22) A new IBC, Section 308.3.3, is added as follows:

"308.3.3 Assisted living facilities. A Type-II, Large assisted living facility is classified as occupancy Group I-2, Condition 1. See Section 202 for definitions."

~~(21)~~(23) In IBC, Section 308.5, the words "more than five" are deleted and replaced with the words "five or more in each location.

~~(22)~~(24) IBC, Section 308.5.1, is deleted and replaced with the following:

"308.5.1 Classification as Group E. A child day care facility that provides care for five or more but not more than 100 children under two years of age, where the rooms in which the children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as a Group E. See Section 429 for special requirements for Day Care."

~~(23)~~(25) In IBC, Sections 308.5.3 and 308.5.4, the words "five or fewer" are deleted and replaced with the words "four or fewer" in each location and the following sentence is added at the end: "See Section 429 for special requirements for Day Care."

~~(24)~~(26) IBC, Section 310.4, is deleted and replaced with the following:

"310.4 Residential Group R-3. Residential Group R-3 occupancies and single-family dwellings complying with the International Residential Code where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Assisted Living Facilities, Type-I, limited capacity, see Section 310.5.3

Buildings that do not contain more than two dwellings

Care facilities, other than child care, that provide accommodations for five or fewer persons receiving care

Congregate living facilities (non-transient) with 16 or fewer occupants

Boarding houses (non-transient)

Convents

Dormitories

Fraternities and sororities

Monasteries

Congregate living facilities (transient) with 10 or fewer occupants

Boarding houses (transient)

Lodging houses (transient) with five or fewer guest rooms and 10 or fewer occupants"

(25)(27) IBC, Section 310.4.1, is deleted and replaced with the following:

"310.4.1 Care facilities within a dwelling. Care facilities, other than child care, for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the International Residential Code. See Section 429 for special requirements for Child Day Care."

(26)(28) A new IBC Section 310.4.3 is added as follows: " 310.4.3 Child Care. Areas used for child care purposes may be located in a residential dwelling unit under all of the following conditions and Section 429:

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 Department of Health and Human Services, as enacted under the authority of the Utah Code, Title 26B, Chapter 2, Part 4, Child Care Licensing, 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."

(27)(29) A new IBC, Section 310.4.4, is added as follows: "310.4.4 Assisted living facilities. Type I assisted living facilities with two to five residents are Limited Capacity facilities classified as a Residential Group R-3 occupancy or are permitted to comply with the International Residential Code. See Section 202 for definitions."

(28)(30) In IBC, Section 310.5, the words "Type II Limited Capacity and Type I Small, see Section 310.5.3" are added after the words "assisted living facilities."

(29)(31) A new IBC, Section 310.5.3, is added as follows: "310.5.3 Group R-4 Assisted living facility occupancy groups. The following occupancy groups shall apply to Assisted Living Facilities: Type II Assisted Living Facilities with two to five residents are Limited Capacity Facilities classified as a Residential Group R-4, Condition 2 occupancy. Type I assisted living facilities with six to sixteen residents are Small Facilities classified as Residential Group R-4, Condition 1 occupancies. See Section 202 for definitions."

Amended by Chapter 15, 2024 General Session

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

- (1) IBC Section 403.5.5 is deleted.
- (2) In IBC, Section 404.5, Exception 2.3 is added as follows:

"2.3 The atrium does not contain any means of egress component above the two lowest stories."
- (3) In IBC, Section 407.2.5, the words "and assisted living facility" are added in the title and first sentence after the words "nursing home."
- (4) In IBC, Section 407.2.6, the words "and assisted living facility" are added in the title after the words "nursing home."
- (5) In IBC, Section 407.3.1.1, Item 3 is deleted and replaced with the following:

"3. To provide makeup air for exhaust systems in accordance with Section 1020.6, Exception 1, doors to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces that do not contain flammable or combustible materials are permitted to have louvers or an undercut of 2/3 inch (19.1 mm) maximum."
- (6) In IBC, Section 407.4.1, Exception 3 is added as follows:

"3. Only one exit access with direct access to a corridor is required from an assisted living facility, single resident sleeping unit that consists of a living space and one or two separate sleeping rooms. For other than closets, toilet and shower rooms, occupants may not be required to pass through more than one room before reaching the exit access."
- (7) In IBC, Section 407.4.3, the words "and assisted living facility" are added in the title and after the words "nursing home."
- (8) In IBC, Section 407.11, a new exception is added as follows: "Exception: An essential electrical system is not required in assisted living facilities."
- (9) In IBC, Section 412.3.1, a new exception is added as follows: "Exception: Aircraft hangars of Type I or II construction that are less than 5,000 square feet (464.5m<sup>2</sup>) in area."
- (10) A new IBC, Section 422.2.1 is added as follows: "422.2.1 Separations: Ambulatory care facilities licensed by the Department of Health and Human Services 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."
- (11) A new IBC Section 429, Day Care, is added as follows:

"429.1 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.

**429.2 Definitions.**

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

429.2.2 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.

429.2.3 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 and Human Services.

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

429.2.4.1 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 and Human Services as Residential Certificate Child Care or licensed as Family Child Care.

429.2.4.2 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 and Human Services as Family Child Care.

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

#### 429.3 Family Day Care.

429.3.1 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.

429.3.2 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.

429.3.2.1 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.

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

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

429.3.4.1 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.

429.3.5 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.

429.3.6 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.

429.3.7 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.

429.3.8 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.

429.3.9 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.

**429.4 Day Care Centers.**

429.4.1 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.

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

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

429.4.3.1 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.

429.4.4 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.

429.4.5 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.

**429.5 Requirements for all Day Care.**

429.5.1 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.

429.5.2 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."

(12) In IBC, Section 504.4, a new section is added as follows: "504.4.1 Group I-2 Assisted Living Facilities. Notwithstanding the allowable number of stories permitted by Table 504.4 Group I-2 Assisted Living Facilities of type VA, construction shall be allowed on each level of a two-story building when all of the following apply:

1. The total combined area of both stories does not exceed the total allowable area for a one-story, above grade plane building equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. All other provisions that apply in Section 407 have been provided."

(13) A new IBC, Section 504.5, is added as follows: "504.5 Group 1-2 Secured areas in Assisted Living Facilities. In Type IIIB, IV, and V construction, all areas for the use and care of residents required to be secured shall be located on the level of exit discharge with door operations in compliance with Section 1010.2.14."

Amended by Chapter 209, 2023 General Session

Amended by Chapter 327, 2023 General Session

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

~~(1) In IBC, Section 703.5, the words "with signs or stenciling" are deleted.~~

~~(2)~~(1) IBC, Section (F) 902.1, is deleted and replaced with the following: "(F) 902.1 Pump and riser room size. Fire pump rooms 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 room around the stationary equipment. Clearances around equipment to

elements of permanent construction, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly and not less than the following minimum elements:

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

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

902.1.3 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."

(3)(2) In IBC, Section 902, new sections are added as follows:

"(F) 902.2 Fire pump room. Fire pumps and controllers shall be provided with ready access. Fire pump rooms shall be provided with doors and an unobstructed passageway large enough to allow for the removal of the largest piece of equipment. The passageway shall have a clear width not less than 72 inches. Openings into the room shall be clear and unobstructed, with doors swinging in the outward direction from the fire pump 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. The door shall be permitted to be locked provided that the key is available at all times and located in a Key Box in accordance with Section 506 of the International Fire Code.

(F) 902.3 Automatic sprinkler riser room. Automatic sprinkler system risers shall be provided with ready access. Automatic sprinkler system riser rooms shall be provided with doors and an unobstructed passageway large enough to allow for the removal of the largest piece of equipment. The passageway shall have a clear width not less than 36 inches. Openings into the room shall be clear and unobstructed, with doors swinging in the outward direction from the riser room and the opening providing a clear width of not less than 32 inches and a clear height of the door opening shall not be less than 80 inches. The door shall be permitted to be locked provided that the key is available at all times and located in a Key Box in accordance with Section 506 of the International Fire Code.

(F) 902.4 Marking on access doors. Access doors for automatic sprinkler system riser rooms and fire pump rooms shall be labeled with an approved sign. The lettering shall be in contrasting color to the background. Letters shall have a minimum height of 2 inches (51 mm) with a minimum stroke of 3/8 inch (10 mm).

(F) 902.5 Environment. Automatic sprinkler system riser rooms and fire pump rooms shall be maintained at a temperature of not less than 40 degrees Fahrenheit (4 degrees Celsius). Heating units shall be permanently installed.

(F) 902.6 Lighting. Permanently installed artificial illumination shall be provided in the automatic sprinkler system riser rooms and fire pump rooms."

(4)(3) IBC, Section (F)903.2.2, is deleted and replaced with the following:

"(F) 903.2.2 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout the building containing an ambulatory care facility where either of the following conditions exist at any time.

1. Four or more care recipients are incapable of self-preservation.

2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility."

(5)(4) 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."

(6)(5) 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."

(7)(6) In IBC, Section (F)903.2.8, the following exceptions are added:

"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.
3. Group R-4 fire areas not more than 4,500 gross square feet and not containing more than 16 residents, provided all residents are housed on a level of exit discharge and 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."

(8)(7) IBC, Section (F) 903.2.8.1 is deleted.

(9)(8) 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."

(10)(9) In IBC, Section 905, a new subsection, Section (F)905.3.98, 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."

(11)(10) 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."

(12)(11) In IBC, Section (F)907.2.3 Group E is deleted and rewritten as follows: "A manual fire alarm system that initiates the occupant notification signal using an emergency voice/alarm communication system that meets the requirements of Section (F) 907.5.2.2, or a manual fire alarm system that initiates an approved audible and visual occupant notification signal that meets the requirements of Sections (F)907.5.2.1, (F)907.5.2.1.1, (F)907.5.2.1.2, and (F)907.5.2.3, and is installed in accordance with Section (F)907.6 shall be installed in Group E occupancies. Where automatic fire sprinkler systems or smoke detectors are installed, the fire sprinkler systems and smoke detectors shall be connected to the building fire alarm system."

(13)(12) In IBC, Section (F) 907.2.3 Group E, Exception 2 is deleted and the remaining exceptions are renumbered.

(14)(13) In IBC, Section (F) 907.2.3 Group E, renumbered Exception 3.2 is deleted and replaced with the following: "Exception 3.2 The fire alarm system will activate on fire sprinkler

waterflow."

(15)(14) In IBC, Section (F) 907.2.3 Group E, new sections (F) 907.2.3.1 through (F) 907.2.3.7 are added as follows:

"(F) 907.2.3.1 Automatic detection devices that detect smoke shall be installed throughout all corridors and spaces open to the corridor at the maximum prescribed spacing of thirty feet on center and no more than fifteen feet from the walls or smoke detectors shall be installed as required in NFPA, Standard 72, Section 17.7.

(F) 907.2.3.2 Where structures are not protected or are partially protected with an automatic fire sprinkler system, approved automatic smoke detectors shall be installed in accordance with the complete coverage requirements of NFPA, Standard 72.

(F) 907.2.3.3 An approved key plan drawing and operating instructions shall be posted at the main fire alarm panel which displays the location of all alarm zones and if applicable, device addresses.

(F) 907.2.3.4 The main panel shall be located in a normally attended area such as the main office or lobby. Location of the main panel, other than as stated above, shall require the review and authorization of the State Fire Marshal Division. Where location as required above is not possible, an electronically supervised remote annunciator from the main panel shall be located in a supervised area of the building. The remote annunciator shall visually indicate system power status, alarms for each zone, and give both visual and audible indication of trouble conditions in the system. All indicators on both the main panel and remote annunciator shall be adequately labeled.

(F) 907.2.3.5 All system wiring shall be as follows:

(A) The initiating device circuits shall be designated and installed Class A as defined in NFPA, Standard 72.

(B) The notification appliance circuits shall be designated and installed Class A as defined in NFPA, Standard 72.

(C) Signaling line circuits shall be designated and installed Class A loop as defined in NFPA, Standard 72.

(F) 907.2.3.6 Fan Shutdown shall be as follows:

(A) Fan shut down shall be as required in the International Mechanical Code, Chapter 6, Section 606.

(B) Duct detectors required by the International Mechanical Code, shall be interconnected and compatible with the fire alarm system."

(16)(15) IBC, Section (F) 915.2.3 Group E occupancies is deleted and replaced with the following:

"(F) 915.2.3 Group E occupancies. Carbon monoxide detectors shall be installed in the following areas within Group E occupancies:

- (1) Boiler rooms, furnace rooms, and similar rooms, or in adjacent areas where carbon monoxide is likely to spread. (The installation of carbon monoxide detectors in boiler rooms and furnace rooms may cause a false alarm problem. Installing these detectors in adjacent spaces where the carbon monoxide is likely to spread from these spaces may be a better option.)
- (2) Home economics rooms with gas appliances.
- (3) School kitchens with gas appliances. (Commercial kitchens).
- (4) Arts rooms and other areas with a gas kiln or open flame.

- (5) Gas roof top units, and other carbon monoxide producing HVAC units, one per zone. (The zone shall be the area covered by the HVAC unit.)
- (6) In areas with gas wall units.
- (7) In areas with a gas water heater or boiler.
- (8) Areas with a forge or foundry.
- (9) Metal shop or auto shop areas or in adjacent areas where carbon monoxide is likely to spread. (The installation of carbon monoxide detectors in metal shop or auto shop areas may cause a false alarm problem. Installing these detectors in adjacent spaces, i.e. classrooms or corridors, where the carbon monoxide is likely to spread from these spaces may be a better option.)
- (10) Labs with open flame.
- (11) HVAC units drawing outside air that could be contaminated with carbon monoxide.
- (12) Other areas with an open flame or fuel fired appliance.

(F) 915.2.3.1 Carbon monoxide alarm signals shall be automatically transmitted to an onsite location that is staffed by school personnel.

Exception: Carbon monoxide alarm signals shall not be required to be automatically transmitted to an onsite location that is staffed by school personnel in Group E occupancies with an occupant load of 30 or less."

(17)(16) A new IBC, Section (F) 915.7 is added as follows:

"(F) 915.7 Carbon monoxide systems in Group E occupancies. Carbon monoxide systems may be part of a fire alarm system or standalone system.

(F) 915.7.1 Power and wiring.

(F) 915.7.1.1 Power. Carbon monoxide detection systems shall require a primary and secondary power source.

(F) 915.7.1.2 Wiring. Class "A" wiring is required when the carbon monoxide system is part of, or connected to, a fire alarm system. Standalone carbon monoxide detection systems may use Class "B" wiring. All wiring shall be Class "A" or "B."

(F) 915.7.2 Equipment shut down. Equipment and appliances that are producing carbon monoxide shall shut down automatically in the zone involved upon carbon monoxide system activation.

(F) 915.7.3 Notification.

(F) 915.7.3.1 Local alarm. Each occupied space shall sound an audible alarm when detecting carbon monoxide at a level in excess of 70 ppm for one hour.

(F) 915.7.3.2 General alarm. A blue strobe, visual alarm, is required in a normally occupied location, similar to the administrative offices, when carbon monoxide is detected in the facility in excess of 70 ppm for one hour.

(F) 915.7.3.2.1 The general alarm shall require a manual reset following an alarm activation.

(F) 915.7.3.3 Digital notification. Portable carbon monoxide detectors, with digital read out indicating parts per million of carbon monoxide, in a space to determine the level of hazard in a given space.

(F) 915.7.4 Monitoring. System monitoring is not required. If the system is monitored, the signal should be a supervisory signal indicating carbon monoxide.

(F) 915.7.5 Inspection.

(F) 915.7.5.1 The carbon monoxide detection system shall be tested in the presence of a Deputy or Special Deputy of the State Fire Marshal Division. The Deputy shall require "spot testing" of the system and its components.

(F) 915.7.5.2 Before requesting final inspection and approval, the installing contractor shall test each component of the system and issue a statement of compliance, in writing, to the State Fire Marshal Division that the carbon monoxide detection system has been installed in accordance with approved plans and has been tested in accordance with the manufacturer's specifications, and the appropriate installation standard.

(F) 915.7.5.3 Systems shall be tagged with the State approved tag for fire alarm systems, upon final approval and shall be inspected and tagged annually by an individual certified as a Master Fire Alarm Technician, by the State Fire Marshal Division.

(F) 915.7.6 Evacuation. The affected area within Group E occupancies shall be evacuated when carbon monoxide is detected at a level in excess of 70 ppm for one hour in that area."

Amended by Chapter 209, 2023 General Session

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

(1) In IBC, Section 1010.2.4, number (2), the following is added at the end of the sentence: "Blended assisted living facilities shall comply with Section 1010.2.14.13.1."

(2) A new IBC Section 1010.2.14.13.1 is added as follows: "1010.2.14.13.1 Blended assisted living facilities. In occupancy Group I-1, Condition 2 or Group I-2, a Type-II assisted living facility licensed by the Department of Health and Human Services for residents with Alzheimer's or dementia, and having a controlled egress locking system to prevent operation from the egress side shall be permitted to also house residents without a clinical need for their containment where all of the following provisions are met:

- (a) locks in the means of egress comply with all IBC requirements for controlled egress doors;
- (b) all residents without a clinical need for their containment shall have the keys, codes, or other means necessary to exit the facility, in a manner that is determined by the facility operator and communicated to the resident or their legal representative;
- (c) residents or their legal representative acknowledge in writing that they understand and agree to living in a facility where egress is controlled; and
- (d) the number of residents housed ~~in a smoke compartment~~ with controlled egress shall not be greater than 30."

(3) 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)."

(4) In IBC, Section 1011.11, a new exception 6 is added as follows: " 6. In occupancies in Group R-3, as applicable in Section 101.2 and in occupancies in Group U, which are accessory to an occupancy in Group R-3, as applicable in Section 101.2, handrails shall be provided on at least one side of stairways consisting of four or more risers."

- (5) In IBC, Section 1025, is deleted.
- (6) In IBC, Section 1104.4, exception 1.5 is deleted.
- (7)

Amended by Chapter 505, 2024 General Session

### **15A-3-106 Amendments to Chapters 13 through 15 of IBC.**

IBC, Chapters 13, ~~and~~ 14, ~~and~~ 15 are not amended.

- (1) In IBC, Section 1512.2 a new exception 2 is added as follows:

(2) Any existing layers of polyisocyanurate insulation shall be permitted to remain in place if the roof decking is in serviceable condition and that the insulation is not damaged, deteriorated or water soaked. All other types of roof insulation and any areas of damaged, deteriorated or water soaked polyisocyanurate insulation are to be removed and replaced with new.

Amended by Chapter 249, 2016 General Session

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

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

- ~~(2)~~(1) In IBC, Section 1605.1, Exception 2 is deleted and replaced with the following:

"2. Where the allowable stress design load combinations of ASCE 7 Section 2.4 are used, flat roof snow loads of ~~30~~ 45 pounds per square foot (~~1.44~~2.15kN/m<sup>2</sup>) or less and roof live loads of ~~30~~ 45 pounds per square foot (~~1.44~~2.15kN/m<sup>2</sup>) or less need not be combined with seismic loads. Where flat roof snow loads exceed ~~30~~ 45 pounds per square foot (~~1.44~~2.15kN/m<sup>2</sup>), the snow loads may be reduced in accordance with the following in load combinations including both snow and seismic loads. S as calculated below, shall be combined with seismic loads.

$S = (\frac{0.20 + 0.025(A-5)}{0.15 + 0.016(A-5)}) \text{Proof}$ , where S shall be greater than or equal to 0.200.15Proof.

Where:

S = Weight of snow to be used in combination with seismic loads.

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

Proof = Design roof snow loads, Pf or Ps, psf

For the purpose of this section, snow load shall be assumed uniform on the horizontal projection without including the effects of drift or sliding. The ~~Importance Factor, I, Risk Category~~ used in calculating Pf may be considered 1.0II.

- ~~(3)~~(2) In IBC, Section 1605.1 a new exception 4.5 is added as follows:

"4.5. ASCE 7-~~16~~22Section 2.3.6 Equation 6 shall be modified to  $1.2D + Ev + Eh + L + f2S$  and  $1.2D + Ev + Emh + L + f2S$  with ~~f2 = (0.20 + 0.025(A-5))~~ f2 = (0.15 + 0.016(A-5)) where the roof snow load exceeds ~~30~~ 45 pounds per square foot (~~1.44~~2.16kN/m<sup>2</sup>). Where A =

Elevation above sea level at the location of the structure (ft/1000).  $f_2 = 0$  for roof snow loads of ~~30~~ 45 pounds per square foot (~~1.442.16~~kN/m<sup>2</sup>) or less."

(4) IBC, Section 1608.1, is deleted and replaced with the following: "1608.1 General". Except as modified in Sections 1608.1.1 and 1608.1.2, 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. Where the minimum live load, in accordance with Section 1607, is greater than the design roof snow load, the live load shall be used for design, but it may not be reduced to a load lower than the design roof snow load. Drifting need not be considered for design roof snow loads, less than 20 psf."

(5) A new IBC, Section 1608.1.1, is added as follows: "1608.1.1 Ice dams and icicles along eaves. Section 7.4.5 of Chapter 7 of ASCE 7 referenced in IBC Section 1608.1 is deleted and replaced with the following: 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 2psf on all overhanging portions. No other loads except dead loads shall be present on the roof when this uniformly distributed load is applied. All building exits under down slope eaves shall be protected from sliding snow and ice."

(6)(3) A new IBC, Section 1608.1.~~21~~21 is added as follows: "1608.1.~~21~~21 Drifts on adjacent structures. Section 7.7.2 of ASCE 7 referenced in IBC, Section 1608.1, is deleted and replaced with the following: 7.7.2 Adjacent structures. At lower adjacent structures, the requirements of Section 7.7.1 shall be used to calculate windward and leeward drifts. The resulting drift is permitted to be truncated."

(7) A new IBC, Section 1608.2.1 is added as follows: "1608.2.1 Utah ground snow loads. Section 7.2 of ASCE 7 referenced in IBC, Section 1608.1 is modified as follows:

- (a) In paragraph 1, 7.2-8 is deleted and replaced with 7.2-9.
- (b) On Figure 7.2-1, remove CS and other ground snow load values in the state of Utah. Add red shaded region for the state of Utah with the following note: See note for Utah.
- (c) The following is added to the Note on Figure 7.2-1: See Table 7.2-9 for Utah.
- (d) Add Table 7.2-9 as follows:

TABLE 7.2-9

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
Lea	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
Teeele	Teeele	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.~~

- ~~Statutory requirements of the Authority Having Jurisdiction are not included in this state ground snow load table.~~
- ~~For locations where there is substantial change in altitude over the city/town, the lead applies at and below the cited elevation, with a tolerance of 100 ft (30 m).~~
- ~~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."~~

(8)(4) A new IBC, Section 1613.1.1, is added as follows: "1613.1.1 Effective Seismic Weight. In ASCE 7 12.7.2 and 12.14.8.1 as referenced in Section 1613.1, Definition of W, Item 4 is deleted and replaced with the following:

4. Where flat roof snow load,  $P_f$ , exceeds 30 psf (1.44 kN/m<sup>2</sup>), the snow load included in the effective seismic weight shall be calculated, in accordance with the following equation:  ~~$W_s = (0.20 + 0.025(A-5))P_f \geq 0.20 P_f$~~   $W_s = (0.15 + 0.016(A-5))P_f \geq 0.15 P_f$ .

WHERE:

$W_s$  = Weight of snow to be included as effective seismic weight

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

$P_f$  = Design flat roof snow load, psf.

For the purposes of this section, snow load shall be assumed uniform on the horizontal projection without including the effects of drift or sliding. The ~~Importance Factor is, Risk Category~~ used in calculating  $P_f$  may be considered 4.0 II for use in the formula for  $W_s$ .

(5) A new IBC, Section 1613.1.2 is added as follows: "1613.1.2 Equivalent Lateral Forces (ELF) Procedure. In ASCE 7 Section 12.8.1.1 the first paragraph is deleted and replaced with the following: "Where the design special acceleration parameter  $S_a$  determined in accordance with either Section 11.4.5.1 or Chapter 21 is available, Method 1 shall be used to determine the seismic response coefficient,  $C_s$ . Where Exception 2 of Section 11.4.5 applies, applies, Method 1 shall not be used. The lower bound for the seismic response coefficient,  $C_s$ , provided in Eq. 12.8-6 or 12.8-7 shall be applicable for both Method 1 and Method 2."

Amended by Chapter 209, 2023 General Session

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

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

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

"TABLE 1807.1.6.4

#### EMPIRICAL FOUNDATION WALLS (1,7,8)

Max. Height	Top Edge Support	Min. Thickn ess	Vertic al Steel (2)	Horizon tal Steel (3)	Steel at Openings (4)	Max. Lintel Length	Min. Lintel Length
-------------	------------------	-----------------	---------------------	-----------------------	-----------------------	--------------------	--------------------

2'(610 mm)	None	6"	(5)	2- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
3'(914 mm)	None	6"	#4@3 2"	3- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
4'(1,219 mm)	None	6"	#4@3 2"	4- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	3'(914 mm)	2" for each foot of opening width; min. 6"
6'(1,829 mm)	Floor or roof Diaphragm (6)	8"	#4@2 4"	5- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
8'(2,438 mm)	Floor or roof Diaphragm (6)	8"	#4@2 4"	6- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
9'(2,743 mm)	Floor or roof Diaphragm (6)	8"	#4@1 6"	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 1808.8.6. Corner reinforcing shall be provided so as to lap 24 inches (610 mm).
- (4) Bars shall be placed within two inches (51 mm) of the openings and extend 24 inches (610 mm) beyond the edge of the opening; vertical bars may terminate three inches (76 mm) from the top of the concrete.
- (5) Dowels of #4 bar at 32 inches on center shall be provided in the footing, extending 18 inches (457 mm) into the foundation wall.
- (6) Diaphragm shall conform to the requirements of Section 2308.
- (7) Footing shall be a minimum of nine inches thick by 20 inches wide.
- (8) Soil backfill shall be soil classification types GW, GP, SW, or SP, per Table 1610.1. Soil shall not be submerged or saturated in groundwater."

(3) A new IBC, Section ~~1905.1.9~~1904.3, is added as follows: "~~1905.1.9~~1904.3 ACI 318, Section 19.3.1.1." Modify ACI 318, Table 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 including footing elements, such as footings, tie beams, piles, and pile caps, etc., that are completely buried in soil."

Amended by Chapter 209, 2023 General Session

### **15A-3-109 Amendments to Chapters 20 through 22 of IBC.**

IBC, Chapters 20 through 22 are not amended.

Enacted by Chapter 14, 2011 General Session

### **15A-3-110 Amendments to Chapters 23 through 25 of IBC.**

(1) A new IBC, Section ~~2306.1~~2306.1.6, is added as follows: "~~2306.1~~2306.1.6 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)."

(2) In IBC, Section ~~2308.3.1~~2308.7.1, the words "6 feet (1829 mm)" and "4 feet (1219 mm)" are deleted and each replaced with the words "32 inches."

(3) A new IBC, Section 2406.6, is added as follows: "2406.6 Glazing in Educational Occupancies (K-12). Exterior entrance level windows within 25 feet of an exterior entrance shall have ballistic glass or security glazing, extending from ground level to a minimum height of six feet from ground level.

Windows surrounding the interior of the classroom entrance or instructional areas shall have ballistic glass or security glazing installed, extending from the floor to a minimum height of six feet from the floor.

2406.6.1 Standard for Security Glazing in Educational Occupancies (K-12): For the purpose of this section, "Ballistic Glass" is defined as glass certified at a minimum level of:

- (i) Underwriters Laboratories Standard UL752-23, Standard for Bullet-Resisting Equipment, Threat Level UL-RF-E from Table C1 (Legacy Level) (2023); or
- (ii) ASTM F3279-24, Standard Test Methods for Ballistic Resistant Security Glazing Materials, Threat and Performance Level 4, Ballistic Test Identity (BTI) R1-T1-C5-2L under Table 1, Ballistic Criteria (2021).

"Security Glazing" is defined as: a clear or tinted durable material applied to glass doors and windows that enhances the structural integrity of the glass by preventing it from shattering and falling to the ground when impacted by an object and meets the minimum standard established by:

- (i) ASTM F3561, Standard Test Method for Forced-Entry-Resistance of Fenestration Systems After Simulated Active Shooter Attack, minimum level 3 of Table 2, Potential Energy of Impactor and Drop Height (2023); or
- (ii) ANSI Z97.1-15 (R20) American National Standards For Safety Glazing Materials used in Building's safety performance specifications and methods of test, must meet the durability requirements of Section 5.3 and 5.4.

References:

Minimum Safety and Security Standards for School Facilities

State Security Chief: 53-22-102(3)(b) and (c)

County Security Chief: 53-22-103(2)

State Board of Education Construction Guidelines: 53E-3-702; 53E-3-706

Panic device: 56G-8-805

Amended by Chapter 20, 2019 General Session

**15A-3-111 Amendments to Chapters 26 through 28 of IBC**

IBC, Chapters 26 through 28 are not amended.

Enacted by Chapter 14, 2011 General Session

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

(1) In IBC [P] Table 2902.1 the following changes are made:

- (a) In the row for "E" occupancy in the field for "OTHER" a new footnote i is added.
- (b) In the row for "I-4" occupancy in the field for "OTHER" a new footnote i is added.
- (c) A new footnote g is added as follows: "FOOTNOTE: g. When provided, subject to footnote l , in public toilet facilities there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms."
- (d) A new footnote h is added to the table as follows: "FOOTNOTE h: Non-residential childcare facilities shall comply with additional sink requirements of Utah Administrative Code, R381-60-9, Hourly Child Care Centers, R381-70-9, Out of School Time Child Care Programs, and R381-100-9, Child Care Centers."

(e) A new footnote i is added to the table as follows: "FOOTNOTE i: A building owned by a state government entity or by a political subdivision of the state that allows access to the public shall provide diaper changing facilities in accordance with footnote g if:

1. the building is newly constructed; or
2. a bathroom in the building is renovated."

(f) Footnote f is deleted and replaced with the following: "FOOTNOTE f: The required number and type of plumbing fixtures for outdoor public swimming pools shall be in accordance with Utah Administrative Code, R392-302, Design, Construction and Operation of Public Pools."

(2) In IBC, Section [P] 2902.1.1, Exception 2 is deleted and replaced with the following:

"2. Where multiple-user facilities are designed to serve all genders, the following shall apply:

2.1 The maximum fixture count to serve all genders shall be calculated at 50 percent of the total occupant load. The maximum fixture count for the multiple-user all gender facility shall be calculated at 50 percent female and 50 percent male.

2.2 The remaining 50 percent of the required restroom fixtures shall be provided as required by Table 2902.1 in separate toilet facilities."

(3) In IBC, Section [P] 2902.2, Exception 6 is deleted and replaced with the following:

"6. Separate facilities shall not be required as prescribed in Section 2902.1.1 Exception 2. Rooms having both water closets and lavatory fixtures designed for use by all genders and privacy for water closets shall be installed in accordance with Section 405.3.4 of the International Plumbing Code and Section 2903.1.4 of this code. Urinals in multiple-user all gender toilet facilities shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall and installed in accordance with Section 405.3.5 of the International Plumbing Code and Section 2903.1.5 of this code."

(4) A new IBC, Section [P]2902.8, is added as follows:

"[P]2902.8 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 non-sewer type shall conform to ANSI Z4.3-2016."

(5) In IBC, Section [P] 2903.1.4, the following sentence is added after the first sentence: "Forrest room facilities designed to serve all genders, the partitions of the stalls shall extend from the floor to the ceiling."

(6) In IBC, Section [P] 2903.1.5, the following sentence is added at the end of the paragraph: "For facilities designed for use by all genders in the same room, urinals shall be located in a separate room or in stalls with partitions that extend from the floor to the ceiling."

(7) ~~IBC, Section 3001.2, is deleted.~~

(8) ~~(7) In IBC, Section 3005.5, a new exception is added as follows: "Exception: Hydraulic elevators and roped hydraulic elevators with a rise of 50 feet or less."~~

(9) ~~(8) In IBC, Section 3109.1, the words "the International Swimming Pool and Spa Code" at the end of the section are deleted and replaced with the words "Utah Administrative Code, R392-302, Design, Construction and Operation of Public Pools."~~

Amended by Chapter 209, 2023 General Session

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

- (1) In IBC, Chapter 35, the referenced standard "ICC A117.1-17: Accessible and Usable Buildings and Facilities" is deleted and replaced with "ICC A117.1-09: Accessible and Usable Buildings and Facilities."
- (2) 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."

Amended by Chapter 15, 2024 General Session

## **Part 2 Statewide Amendments to International Residential Code**

### **15A-3-201 General provision.**

- (1) The amendments in this part are adopted as amendments to the IRC to be applicable statewide.
- (2) The statewide amendments to the following which may be applied to detached one- and two family dwellings and multiple single-family dwellings shall be applicable to the corresponding provisions of the IRC:
  - (a) IBC under Part 1, Statewide Amendments to International Building Code;
  - (b) IPC under Part 3, Statewide Amendments to International Plumbing Code;
  - (c) IMC under Part 4, Statewide Amendments to International Mechanical Code;
  - (d) IFGC under Part 5, Statewide Amendments to International Fuel Gas Code;
  - (e) NEC under Part 6, Statewide Amendments to National Electrical Code; and
  - (f) IECC under Part 7, Statewide Amendments to International Energy Conservation Code.

Amended by Chapter 189, 2014 General Session

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

- (1) In IRC, Section R101.2, Exception, the words "where provided with an automatic sprinkler system complying with Section P2904" are deleted.
- (2) In IRC, Section R101.2, Exception, the words "6. A triplex or fourplex of no more than two levels with 2-hour fire-resistance-rated vertical shared wall assemblies tested in accordance with ASTM E119 or UL263, 1-hour fire-resistance-rated horizontal floor assemblies tested in accordance with ASTM E119 or UL263, and independent egress for each unit," are added.
- (3) 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."
- (4) In IRC Section R105.2, under Building, the following changes are made:
  - (a) Number 3 is deleted and replaced with the following: "3. Retaining walls retaining less than 4 feet (1219mm) of unbalanced fill, unless supporting a surcharge or requiring design per Section R404.4."

- (b) Number 10 is deleted and replaced with the following: "10. Decks that are not more than 30 inches (762mm) above grade at any point and not requiring guardrails, that do not serve exit door required by Section R311.4."
- (5) In IRC, Section R105.2, a new exception is added: "11. Grade level, non-connected cone boxes, less than 350 square feet, used for storage only."
- (6) In IRC, Section R108.3, the following sentence is added at the end of the section: "The building official shall not request proprietary information."
- (7) In IRC, Section 109.1.5, is deleted and replaced with the following: "R109.1.5 Other inspections. In addition to the inspections listed in R109.1.1 through R109.1.4, the building official shall have the authority to inspect the proper installation of insulation. R109.1.5.1 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 R703.4 to prevent water from entering the weather-resistive barrier. R109.1.5.2 Fire-resistance rated construction inspection. Where fire-resistance-rated construction is required between dwelling units or due to location on property, the building official shall require an inspection of such construction after lathing or gypsum board or gypsum panel products are in place, but before any plaster is applied, or before board or panel joints and fasteners are taped and finished."
- (8) 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."
- (9) In IRC, Section R202, the definition for "Approved" is modified by adding the words "or independent third-party licensed engineer or architect and submitted to the building official" after the word "official."
- (10) In IRC, Section R202, the definition for "Approved Agency" is modified by replacing the word "and" with "or."
- (11) In IRC, Section 202, the definition for "Approved Source" is modified by adding the words "or licensed engineer or architect" after the word "official."
- (12) In IRC, Section R202, the following definition is added: "CERTIFIED BACKFLOWPREVENTER 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)."
- (13) 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")."
- (14) In IRC, Section 202, the following definition is added: "DUAL SOURCE CONNECTION. A pipe that is installed so that either the non-potable (i.e. secondary) irrigation water or the potable water is connected to a pressurized irrigation system at one time, but not both at the same time; or a pipe that is installed so that either the potable water or private well water is connected to a residence at one time, but not both at the same time. The potable water supply line shall be protected by a reduced pressure backflow preventer."

(15) 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."

(16) 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."

(17) 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."

(18) In IRC, Figure R301.2 (3), is deleted and replaced with R301.2 (3) as follows:

"TABLE R301.2 (3)

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.

- a 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).
- b 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."

- (19) In 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."
- (20) In IRC, Section R302.2, the following sentence is added at the end of the paragraph: "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."
- (21) 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."
- (22) In IRC, Section R302.5.1, the last sentence is deleted.
- (23) In IRC, Section R302.13, is deleted.
- (24) In IRC, Section R303.4, the following exception is added: "Exception: Dwelling units tested in accordance with Section N1102.4.1.2 (R402.4.1.2) which has an air tightness of 3.0 ACH (50) or greater do not require mechanical ventilation."
- (25) In IRC, Section R310.1, all words in the last sentence after "or to a yard or court", are deleted, and Exception 3 of this section is deleted.
- (26) In IRC, Section R310.7, in the exception, the words "or accessory dwelling units" are added after the words "sleeping rooms".
- (27) IRC, Sections R311.7.45 through R311.7.5.3, are deleted and replaced with the following:  
R311.7.5 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section, dimensions and dimensioned surfaces shall be exclusive of flooring finish materials.

~~"R311.7.45.1 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 Nosing. 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."

(28) In IRC, Section R312.2, is deleted.

(29) In 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."

(30) In IRC, Section R314.2.2, the words "accessory dwelling units," are added after the words "Where alterations, repairs."

(31) In IRC, Section R315.2.2, the words "accessory dwelling units," are added after the words "Where alterations, repairs."

(32) 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." (32) A new IRC, Section R328.12, is added as follows:

(33) "R328.12 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."

(34) In IRC, Section 403.1.3.5.3, an exception is added as follows: "Exception: Vertical steel in footings shall be permitted to be located while concrete is still plastic and before it has set. Where vertical steel resists placement or the consolidation of concrete around steel is

impeded, the concrete shall be vibrated to ensure full contact between the vertical steel and concrete."

- (35) 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."
- (36) 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."
- (37) 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."
- (38) In IRC, Section R405.1, a second 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 geotechnical report shall make a recommendation regarding a drainage system."
- (39) In IRC, Section R506.2.3, the words "10-mil (0.010 inch; 0.25 mm)" are deleted and replaced with "6-mil (0.006 inch; 0.152 mm)" and the words "conforming to ASTM E1745 Class A requirements" are deleted.
- (40) In IRC, Section 507.2.1, Wood materials. The following sentence is added after the words, "in accordance with Section R317," "field applied weather resistant barrier applied to the top of untreated material."

Amended by Chapter 505, 2024 General Session

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

- (1) IRC, Section R609.4.1, is deleted.
- (2) In IRC, Section N1101.4 (R102.1.1), a new section N1101.4.1 (R102.1.1) is added as follows: "N1101.4.1 National Green Building Standard. Buildings complying with ICC 700-2020 National Green Building Standard and achieving the Gold rating level for the energy efficiency category shall be deemed to exceed the energy efficiency required by this code. The building shall also meet the requirements identified in table N1105.2 and the building thermal envelope efficiency is greater than or equal to levels of efficiency and solar heat gain coefficients (SHGC) in Tables N1102.2.2 and N1102.1.3 of the 2009 IRC."
- (3) 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 for building permits shall include only those items specified in Subsection 10-5-132(8) of the Utah Municipal Code."
- (4) In IRC, Section N1101.10.3 (R303.1.3) the following changes are made:

- (a) The following is added at the end of the first sentence "or EN 14351-1:2006+A1:2010."
  - (b) The word "accredited" is replaced with "approved" in the third sentence.
  - (c) The following sentence is added after the third sentence: "A conversion factor of 5.678 shall be used to convert from U values expressed in SI units: ()/53678=."
  - (d) After "NFRC 200" the following words are added: "or EN 14351-1:2006+A1:2010," and in the sentence the word "accredited" is replaced with the word "approved."
  - (e) The following new sentence shall be inserted immediately prior to the last sentence: "Total Energy Transmittance values may be substituted for SHGC, and Luminous Transmission values may be substituted for VT."
- (5) In IRC, Section N1101.12 (R303.3), all wording after the first sentence is deleted.
- (6) In IRC, Section N1101.13 (R401.2), in the first sentence, the words "Section N1101.13.5 and" are deleted.
- (7) In IRC, Section N1101.13.5 (R401.2.5) is deleted.
- (8) In IRC, Section N1101.14 (R401.3) Number 7, the words "and the compliance path used" are deleted.
- (9) In IRC, Table N1102.1.2 (R402.1.2):
  - (a) in the column titled Fenestration U-Factor the following changes are made:
    - (i) in the row titled "Climate Zone 3" delete 0.30 and replace it with 0.32;
    - (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.30 and replace it with 0.32; and
    - (iii) in the row titled "Climate Zone 6" delete 0.30 and replace it with 0.32;
  - (b) in the column titled "Glazed Fenestration SHGC", the following change is made: in the row titled "Climate Zone 3" delete 0.25 and replace it with 0.35;
  - (c) in the column titled "Ceiling U-Factor" the following changes are made:
    - (i) in the row titled "Climate Zone 3" delete 0.026 and replace it with 0.030;
    - (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.024 and replace it with 0.026; and
    - (iii) in the row titled "Climate Zone 6" delete 0.024 and replace it with 0.026;
  - (d) in the column titled "Wood Frame Wall U Factor", the following changes are made:
    - (i) in the row titled "Climate Zone 3" delete 0.060 and replace it with 0.060;
    - (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.045 and replace it with 0.060; and
    - (iii) in the row titled "Climate Zone 6" delete 0.045 and replace it with 0.060;
  - (e) in the column titled "Basement Wall U-Factor" the following changes are made:
    - (i) in the row titled "Climate Zone 5 and Marine 4" delete 0.050 and replace it with 0.075; and
    - (ii) in the row titled "Climate Zone 6" delete 0.50 and replace it with 0.065; and
  - (f) in the column titled "Crawl Space Wall U-Factor" the following changes are made:
    - (i) in the row titled "Climate Zone 5 and Marine 4" delete 0.055 and replace it with 0.078; and
    - (ii) in the row titled "Climate Zone 6" delete 0.55 and replace it with 0.065.
- (10) In IRC, Table N1102.1.3 (R402.1.3), the following changes are made:
  - (a) in the column titled "Wood Frame Walls R-Value" a new footnote indicator "j" is added and at the bottom of the footnotes the following footnote "j" is added: "j. In climate zone 3B and 5B, an R-15, and in climate zone 6, an R-20 shall be acceptable where air-impermeable insulation is installed in the cavity space, exterior continuous insulation, or some combination thereof; and the tested house air leakage is a maximum of 2.0 ACH50"; and

(b) add a new footnote "k" as follows: "k. 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 0.30 U-factor or lower, minimum heating equipment efficiency is for gas 95 AFUE, or for oil, 84 AFUE, and all other components requirements are met."

(11) In IRC, Table N1102.1.3 (R402.1.3) the following changes are made:

- (a) in the column titled "Fenestration U-Factor" the following changes are made:
  - (i) in the row titled "Climate Zone 3" delete 0.30 and replace it with 0.32;
  - (ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.30 and replace it with 0.32; and
  - (iii) in the row titled "Climate Zone 6" delete 0.30 and replace it with 0.32;
- (b) in the column titled "Glazed Fenestration SHGC" the following change is made: in the row titled "Climate Zone 3" delete 0.25 and replace it with 0.35; (c) in the Column R-Value the following changes are made:
  - (i) in the row titled "Climate Zone 3" delete 49 and replace it with 38;
  - (ii) in the row titled "Climate Zone 5 and Marine 4" delete 60 and replace it with 49; and
  - (iii) in the row titled "Climate Zone 6" delete 60 and replace it with 49;
- (d) in the Column titled "Wood Frame Wall R-Value" the following changes are made:
  - (i) in the row titled "Climate Zone 3" delete all values and replace with 20+Oci or 13+5ci or015ci;
  - (ii) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with 21+Oci or15+5ci or 0+15ci; and
  - (iii) in the row titled "Climate Zone 6" delete all values and replace with 21+Oci or 15+5ci or0+15ci;
- (e) in the column titled "Basement Wall R Value" the following changes are made:
  - (i) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with 15+Oci or0+11ci or 11+5ci; and
  - (ii) in the row titled "Climate Zone 6" delete all values and replace with 19+Oci or 0+13ci or11+5ci;
- (f) in the column titled "Slab R Value and Depth" the following changes are made:
  - (i) in the row titled "Climate Zone 3" delete 10ci. 2 ft and replace it with NR; and (ii) in the row titled "Climate Zone 5 & Marine 4" delete 4 ft and replace it with 2 ft; and (g) in the column titled "Crawl Space Wall R-Value" the following changes are made:
    - (i) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with 15+Oci or0+11ci or 11+5ci; and
    - (ii) in the row titled "Climate Zone 6" delete all values and replace with 19+Oci or 0+13ci or0+11+5ci.

(12) In IRC, a new subsection N1102.1.5.1 (R402.1.5.1) is added as follows: "1102.1.5.1 (R402.1.5.1) RESCheck 2012 Utah Energy Conservation Code. Compliance with section N1102.1.5 (R402.1.5) may be satisfied using the software RESCheck 2012 Utah Energy Conservation Code, which shall satisfy the R-value and U-factor requirements of N1102.1, N1102.2, and N1102.3, provided the following conditions are met:

- (a) in "Climate Zone 5 and 6" the software result shall show 5% better than code; and
- (b) in "Climate Zone 3", the software result shall show 5% better than code when software inputs for window U-factor .65 and window SHGC=0.40, notwithstanding actual windows installed shall conform to requirements of Tables N1102.1.2 (R402.1.2) and N1102.1.3 (R402.1.3)."

(13) In IRC, Sections N1102.2.1 (R402.2.1), a new Section N1102.2.1.1 is added as follows: "N1102.2.1.1. Unvented attic and unvented enclosed rafter assemblies. Unvented attic and unvented enclosed rafter assemblies conforming to Section R806.5 shall be provided with an R-value of R-22 (maximum U-Factor of 0.045) in Climate Zone 3-B or an R-value of R-26 (maximum U-factor of 0.038) in Climate Zones 5-B and 6-B shall be permitted provided all the following conditions are met:

1. The unvented attic assembly complies with the requirements of the International Residential Code, R806.5.
2. The house shall attain a blower door test result 2.5ACH 50.
3. The house shall require a whole house mechanical ventilation system that does not rely solely on a negative pressure strategy (must be positive, balanced or hybrid).
4. Where insulation is installed below the roof deck and the exposed portion of roof rafters are not already covered by the R-20 depth of the air-impermeable insulation, the exposed portion of the roof rafters shall be wrapped (covered) by minimum R-3 unless directly covered by drywall/finished ceiling. Roof rafters are not required to be covered by minimum R-3 if a continuous insulation is installed above the roof deck.
5. Indoor heating, cooling and ventilation equipment (including ductwork) shall be inside the building thermal envelope."

(14) In IRC, Section N1102.2.9.1 (R402.2.9.1) the numeral (i) is added before the words "cut at a45 degree" and the following is added after the words "exterior wall": "or (ii) lowered from top of slab 4" when a 4" thermal break material such as, but not limited to, felt or asphalt impregnated fiber board, with a minimum thickness of 1/4" is installed at the upper 4" of slab".

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

(16) 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."

(17) In IRC, Table N1102.4.1.1 (R402.4.1.1) in the column titled "COMPONENT, the following changes are made:

- (a) In the row "Rim Joists" the word "exterior" in the first sentence is deleted, and the second sentence is deleted.
- (b) In the row "Electrical/phone box on the exterior walls" the last sentence is deleted and replaced with: "Alternatively, close cell foam, caulking or gaskets may be used, or air sealed boxes may be installed."

(18) In IRC, Section N1102.4.1.2 (R402.4.1.2), the following changes are made:

- (a) In the fourth sentence, the word "third" is deleted.
- (b) The following sentence is added after the fourth 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."
- (c) In the first Exception the second sentence is deleted.

(19) IRC, Section N1103.3.3 (R403.3.3), is deleted.

(a) 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.";

(20) IRC Section N1103.3.3.1 (R403.3.3.1) is deleted.

(21) In IRC, Section N1103.3.5 (R403.3.5), the following changes are made:

- (a) a second Exception is added as follows: "A duct leakage test shall not be required for any system designed such that no air handlers or ducts are located within unconditioned attics."
- (b) the following is added at the end of the section: "The following parties shall be approved to conduct testing:

- (i) Parties certified by BPT or RESNET;
- (ii) Licensed contractors who have completed training provided by Duct Test equipment manufacturers or other comparable training."

(22) In IRC, Section N1103.3.6 (R403.3.6) the following changes are made:

- (a) in Subsection 1:
  - (i) the number 4.0 is changed to 6.0;
  - (ii) the number 113.3 is changed to 170;
  - (iii) the number 3.0 is changed to 5.0; and
  - (iv) the number 85 is changed to 141;
- (b) in Subsection 2:
  - (i) the number 4.0 is changed to 5.0; and (ii) the number 113.3 is changed to 141; and (c)

Subsection 3 is deleted.

(23) In IRC, Section N1103.3.7 (R403.3.7) the words "or plenums" are deleted.

(24) In IRC, Section N1103.5.1.1 (R403.5.1.1) the words "Where installed" are added at the beginning of the first sentence.

(25) In IRC, Section N1103.5.2 (R403.5.2) the following change is made, Subsections 5 and 6 are deleted and Subsection 7 is renumbered to 5.

(26) IRC, Section N1103.6.2 (R403.6.2), is deleted and replaced with the following: "N1103.6.2 (R403.6.2) Whole-house mechanical ventilation system fan efficacy. Fans used to provide whole-house mechanical ventilation shall meet the efficacy requirements of Table N1103.6.2 (R403.6.2).  
 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."

(27) In IRC, Section N1103.6.2 (R403.6.2), the table is deleted and replaced with the following:

"TABLE N1103.6.2 (R403.6.2)",  
**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"

- (28) IRC, Section N1103.6.3 (R403.6.3) is deleted.
- (29) In IRC, Section N1103.7 (R403.7) the word "approved" is deleted in the first sentence and the following is added after the word "methodologies": "complying with N1103.7.1 (R403.7.1)".
- (30) A new IRC, Section N1103.7.1 (R403.7.1) is added as follows: "N1103.7.1 Qualifications. An individual performing load calculations shall be qualified by completing HVAC training from one of the following:
  1. HVAC load calculation education from ACCA;
  2. A recognized educational institution;
  3. HVAC equipment manufacturer's training; or
  4. Other recognized industry certification."
- (31) In IRC, Section N1104.1 (R404.1), the word "All" is replaced with "Not less than 90 percent of the lamps in".
- (32) IRC, Section N1104.1.1 (R404.1.1) is deleted.
- (33) IRC, Section N1104.2 (R404.2) is deleted.
- (34) IRC, Section N1104.3 (R404.3) is deleted.
- (35) In IRC, section N1105.2 (R405.2) the following changes are made:
  - (a) In Subsection 3, the words "approved by the code official" are deleted; and
  - (b) In Subsection 3, the following words are added at the end of the sentence: "when applicable and readily available".
- (36) In IRC, Section N1106.3 (R406.3) "Building thermal envelope" is deleted, and replaced with "Building thermal envelope and on-site renewables. The proposed total building thermal envelope UA, which is the sum of U-factor times assembly area, shall be less than or equal to the building thermal envelope UA using the prescriptive U-factors from Table N1102.1.2 multiplied by 1.15 in accordance with Equation 11-4. The area-weighted maximum fenestration SHGC permitted in Climate Zones 0 through 3 shall be:  $0.30 \cdot UA_{\text{Proposed design}} = 1.15 \cdot UA_{\text{Prescriptive reference design}}$  (Equation 11-4)."
- (37) In IRC, Section N1106.3.1 (R406.3.1) is deleted.
- (38) In IRC, Section N1106.3.2 (R403.3.2) is deleted.
- (39) In IRC, Section N1106.4 (R406.4) the following changes are made:
  - (a) In the first sentence, the words "in accordance with Equation 11-5" are deleted and replaced with: "permitted to be calculated using the minimum total air exchange rate for the rated home ( $Q_{\text{tot}}$ ) and for the index adjustment factor in accordance with Equation 11.5.";
  - (b) In equation 11-5, the words "Ventilation rate, CFM" are deleted and replaced with: " $Q_{\text{tot}}$ ";
  - (c) In the last sentence the number "5" is deleted and replaced with "15".
- (40) In IRC N1106.5, in the column titled "ENERGY RATING INDEX" of Table R406.5, the following changes are made:
  - (a) In the row for "Climate Zone 3", "51" is deleted and replaced with "65";
  - (b) In the row for "Climate Zone 5", "55" is deleted and replaced with "69"; and
  - (c) In the row for "Climate Zone 6", "54" is deleted and replaced with "68".
- (41) In IRC, Section N1108 (R408) is deleted.
- (42) In IRC, Section M1401.3 the word "approved" is deleted in the first sentence and the following is added after the word methodologies ", complying with M1401.3.1".
- (43) A new IRC, Section M1401.3.1, is added as follows: "M1401.3.1 Qualifications. An individual performing load calculations shall be qualified by completing HVAC training from one of the following:

1. HVAC load calculation education from ACCA;
2. A recognized educational institution;
3. HVAC equipment manufacturer's training; or
4. Other recognized industry certification."

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

(45) In IRC, Section M1403.1, the characters "/ANCE" are deleted.

(46) IRC, Section M1411.9, is deleted.

(47) In IRC, Section M1412.1, the characters "/ANCE" are deleted.

(48) In IRC, Section M1413.1, the characters "/ANCE" are deleted.

Amended by Chapter 505, 2024 General Session

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

(1) In IRC, Section M1602.2, a new exception is added at the end of Item 7 as follows: "Exception: The discharge of return air from an accessory dwelling unit into another dwelling unit, or into an accessory dwelling unit from another dwelling unit, is not prohibited."

(2) A new IRC, Section G2401.2, is added as follows: "G2401.2 Meter Protection. Fuel gas services shall be in an approved location and/or provided with structures designed to protect the fuel gas meter and surrounding piping from physical damage, including falling, moving, or migrating ice and snow. If an added structure is used, it must provide access for service and comply with the IBC or the IRC."

(3) In IRC, Section 2503.5.1, #2 Air Test is deleted and replaced with the following: "Where water is not available at the construction site or where freezing conditions limit the use of water on the construction site, plastic drainage and vent pipe may be permitted to be tested with air. The following procedures shall be followed:

- (a) Proper personal protective equipment, including safety eyewear and protective headgear, should be worn by all individuals in any area where an air or gas test is being conducted.
- (b) Contractor shall take all precautions necessary to limit the pressure within the plastic piping.
- (c) No drain and vent system shall be pressurized in excess of 6 psi as measured by accurate gauges graduated to no more than three times the test pressure.
- (d) The pressure gauge shall be monitored during the test period, which should not exceed 15 minutes.
- (e) At the conclusion of the test, the system shall be depressurized gradually, all trapped air or gases should be vented, and test balls and plugs should be removed with caution."

(4) In IRC, Section P2503.8, the word "devices" is deleted and replaced with the word "assemblies."

(5) IRC, Section P2503.8.2, is deleted and replaced with the following: "P2503.2 Testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protections, and spill-resistant vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The Utah Cross-Connection Control Commission has adopted the field test procedures published by the Manual of Cross Connection Control, Tenth Edition. This manual is published by the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges shall comply with ASSE 1064."

Amended by Chapter 505, 2024 General Session

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

- (1) IRC, Section P2602.1, is deleted and replaced with the following: "P2602.1 General. The water-distribution system of any building or premises where plumbing fixtures are installed shall be connected to a public 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. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer where the sewer is accessible and is within 300 feet of the property line in accordance with Utah Code Section 10-8-38, or an approved private sewage disposal system in accordance with Utah Administrative Code, Rule R317-4, as administered by the Department of Environmental Quality, Division of Water Quality. Exception: Sanitary drainage piping and systems that convey only the discharge from bathtubs, showers, lavatories, clothes washers, and laundry trays shall not be required to connect to a public sewer or to a private sewage disposal system provided that the piping or systems are connected to a system in accordance with Sections P2910 or P2911."
- (2) 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."
- (3) 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."
- (4) In IRC, Section P2705, Item 5, the words "lavatory" and "lavatories" are deleted.
- (5) In IRC, Section P2705, a new Item 9 is added as follows: "9. 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.
- (6) In IRC, Section P2801.6.2, the following is added at the end of the section: "When permitted by the code official, the pan drain may be directly connected to a soil stack, waste stack, or branch drain. The pan drain shall be individually trapped and vented as required in Section 907.1. The pan drain shall not be directly or indirectly connected to any vent. The trap shall be provided with a trap primer conforming to ASSE 1018 or ASSE 1044, a barrier type floor drain trap seal protection device meeting ASSE 1072, or a deep seal p-trap."
- (7) A new IRC, Section P2801.6.3, is added as follows: "P2801.6.3 Pan designation. A water heater pan shall be considered an emergency receptor designated to receive the discharge of

water from the water heater only and shall not receive the discharge from any other fixtures, devices, or equipment."

(8) IRC, Section P2801.8, is deleted and replaced with the following: "P2801.8 Water heater seismic bracing. As a minimum requirement, water heaters shall be anchored or strapped to resist horizontal displacement caused by earthquake motion. Strapping shall be at points within the upper one-third and lower one-third of the appliance's vertical dimensions.

(9) In IRC, Section P2804.6.1, a new number 15 is added as follows: "15. Be installed in accordance with the manufacturer's installation instructions, not to exceed 180 degrees in directional changes."

(10) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protection, and spill-resistant vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The Utah Cross Connection Control Commission has adopted the field test procedures published by the Manual of Cross Connection Control, Tenth Edition. This manual is published by the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges shall comply with ASSE 1064.

(11) 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.  
P2902.1.3 Reduced Pressure Principle 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 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, 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 of the International Plumbing Code as amended in Utah Code, Subsection 15A-3-303(1).

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.

P2902.1.4 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.

**P2902.1.5 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."

(12) In IRC, Table 2903.2, the following changes are made in the column titled "MAXIMUM FLOWRATE OR QUANTITY":

- (a) In the row titled "Lavatory faucet" the text is deleted and replaced with "1.5 gpm at 60 psi".
- (b) In the row titled "Shower head" the text is deleted and replaced with "2 gpm at 80 psi".

(13) In IRC, Section P2903.3, the words "public water main or an" are deleted and the following sentence is added at the end: "A water pressure booster pump may not be connected to a public water main unless allowed by Utah Administrative Code, Rule R309-540."

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

(15) 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."

(16) IRC, Section P2910.5, is deleted and replaced with the following:  
"P2910.5 Potable water connections.

A system that utilizes nonpotable water (i.e., pressurized irrigation) and installs a connection to the potable water system for backup must install a Reduced Pressure Principle Assembly (RP) directly downstream of the potable water connection (Stop and Waste) and install a "dual source connection" directly downstream from the (RP) installed so that either the potable water system or the nonpotable water is connected at any time to prevent a direct Cross Connection and to protect the potable water from any potential hazard from the nonpotable water system. See Utah Code Section 19-4-112. Note: RP must be tested within 10 days of installation and annually whether the drinking water is used or not."

(17) IRC, Section P2910.9.5, is deleted and replaced with the following:  
"P2910.9.5 Makeup water.

Where an uninterrupted nonpotable 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."

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

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

(20) In IRC, Section P3007.3.3.1, the words "stainless steel, cast iron, galvanized steel, brass" are added after the word "PE."

(21) IRC, Section P3009, is deleted and replaced with the following:  
"P3009 Graywater soil absorption systems: Graywater recycling systems utilized for subsurface irrigation for single-family residences shall comply with the requirements of Utah Administrative Code, R317-401, Graywater Systems. Graywater recycling systems utilized for subsurface irrigation for other occupancies shall comply with Utah Administrative Code, R317-3, Design Requirements for Wastewater Collection, Treatment, and Disposal Systems, and Utah Administrative Code, R317-4, Onsite Wastewater Systems."

(22) In IRC, Section P3101.4, 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."

(23) 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."

(24) In IRC, Section E3401.2, the second sentence is modified by adding the words "townhouses", after the word "dwellings" and the word "their" before the word "accessory" and the following is added after "NFPA 70", "such as, but not limited to the following equipment:

- (a) fixed outdoor electric deicing and snow-melting equipment;
- (b) motors;
- (c) generators;
- (d) transformers;
- (e) phase converters;
- (f) stationary standby batteries;
- (g) elevators;
- (h) dumbwaiters;
- (i) platform lifts;
- (j) stairway chairlifts;
- (k) electric vehicle power transfer systems;
- (l) electric welders;
- (m) audio signal processing, amplification, and reproduction equipment;
- (n) information technology equipment;
- (o) solar photovoltaic (PV) systems;
- (p) optional standby systems;
- (q) interconnected electric power production sources;
- (r) energy storage systems; and
- (s) energy management systems."

Amended by Chapter 505, 2024 General Session

**15A-3-206 Amendments to Chapters 36, 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) IRC, Section E3606.5, is deleted.
- (3) IRC, Section E3601.7 is deleted and replaced with the following:

"3601.7 Maximum number of disconnects. The service disconnecting means shall consist of not more than six switches or six sets of circuit breakers mounted in a single enclosure or in a group of separate enclosures."
- (4) In IRC, Section E3705.4.4, the following sentences are deleted:

"Where more than two NM cables containing two or more current-carrying conductors are installed, without maintaining space between the cables, through the same opening in wood framing should be sealed with thermal insulation, caulk, or sealing foam. The allowable ampacity of each conductor shall be adjusted in accordance with Table E3705.3 and the provisions of Section E3701.3. Exception, may not apply."
- (5) IRC, Section E3901.4.2, is deleted and replaced with the following:

"E3901.4.2 Island and Peninsular Countertops and Work Spaces. Receptacle outlets, if installed to serve an island or peninsular countertop or work surface, shall be installed in accordance with E3901.4.3. If a receptacle outlet is not provided to serve an island or peninsular countertop or work surface, provisions shall be provided at the island or peninsula for future addition of a receptacle outlet to serve the island or peninsular countertop or work surface.
- (6) IRC, Section E3901.4.3, is deleted and replaced with the following:

"E3901.4.3 Receptacle Outlet Location. When installed, receptacle outlets shall be located in one or more of the following:

  1. On or above, but not more than 20 inches (508 mm) above a countertop or worksurface.
  2. In a countertop using receptacle outlet assemblies listed for use in countertops.
  3. In a work surface using receptacle outlet assemblies listed for use in work surface or listed for use in countertops.

Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, sinks, or range tops as covered in the exception to Section E3901.4.1 or appliances occupying assigned spaces shall not be considered as these required outlets.

  4. Under the countertop not more than 14 inches from the bottom leading edge of the countertop."
- (7) In IRC, Section 3902.1, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (8) In IRC, Section 3902.2, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (9) In IRC, Section 3902.3, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (10) In IRC, Section 3902.4, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (11) In IRC, Section 3902.5, after the word "125-volt" add the words "single phase 15 and 20 ampere in unfinished portions of the basement shall have ground-fault circuit-interrupter protection for personnel" and delete the rest of the section.

- (12) In IRC, Section 3902.6, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (13) In IRC, Section 3902.7, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (14) In IRC, Section 3902.8, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (15) In IRC, Section 3902.9, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (16) IRC, Section 3902.10, is deleted.
- (17) In IRC, Section 3902.12, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (18) In IRC, Section 3902.13, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."
- (19) IRC, Section 3902.15, Crawl space lighting outlets, is deleted.
- (20) IRC, Section 3902.16, Equipment requiring servicing, is deleted.
- (21) IRC Section 3902.17, Outdoor outlets, is deleted.
- (22) IRC, Section 3902.19, Location of arc-fault circuit interrupters, is deleted.
- (23) IRC, Section E3902.20, Arc-fault circuit interrupter protection, is deleted.
- (24) IRC, Section E3902.21, Arc-fault circuit interrupter protection for branch circuit extensions or modification, is deleted.
- (25) IRC, Section 4002.11, is deleted and replaced with the following: "4002.11 Bathtub and Shower Space. Receptacles shall not be installed within or directly over a bathtub or shower stall."
- (26) IRC, Chapter 42, is deleted and replaced with Article 680 of the currently adopted NEC.
- (26)(27) IRC, Chapter 44, is amended by deleting the standard for "ANCE."
- (27)(28) In IRC, Chapter 44, the standard for ASHRAE is amended by changing "34-2013" to "34-2019."
- (28)(29) In IRC, Chapter 44, the standard for CSA, is amended by changing the:
  - (a) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA60335-2-40-2019"; and
  - (b) title "Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Motor-Compressors" to "Standard for Household and Similar Electrical Appliances, Part 2-40, Requirements for Electric Heat Pumps, Air Conditioners and Dehumidifiers-3rd Edition."
- (29)(30) In IRC, Chapter 44, the standard for UL, is amended by changing the:
  - (a) standard reference number "1995-2011" to "1995-2015";
  - (b) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA60335-2-40-2019"; and
  - (c) title "Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Motor-Compressors" to "Standard for Household and Similar Electrical Appliances, Part 2-40, Requirements for Electric Heat Pumps, Air Conditioners and Dehumidifiers-3rd Edition."
- (30)(31) In IRC, Chapter 44, the standard for ANSI/RESNET/ICC 201-2019 Section 4.4.4 is added as follows: "4.4.4. Air Source Heat Pumps and Air Conditioners. For Heat Pumps and Air Conditioners with the more recent Manufacturers Equipment Performance Ratings (HSPF2 or

SEER2) available, and HSPF and SEER are not available, these ratings shall be converted to HSPF and SEER values by dividing HSPF2 or SEER2 by the conversion factors in Table 4.4.4.1(1). If the type of equipment is not determined, the conversion shall default to the Ducted Split System factors. All calculations, including Equation 4.1-1a shall use HSPF or SEER values as made available by the Manufacturer or converted as specified in this section.

Table 4.4.4.1(1) SEER2 and HSPF2 Conversion Factors3.

Equipment Type	SEER2/	EER/EER4	HSPF/
	SEER		HSPF
Ductless Systems	1.00	1.00	0.90
Ducted Split System	0.95	0.95	0.85
Ducted Package System	0.95	0.95	0.84
Small Duct High Velocity System	1.00	not applicable	0.85
Ducted Space-Constrained Air Conditioner	0.97	not applicable	not applicable
Ducted Space-Constrained Heat Pump		not applicable	0.85
		Applicable	

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

"Standard reference Title Referenced in code number 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"

(32)(33)IRC, Chapter 44, is amended by adding the following reference standard: "UL 9540-20: Energy Storage Systems and Equipment; R328.1, R328.2, and R328.6."

(33)(34)

- (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 (28)(a) is not required.

Amended by Chapter 505, 2025 General Session

### Part 3

#### Statewide Amendments to International Plumbing Code

##### **15A-3-301 General provision.**

The amendments in this part are adopted as amendments to the IPC to be applicable statewide.

Enacted by Chapter 14, 2011 General Session

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

- (1) In IPC, Section 202, the following definition is added: "Utah 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) and Utah Administrative Code, R309-305."
- (2) In IPC, Section 202, the definition for "Cross Connection" is deleted and replaced with the following: "Cross Connection. Any physical connection or potential connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other either water of unknown or questionable safety or steam, gas, or chemical, whereby there exists the possibility for flow from one system to the other, with the direction of flow depending on the pressure differential between the two systems (see "Backflow")."
- (3) In IPC, Section 202, the following definition is added: "Deep Seal Trap. A manufactured or field fabricated trap with a liquid seal of 4" or larger."
- (4) In IPC, Section 202, the definition for "Essentially Nontoxic Transfer Fluid" is deleted and replaced with the following:

"ESSENTIALLY NONTOXIC TRANSFER FLUID. Fluids, including propylene glycol and mineral oil."
- (5) In IPC, Section 202, the definition for "Essentially Toxic Transfer Fluid" is deleted and replaced with the following:

"ESSENTIALLY TOXIC TRANSFER FLUID. Soil, waste, or gray water; and any fluid that is not an essentially nontoxic transfer fluid under this code."
- (6) In IPC, Section 202, the following definition is added: "Motor Vehicle Waste Disposal Well. An injection well that discharges to the subsurface by way of a floor drain, septic system, French drain, dry well, or similar system that receives or has received fluid from a facility engaged in vehicular repair or maintenance activities, including an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop, or any other facility that does any vehicular repair work. A motor vehicle waste disposal well is subject to rulemaking under Section 19-5-104 regarding underground injection."
- (7) In IPC, Section 202, the definition for "Potable Water" is deleted and replaced with the following: "Potable Water. Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the Utah Code, Title 19, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and the regulations of the public health authority having jurisdiction."
- (8) In IPC, Section 202, the following definition is added for Dual Source Connection: "Dual Source Connection. A pipe that is installed so that either the nonpotable (i.e. secondary) irrigation water or the potable water is connected to a pressurized irrigation system at one time, but not both at the same time; or a pipe that is installed so that either the potable water or private well water is connected to a residence at one time, not both at the same time. The potable water supply line shall be protected by a reduced pressure backflow preventer."
- (9) In IPC, Section 202, the definition for Individual Water Supply is deleted and replaced with the following: "Individual Water Supply. A water supply that is not served by a Public Water System, as defined by Utah Administrative Code, R309-100.
- (10) In IPC, Section 202, the definition for Public Water Main is deleted and replaced with the following: "Public Water Main". A water supply pipe owned by a Public Water System, as defined in Utah Administrative Code R309-100.

(11) In IPC, Section 202, the following definition is added for Public Water Supply. "Public Water Supply. A water supply that is served by a Public Water System, as defined in Utah Administrative Code . R309-100.

Amended by Chapter 209, 2023 General Session

**15A-3-303 Amendments to Chapter 3 of IPC.**

(1) In IPC, Section 303.4, the following exception is added:

"Exception: Third-party standards and certification for approval of backflow prevention assemblies ~~will shall~~ consist of any combination of two ~~certifications approvals from a third-party~~ laboratory, ~~and a recognized listed organization that performs a laboratory performance evaluation and a one year field performance evaluation or field. Acceptable third-party laboratory certifying agencies are ASSE, IAPMO, and USC FCCCHR. USC FCCCHR currently provides the only field testing of backflow protection assemblies.~~ Also see [www.drinkingwater.utah.gov](http://www.drinkingwater.utah.gov) and Division of Drinking Water Rule, Utah Administrative Code, R309-105-12(4)."

(2) In IPC, Section 306.2.4, the following sentence is added after the last sentence: "Access shall be provided to the tracer wire at both ends or both ends of the tracer wire shall be terminated at the cleanout."

~~(2) IPC, Section 311.1, is deleted.~~

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

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

1. Contractor shall recognize that plastic is extremely brittle at lower temperatures and can explode, causing serious injury or death.
2. Contractor assumes all liability for injury or death to persons or damage to property or for claims for labor and/or material arising from any alleged failure of the system during testing with air or compressed gasses.
3. Proper personal protective equipment, including safety eyewear and protective headgear, should be worn by all individuals in any area where an air or gas test is being conducted.
4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.
5. No drain and vent system shall be pressurized in excess of 6 psi as measured by accurate gauges graduated to no more than three times the test pressure.
6. The pressure gauge shall be monitored during the test period, which should not exceed 15 minutes.
7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or gases should be vented, and test balls and plugs should be removed with caution."

(4) In IPC, Section ~~312.5~~ 312.6, the following is added at the end of the paragraph:

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

1. Contractor shall recognize that plastic is extremely brittle at lower temperatures and the use can explode, causing serious injury or death.
2. Contractor assumes all liability for injury or death to persons or damage to property or for claims for labor and/or material arising from any alleged failure of the system during testing

with air or compressed gases.

3. Proper personal protective equipment, including safety eyewear and protective headgear, should be worn by all individuals in any area where an air or gas test is being conducted.
4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.
5. Water supply systems shall be pressure tested to a minimum of 50 psi but not more than 80 psi as measured by accurate gauges graduated to no more than three times the test pressure.
6. The pressure gauge shall be monitored during the test period, which should not exceed 15 minutes.
7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or gases should be vented, and test balls and plugs should be removed with caution."

(5) IPC, Section ~~312.10.2~~312.11.2, is deleted and replaced with the following:

~~312.10.2~~ 312.11.2 Testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protection, and spill-resistant vacuum breaker backflow preventer assemblies shall be tested at the time of installation or within 10 days of being placed into service, immediately after repairs or relocation and at least annually. The Utah Cross Connection Control Commission has adopted the field test procedures published by the Manual of Cross-Connection Control, Tenth Edition. This manual is published by the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges shall comply with ASSE 1064."

(6) A new IPC, Section ~~312.10.3~~ 312.11.3, is added as follows: ~~312.10.3~~ 312.11.3 Tester Qualifications. Testing shall be performed by a Utah Certified Backflow Assembly Tester in accordance with Utah Administrative Code, R309-305."

Amended by Chapter 209, 2023 General Session

#### **15A-3-304 Amendments to Chapter 4 of IPC.**

(1) In IPC, Table 403.1, the following changes are made:

- (a) In row number "3", for in the field for "OTHER", a new footnote h is added.
- (b) In row number "5", for "Adult day care and child day care" occupancy, in the field for "OTHER", a new footnote h is added.
- (c) Footnote f is deleted and replaced with the following: "FOOTNOTE f: The required number and type of plumbing fixtures for outdoor public swimming pools shall be in accordance with Utah Administrative Code, R392-302 Design, Construction and Operation of Public Pools."
- (d) A new footnote g is added as follows: "FOOTNOTE: g: When provided, in public toilet facilities, there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms. Diaper changing facilities shall meet the requirements of ASTM F2285-04 (2010) Standard Consumer Safety Performance Specifications for Diaper Changing Tables for Commercial Use."
- (e) A new footnote h is added to the table as follows: "FOOTNOTE h: Non-residential child care facilities shall comply with the additional sink requirements of Utah Administrative Code, R381-60-9, Hourly Child Care Centers, R381-70-9, Out of School Time Child Care Programs, and R381-100-9, Child Care Centers."

(2) In IPC, Section 403.1.1, exception 2 is deleted and replaced with the following:

"2. Where multiple-user facilities are designed to serve all genders, the following shall apply":

2.1. The maximum fixture count to serve all genders shall be calculated at 50 percent of the total occupant load. The maximum fixture count for the multiple user all gender facility shall be calculated at 50 percent female and 50 percent male.

2.2 The remaining 50 percent of the required restroom fixtures shall be provided as required by Table 403.1.

(2)(3) In IPC, Section 405.3.4, the following sentence is added after the first sentence: "For facilities designed for use by all genders in the same room, the partitions of the stalls shall extend from the floor to the ceiling."

(3)(4) In IPC, Section 405.3.5, the following sentence is added at the end of the first paragraph: "For facilities designed for use by all genders in the same room, the partitions of the stalls shall extend from the floor to the ceiling."

(4)(5) A new IPC, Section 406.3, is added as follows: "406.3 Automatic clothes washer safe pans. Safe pans, when installed under automatic clothes washers, shall be installed in accordance with Section 504.7."

(6) In IPC, Section 412.2, the following is added at the end of the sentence. "-2020".

(5)(7) A new IPC, Section 413.5, is added as follows: "413.5 Public toilet rooms. All public toilet rooms shall be equipped with at least one floor drain."

(6)(8) A new IPC, Section 413.6, is added as follows: "Prohibition of motor vehicle waste disposal wells. New and existing motor vehicle waste disposal wells are prohibited. A motor vehicle waste disposal well associated with a single-family residence is not subject to this prohibition."

(7)(9) IPC, Section 423.3, is deleted.

Amended by Chapter 209, 2023 General Session

#### **15A-3-305 Amendments to Chapter 5 of IPC.**

(1) IPC, Section 502.4, is deleted and replaced with the following: "502.4 Seismic supports. As a minimum requirement, water heaters shall be anchored or strapped to resist horizontal displacement caused by earthquake motion. Strapping shall be at points within the upper one third and lower one-third of the appliance's vertical dimensions."

(2) In IPC, Section 504.6, a new number 15 is added as follows: "15. Be installed in accordance with the manufacturer's installation instructions, not to exceed 180 degrees in directional change."

(3) In IPC, Section 504.7.2, the following is added at the end of the section: "When permitted by the code official, the pan drain may be directly connected to a soil stack, waste stack, or branch drain. The pan drain shall be individually trapped and vented as required in Section 907.1. The pan drain shall not be directly or indirectly connected to any vent. The trap shall be provided with a trap primer conforming to ASSE 1018 or ASSE 1044, a barrier type floor drain trap seal protection device meeting ASSE 1072, or a deep seal p-trap."

(4) A new IPC, Section 504.7.3, is added as follows: "504.7.3 Pan Designation. A water heater pan shall be considered an emergency receptor designated to receive the discharge of water from the water heater only and shall not receive the discharge from any other fixtures, devices, or equipment."

Amended by Chapter 20, 2019 General Session

#### **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) In IPC, Table 604.4, the following changes are made in the column titled "MAXIMUM FLOWRATE OR QUANTITY":

- (a) In the row titled "Lavatory, private" the text is deleted and replaced with "1.5 gpm at 60 psi".
- (b) In the row titled "Shower head" the text is deleted and replaced with "2 gpm at 80 psi".
- (c) In the row titled "Urinal" the text is deleted and replaced with "0.5 gallon per flushing cycle".

(4) 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."

(5) 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."

(6) In IPC, Section 606.5.1, the words "public water main or" are deleted.

(7) A new IPC, Section 606.5.11, is added as follows: "606.5.11 Water pressure booster pumps connected to a public water main. A water pressure booster pump shall not be connected to a public water main unless allowed by Utah Administrative Code, Rule R309-540."

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

(9) 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 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."

**(10) In Table 608.1 under Backflow preventer plumbing devices, the following is added:**

<u>Hand-held Showers</u>	<u>High or Low Hazard</u>	<u>Backpressure or Backsiphonage</u>	<u>ASME 112.18.3 or ASSE 1014</u>

**(10 11) 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.**

**(11 12) 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."**

**(12 13) 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."**

**(13 14) 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."**

**(14 15) 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."**

**(15 16) IPC, Section 608.14.4, is deleted.**

(16 17)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."

(1718) 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 415.3.1. 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 at the highest point, but 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 device and above all downstream piping and the highest point of use."

(18 19)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."

(19 20)In IPC, Section 608.17.1.2, the words "or ASSE 1024" are deleted.

(20 21)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, ASSE 1081.1, or CSA CAN/CSA-B64.3."

(24 22)In IPC, Section 608.17.4.1, a new exception is added as follows: "Exception: All class 1 and 2 systems containing chemical additives consisting of strictly glycerin (C.P. or U.S.P. 96.5 percent grade) or propylene glycol shall be protected against backflow with a double check valve assembly or double check valve detector assembly. Such systems shall include written certification of the chemical additives at the time of original installation and service or maintenance."

(22 23)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 downstream of an atmospheric vacuum breaker."

(23 24)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."

(24 25)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 608.14.2."

(25 ~~26~~)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 209, 2023 General Session

**15A-3-307 Amendments to Chapter 7 of IPC.**

(1) IPC, Section 701.2, is deleted and replaced with the following: "701.2 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer where the sewer is accessible and is within 300 feet of the property line in accordance with Utah Code, Section 10-8-38; or an approved private sewage disposal system in accordance with Utah Administrative Code, Rule R317-4, as administered by the Department of Environmental Quality, Division of Water Quality."

(2) A new IPC Section 701.8 is added as follows: "701.8 Drainage piping in food service areas. Exposed soil or waste piping shall not be installed above any working, storage, or eating

**15A-3-308 Amendments to Chapter 8 of IPC.**

In IPC, Section 802.1.1, the last sentence is deleted.

Amended by Chapter 249, 2016 General Session

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

(1) In IPC, Section 903.1.1, when the number of inches is to be specified, "12 inches (304.8mm)" is inserted.

(2) In IPC, a new Section 903.7 is added as follows: "903.7 Extension through a wall. Vents extending through the wall shall terminate not less than 12 inches from the wall with an elbow pointing downward."

(3) In IPC, Section 905.4, the following sentence is added at the end of the paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain, floor sink, and bathtub installations when installed in accordance with Sections 702.2, 905.2 and 905.3 and provided with a wall clean out."

Amended by Chapter 209, 2023 General Session

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

(1) In IPC, a new Section 1002.4.1.6 is added as follows: "1002.4.1.6 Deep Seal Trap."

(2) In IPC, Section 1003.3.8, the word "gravity" is inserted before the word "grease."

Amended by Chapter 209, 2023 General Session

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

(1) A new IPC, Section 1106.1.1, is added as follows:  
"1106.1.1 Alternate Methods.  
An approved alternate storm drain sizing method may be allowed."

(2) IPC, Section 1109, is deleted.

Amended by Chapter 249, 2016 General Session

**15A-3-312 Amendments to Chapter 12 of IPC.**

IPC, Chapter 12, is not amended.

Enacted by Chapter 14, 2011 General Session

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

(1) A new IPC, Section 1301.4.1, is added as follows:

"1301.4.1 Recording.

The existence of a nonpotable water system shall be recorded on the deed of ownership for the property. The certificate of occupancy shall not be issued until the documentation for the recording required under this section is completed by the property owner."

(2) IPC, Section 1301.5, is deleted and replaced with the following:

"1301.5 Potable water connections.

Where a potable water system is connected to a nonpotable water system, the potable water supply shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 608."

(3) In IPC, a new Section 1301.5.1 is added as follows: "1301.5.1 Potable water connections. A system that utilizes nonpotable water (i.e., pressurized irrigation) and installs a connection to the potable water system for backup must install a Reduced Pressure Principle Assembly (RP) directly downstream of the potable water connection (Stop and Waste) and install a dual source connection directly downstream from the (RP) installed so that either the potable water system or the nonpotable water is connected at any time to prevent a direct Cross Connection and to protect the potable water from any potential hazard from the nonpotable water system. See Utah Code Section 19-4-112. Note: RP must be tested within 10 days of installation and annually whether the drinking water is used or not."

(4) IPC, Section 1301.9.4, is deleted and replaced with the following:

"1301.9.4 Makeup water.

Where an uninterrupted 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 a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 608. A full-open valve located on the makeup water supply line to the storage tank shall be provided. Inlets to the storage tank shall be controlled by fill valves or other automatic supply valves installed to prevent the tank from overflowing and to prevent the water level from dropping below a predetermined point. Where makeup water is provided, the water level shall not be permitted to drop below the source water inlet or the intake of any attached pump."

(5) IPC, Section 1302.12.4, is deleted and replaced with the following:

"1302.12.4 Inspection and testing of backflow prevention assemblies.

Testing of a backflow preventer shall be conducted in accordance with Sections 312.10.1, ~~312.10.2, and 312.10.3~~ 312.11.1, 312.11.2, and 312.11.3.

(6) IPC, Section 1303.15.6, is deleted and replaced with the following:

"1303.15.6 Inspection and testing of backflow prevention assemblies.

Testing of a backflow prevention assembly shall be conducted in accordance with Sections ~~312.10.2, and 312.10.3~~ 312.11.1 and 312.11.2.

(7) IPC, Section 1304.4.2, is deleted and replaced with the following:

"1304.4.2 Inspection and testing of backflow prevention assemblies.  
conducted in accordance with Sections ~~312.10.1, 312.10.2, 312.11.1, 312.11.2, and~~  
~~312.10.3 312.11.3.~~"

Amended by Chapter 209, 2023 General Session

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

IPC, Chapter 14, is deleted and replaced with the following:

#### **"1401. Subsurface Landscape Irrigation Systems.**

Graywater recycling systems utilized for subsurface irrigation for single-family residences shall comply with the requirements of UAC R317-401, Graywater Systems. Graywater recycling systems utilized for subsurface irrigation for other occupancies shall comply with UAC R317-3, Design Requirements for Wastewater Collection, Treatment, and Disposal Systems, and UAC R317-4, Onsite Wastewater Systems."

Amended by Chapter 20, 2019 General Session

### **15A-3-315 Amendments to Chapter 15 of IPC.**

(1) In IPC, Chapter 15, the following reference standards are deleted: ASSE 5013-2015, ASSE 5015-2015, ASSE 5020-2015, ASSE 5047-2015, ASSE 5048-2015, ASSE 5052-98, ASSE 5056-2015, CSA B64.10-17, and CSA B64.10.1-17.

(2) In IPC, Chapter 15, the following referenced standard is added:

Standard reference number	Title	Referenced in code section number
USC-FCCCHR 10th Edition	Foundation for Cross-Connection Control and Hydraulic Research	Section 312.1011.2"
Manual of Cross Connection Control	University of Southern California Kaprielian Hall 300 Los Angeles CA 90089-2531	

Amended by Chapter 209, 2023 General Session

## **Part 4 Statewide Amendments to International Mechanical Code**

### **15A-3-401 General provisions.**

The amendments in this part are adopted as amendments to the IMC to be applicable statewide.

(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 Professional Licensing, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, with:

- 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
- a source capture system capable of exhausting not less than 50 cfm per station.
- a nail salon that complies with Note h. 1a or h. 1b is not required to comply with the

labeling, listing, or testing requirements described in the 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) 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 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."

(2)(3) In IMC, Section 505.4, a new subsection 505.4.1 is added as follows: "505.4.1 Makeup Air. Makeup air is not required in residential dwelling units where gas, liquid, or solid fuel-burning appliances located within a unit's air barrier are all direct-vent or use a mechanical draft venting system."

(3)(4) In IMC, Section 1004.2, the first sentence is deleted and replaced with the following: "In accordance with Title 34A, Chapter 7, Safety, and requirements made by rule by the Labor Commission, boilers and pressure vessels in Utah are regulated by the Utah Labor Commission, Division of Boiler, Elevator and Coal Mine Safety, except those located in private residences or in apartment houses of less than five family units. Boilers shall be installed in accordance with their listing and labeling, with minimum clearances as prescribed by the manufacturer's installation instructions and the state boiler code, whichever is greater."

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

(6) In IMC, Section 1109.2.5, Exception 2, the words "using Group A1 refrigerant" are deleted.

(2) In IMC, Section 1209.3, the following words are added at the end of the section: "or other methods approved for the application."

Amended by Chapter 505, 2024 General Session

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

(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/CSA 60335-2-40."

~~(5) In IMC, Section 918.2, the following words are added at the end of the sentence: "or UL/CSA60335-2-40."~~

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

~~(7) In IMC, Section 1109.2.5, the words "using Group A1 refrigerant" are deleted in Exception 2.~~

~~(5)(8) In IMC, Section 1209.3, the following words are added at the end of the section: "or other methods approved for the application.~~

~~(7)(9) IMC, Chapter 15 is amended by adding the following referenced standard to CSA:~~

"Standard reference number	Title	Referenced in code section number
CSA: CSA C22.2 60335-2-40-2019	Standard for Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers - 3rd Edition	M1403.1, M1412.1, M1413.1"

~~(8)(10) IMC, Chapter 15 is amended by adding the following referenced standard to UL:~~

"Standard reference number	Title	Referenced in code section number
UL: 60335-2-40-2019	Standard for Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers - 3rd Edition	M1403.1, M1412.1, M1413.1"

Amended by Chapter 15, 2024 General Session

## Part 5

### Statewide Amendments to International Fuel Gas Code

#### 15A-3-501 General provisions.

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

(1) In IFGC, Section 404.9, a new Section 404.9.1, is added as follows: "404.9.1 Meter protection. Fuel gas services shall be in an approved location and/or provided with structures designed to protect the fuel gas meter and surrounding piping from physical damage, including falling, moving, or migrating ice and snow. If an added structure is used, it must still provide access for service and comply with the IBC or the IRC."

(2) IFGC, Section 409.5.3, is deleted.

(3) In IFGC, Section 502.1, ~~the last sentence~~ is deleted and replaced with "Plastic vents for Category IV appliances shall not be required to be listed and labeled where such vents comply with all of the following:

502.1 General. Vents, except as provided in Section 503.7, shall be listed and labeled. Type B and BW vents shall be tested in accordance with UL 441. Type L vents shall be tested in accordance with UL 641. Vents for Category II, III, and IV appliances shall be tested in accordance with UL 1738.

~~1. specified by the appliance manufacturer.~~

~~2. installed in accordance with the appliance manufacturer's instructions;~~

3. ~~the vent gas temperatures do not exceed 140 degrees Fahrenheit."~~

(4) In IFGC, Section 503.4.1, in the last sentence after "appliance manufacturer" ~~insert: "where the appliance vent gas temperatures do not exceed 140 degrees Fahrenheit."~~ the word "or" is deleted and replaced with the word "and".

(5) In IFGC, Section 503.6.11.1, the following exception is added:  
"Exception: Existing and replacement Category I appliances may be located in rooms within the occupiable space provided all the following are met:  
1. The original installation was compliant with existing codes at the time of installation.  
2. The dwelling is equipped with a current, operable carbon monoxide detector, installed in accordance with Section 915 of the International Building Code.  
3. The AHJ has approved a replacement based on the extreme difficulty of an installing individual Category I vent system or a direct vent Category IV appliance.  
4. The room or space is used for no other purpose.  
5. Combustion air is provided in accordance with Section 304. Where outdoor combustion air is provided, the room has a solid weather-stripped door equipped with an approved self-closure device.  
6. Common vents terminate with a listed cap."

(6) In IFGC, Section 631.2, the following sentence is inserted before the first sentence: "In accordance with Title 34A, Chapter 7, Safety, and requirements made by rule by the Labor Commission, boilers and pressure vessels in Utah are regulated by the Utah Labor Commission, Division of Boiler, Elevator and Coal Mine Safety, except those located in private residences or in apartment houses of less than five family units. Boilers shall be installed in accordance with their listing and labeling, with minimum clearances as prescribed by the manufacturer's installation instructions and the state boiler code, whichever is greater." Amended by Chapter 20, 2019 General Session

## Part 6

### Statewide Amendments to National Electrical Code

#### **15A-3-601 General provisions.**

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

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

(2) In NEC, Section 210.8(A), the words "through 250-volt" are deleted.

(3) In NEC, Section 210.8(A) number (5), the word "Basements" is deleted and replaced with the following: "Unfinished portions or areas of the basement not intended as habitable rooms."

(4) In NEC, Section 210.8(A), number (6), the following is added after the word "kitchens": "where the receptacles are installed to serve the countertop surfaces."

(5) In NEC, Section 210.8(A), number (7) is deleted.

(6) In NEC, Section 210.8(D), numbers (8) through (12) are deleted.

(7) NEC, Section 210.8(F), is deleted.

(8) NEC, Sections 210.52(C) number (2) and number (3) are deleted and replaced with the following:

"210.52(C)(2) Island and peninsular countertops and Work Surfaces. Receptacle outlets, if installed to serve an island or peninsular countertop or work surface, shall be installed in accordance with 210.52(C)(3). If a receptacle outlet is not provided to serve an island or peninsular countertop or work surface, provisions shall be provided at the island or peninsula for future addition of a receptacle outlet to serve the island or peninsular countertop or work surface.

210.2(C)(3) Receptacle outlet location. Receptacle outlets shall be located in one or more of the following:

- (a) On or above, but not more than 500 mm (20 inches) above a countertop or work surface.
- (b) In a countertop using receptacle assemblies listed for use in countertops.
- (c) In a work surface using receptacle outlet assemblies listed for use in work surfaces or listed for use in countertops.

Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, sinks, or range tops as covered in the exception to 210.52(C)(1), occupying assigned spaces shall not be considered as these required outlets.

Exception: In dwelling units designed to be accessible to persons with disabilities, receptacles shall be permitted to be installed not more than 300 mm (12 inches) below the countertop or work surface. Receptacles installed below a countertop or work surface shall not be located where the countertop or work surface extends more than 150 mm (6 inches) beyond its support or base."

(9) NEC, Section 210.12, is deleted.

(10) NEC, Section 210.65, is deleted.

(11) NEC, Section 215.18, is deleted.

(12) NEC, Section 225.42 is deleted.

(13) NEC, Section 230.67, is deleted.

(14) NEC, Section 230.71, is deleted and replaced with the following:

"230.71 Maximum Number of Disconnects.

(A) General. The service disconnecting means for each service permitted by 230.2, or for each set of service-entrance conductors permitted by 230.40, Exception No. 1, 3, 4, or 5 shall consist of not more than six switches or sets of circuit breakers, or a combination of not more than six switches and sets of circuit breakers, mounted in a single enclosure, in a group of separate enclosures, or in or on a switchboard or in switchgear. There shall be not more than six sets of disconnects per service grouped in any one location. For the purpose of this section, disconnecting means installed as part of listed equipment and used solely for the following shall not be considered a service disconnecting means:

(1) Power monitoring equipment;

(2) Surge-protective device(s);

(3) Control circuit of the ground-fault protection system; or

(4) Power-operable service disconnecting.

(B) Single-Pole Units. Two or three single-pole switches or breakers, capable of individual operation, shall be permitted on multiwire circuits, one pole for each ungrounded conductor, as one multipole disconnect, provided they are equipped with identified handle ties or a master handle to disconnect all conductors of the service with no more than six operations of the hand.

(C) Beginning on July 1, 2027, Section 230.71(B) is no longer in effect.

(15) NEC, Section 314.27(C), is deleted and replaced with the following: "314.27(C) Boxes at

Ceiling-Suspended (Paddle) Fan Outlets. Outlet boxes or outlet box systems used as the sole support of a ceiling-suspended (paddle) fan shall be listed, shall be marked by their manufacturer as suitable for this purpose, and shall not support ceiling-suspended (paddle) fans that weigh more than 32 kg (70 lb). For outlet boxes or outlet box systems designed to support ceiling-suspended (paddle) fans that weigh more than 16 kg (35 lb), the required marking shall include the maximum weight to be supported."

(16) In NEC, Section 334.24, the last sentence is deleted and replaced with the following:  
"For flat cables, the minor diameter dimension of the cable shall be used to determine the bending radius when bending on the flat side of the cable. For all other bends, the major diameter dimension shall be used."

(17) In NEC, Section 334.80, the second paragraph is deleted.

(18) In NEC, Section 338.24, the last sentence is deleted and replaced with the following:  
"For flat cables, the minor diameter dimension of the cable shall be used to determine the bending radius when bending on the flat side of the cable. For all other bends, the major diameter dimension shall be used."

(19) In NEC, Section 4069(B) number (2), the following words are deleted:  
"be listed weather-resistant type, and installation shall".

(20) NEC, Section 700.3(A) is deleted and replaced with the following:  
"700.3(A) Conductor Witness Test."  
The authority having jurisdiction shall conduct or witness a test of the complete system upon installation and periodically afterwards."

Amended by Chapter 15, 2025 General Session

## Part 7

### Statewide Amendments to International Energy Conservation Code

#### 15A-3-701 General provisions.

The following is adopted as an amendment to the IECC to be applicable statewide:

(1) ~~IECC, Section C405.11, is deleted and replaced with the following: "C405.11 Automatic receptacle control. Automatic receptacle control to be optional and decided by property owner."~~

(2)(1) In IECC, Section R102.1.1, a new section R102.1.1 is added as follows: "R102.1.1 National Green Building Standard complying with ICC 700-2020 National Green Building Standard and achieving the Gold rating level for the energy efficiency category shall be deemed to exceed the energy efficiency required by this code. The building shall also meet the requirements identified in table N1105.2 and the building thermal envelope efficiency is greater than or equal to levels of efficiency and solar heat gain coefficients (SHGC) in Tables N1102.2.2 and N1102.1.3 of the 7 ."

(3)(2) In IECC, Section R103.2, all words after the words "herein governed." are deleted and replaced with the following: "Construction documents include all documentation required for building permits shall include only those items specified in 10-5-132(8) of the Utah Municipal Code."

(4)(3) In IECC, Section R303.1.3, the following changes are made:  
(a) The following is added at the end of the first sentence: "or EN 14351-1:2006+A1:2010."  
(b) The word "accredited" is replaced with "approved" in the third sentence.

- (c) The following sentence is added after the third sentence: "A conversion factor of 5.678 shall be used to convert from U values expressed in SI units: (/53678=.)"
- (d) After "NFRC 200" the following words are added: "or EN 14351-1:2006+A1:2010", and in the sentence the word "accredited" is replaced with the word "approved".
- (e) The following new sentence shall be inserted immediately prior to the last sentence: "Total Energy Transmittance values may be substituted for SHGC, and Luminous Transmission values may be substituted for VT."

(5)(4) In IECC, Section R303.3, all wording after the first sentence is deleted.

(6)(5) In IECC, Section R401.2, in the first sentence, the words "Section R401.13.5 and" are deleted.

(7)(6) In IECC, Section R401.2.5 is deleted.

(8)(7) In IECC, Section R401.3 Number 7, the words "and the compliance path used" are deleted.

(9)(8) In IECC Table R402.1.2, the following changes are made:

- (a) in the column titled "Fenestration U-Factor", the following changes are made:
  - (i) in the row titled "Climate Zone 3", delete 0.30 and replace it with 0.32;
  - (ii) in the row titled "Climate Zone 5 and Marine 4", delete 0.30 and replace it with 0.32; and
  - (iii) in the row titled "Climate Zone 6", delete 0.30 and replace it with 0.32;
- (b) in the column titled "Glazed Fenestration SHGC", the following change is made: in the row titled "Climate Zone 3" delete 0.25 and replace it with 0.35;
- (c) in the column titled "Climate U-Factor", the following changes are made:
  - (i) in the row titled "Climate Zone 3", delete 0.026 and replace it with 0.030;
  - (ii) in the row titled "Climate Zone 5 and Marine 4", delete 0.024 and replace it with 0.026; and
  - (iii) in the row titled "Climate Zone 6", delete 0.024 and replace it with 0.026;
- (d) in the column titled "Wood Frame Wall U Factor", the following changes are made:
  - (i) in the row titled "Climate Zone 3", delete 0.060 and replace it with 0.060;
  - (ii) in the row titled "Climate Zone 5 and Marine 4", delete 0.045 and replace it with 0.060; and
  - (iii) in the row titled "Climate Zone 6", delete 0.045 and replace it with 0.060;
- (e) in the column titled "Basement wall U-Factor", the following changes are made:
  - (i) in the row titled "Climate Zone 5 and Marine 4", delete 0.050 and replace it with 0.075; and
  - (ii) in the row titled "Climate Zone 6", delete 0.50 and replace it with 0.065; and
- (f) in the column titled "Crawl Space Wall U-Factor", the following changes are made:
  - (i) in the row titled "Climate Zone 5 and Marine 4", delete 0.055 and replace it with 0.078; and
  - (ii) in the row titled "Climate Zone 6", delete 0.55 and replace it with 0.065.

(10)(9) In IECC, Table R402.1.3, the following changes are made:

- (a) in the column titled "Fenestration U-Factor", the following changes are made:
  - (i) in the row titled "Climate Zone 3", delete 0.30 and replace it with 0.32;
  - (ii) in the row titled "Climate Zone 5 and Marine 4", delete 0.30 and replace it with 0.32; and
  - (iii) in the row titled "Climate Zone 6", delete 0.30 and replace it with 0.32;
- (b) in the column titled "Glazed Fenestration SHGC", the following change is made: in the row titled "Climate Zone 3" delete 0.25 and replace it with 0.35;
- (c) in the column R-Value the following changes are made:
  - (i) in the row titled "Climate Zone 3", delete 49 and replace it with 38;
  - (ii) in the row titled "Climate Zone 5 and Marine 4", delete 60 and replace it with 49; and

- (iii) in the row titled "Climate Zone 6", delete 60 and replace it with 49;
- (d) in the column titled "Wood Frame Wall R-Value", the following changes are made:
  - (i) in the row titled "Climate Zone 3", delete all values and replace with "20+Oci or 13+5ci or0+15ci";
  - (ii) in the row titled "Climate Zone 5 or Marine 4", delete all values and replace with "21+Oci or15+5ci or 0+15ci"; and
  - (iii) in the row titled "Climate Zone 6", delete all values and replace with "21+Oci or 15+5ci or0+15ci";
- (e) in the column titled "Basement Wall R-Value", the following changes are made:
  - (i) in the row titled "Climate Zone 5 or Marine 4", delete all values and replace with "15+Oci or0+11ci or 11+5ci"; and
  - (ii) in the row titled "Climate Zone 6", delete all values and replace with "19+Oci or 0+13ci or11+5ci";
- (f) in the column titled "Slab R-Value and Depth", the following changes are made:
  - (i) in the row titled "Climate Zone 3", delete "10ci. 2ft" and replace it with "NR"; and
  - (ii) in the row titled "Climate Zone 5 & Marine 4", delete "4 ft" and replace it with "2 ft";
- (g) in the column titled "Crawl Space Wall R-Value", the following changes are made:
  - (i) in the row titled "Climate Zone 5 or Marine 4", delete all values and replace with "15+Oci or0+11ci or 11+5ci"; and
  - (ii) in the row titled "Climate Zone 6", delete all values and replace with "19+Oci or 0+13ci or0+11+5ci"; and
- (h) in IECC, Table R402.2, 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."
- (11)(10) In IECC, a new subsection R402.1.5.1 is added as follows: "R402.1.5.1 RESCheck 2012 Utah Energy Conservation Code. Compliance with section N1102.1.5 (R402.1.5) may be satisfied using the software RESCheck 2012 Utah Energy Conservation Code, which shall satisfy the R-value and U-factor requirements of N1102.1, N1102.2, and N1102.3, provided the following conditions are met:
  - (a) In Climate Zone 5 and 6 the software result shall show 5% better than code; and
  - (b) In Climate Zone 3, the software result shall show 5% better than code when software inputs for window U-factor = 0.65 and window SHGC = 0.40, notwithstanding actual windows installed shall conform to requirements of Tables N1102.1.2 (R402.1.2) and N1102.1.3 (R402.1.3)."
- (12)(11) In IECC, Section R402.2.1, a new section is added as follows: "R402.2.1.1. Unvented attic and unvented enclosed rafter assemblies. Unvented attic and unvented enclosed rafter assemblies conforming to Section R806.5 shall be provided with an R-value of R-22 (maximum U-Factor of 0.045) in Climate Zone 3-B or an R-value of R-26 (maximum U-factor of 0.038) in Climate Zones 5-B and 6-B shall be permitted provided all the following conditions are met:
  1. The unvented attic assembly complies with the requirements of the International Residential Code, Section R806.5.
  2. The house shall attain a blower door test result 2.5ACH 50.

3. The house shall require a whole house mechanical ventilation system that does not rely solely on a negative pressure strategy (must be positive, balanced or hybrid).
4. Where insulation is installed below the roof deck and the exposed portion of roof rafters are not already covered by the R-20 depth of the air-impermeable insulation, the exposed portion of the roof rafters shall be wrapped (covered) by minimum R-3 unless directly covered by drywall/finished ceiling. Roof rafters are not required to be covered by minimum R-3 if a continuous insulation is installed above the roof deck.
5. Indoor heating, cooling and ventilation equipment (including ductwork) shall be inside the building thermal envelope.

(13)(12) A new IECC, Section R402.2.1.3 is added as follows: "R402.2.1.3 Walls with Air-Impermeable Insulation. Where IECC Table R402.1.2 requires R-20 for wood framed walls in climate zones 3-B and 5-B or R-20+5CI for climate zone 6-B, an air-impermeable insulation installed in the wall cavity with R-value of R-15 for climate zones 3-B and 5-B or R-20 for climate zone 6B shall be deemed equivalent to the provisions in IECC Table R402.1.2, provided the home attains a blower door test 2.5ACH."

(14)(13) In IECC, Section R402.2.9.1, the numeral "(i)" is added before the words "cut at a 45 degree" and the following is added after the words "exterior wall": "or (ii) lowered from top of slab 4" when a 4" thermal break material such as, but not limited to, felt or asphalt impregnated fiber board, with a minimum thickness of 1/4" is installed at the upper 4" of slab."

(15)(14) In IECC, Section R402.4.1, in the first sentence, the word "and" is deleted and replaced with the word "or".

(16)(15) In IECC, Section R402.4.1.1, the second and the last sentences are deleted and replaced with the following: "Where required by the code official, the builder shall certify compliance with criteria indicated in Table R1102.4.1 for items which are not readily visible during regularly scheduled inspections."

(17)(16) In IECC, Table R402.4.1.1 in the column titled "COMPONENT", the following changes are made:

- (a) in the row "Rim Joists" the word "exterior" in the first sentence is deleted, and the second sentence is deleted.
- (b) In the row "Electrical/phone box on the exterior walls" the last sentence is deleted and replaced with: "Alternatively, close cell foam, caulking or gaskets may be used, or air sealed boxes may be installed."

(18)(17) In IECC, Section R402.4.1.2, the following changes are made:

- (a) In the fourth sentence, the word "third" is deleted.
- (b) The following sentence is added after the fourth 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."

- (c) In the first Exception the second sentence is deleted.

(19)(18) In IECC, Section R402.4.1.3 the following changes are made:

- (a) in the first sentence, the words 5.0 air changes per hour in Climate Zones 0, 1 and 2, and 3.0 are deleted and replaced with 4.0., and the words in Climate Zone 3 through 8 are deleted;
- (b) in the first sentence of the Exception, 0.28 is replaced with 5.0 air changes per hour or 0.30;and
- (c) in Number 2, the words of "conditioned floor area" are inserted before the words "or smaller."

(20)(19) In IECC, Section R402.6 is deleted.

(21)(20) In IECC, Section R403.3.1 is deleted and replaced with the following: "Ducts located outside conditioned space. Supply and return ducts in attics shall be insulated to a minimum of R-8 where 3 inches (76.2 mm) in diameter and greater and R-6 where less than 3 inches (76.2 mm) in diameter. Supply and return ducts in other portions of the building shall be insulated to a minimum of R-6 where 3 inches (76.2 mm) in diameter or greater and R-4.2 where less than 3 inches (76.2 mm) in diameter. Exception: Ducts or portions thereof located completely inside the building thermal envelope."

(22)(21) In IECC, Section R403.3.3, is deleted.

(23)(22) In IECC, Section R403.3.3.1 is deleted.

(24)(23) In IECC, Section R403.3.5, the following changes are made:

- (a) a second Exception is added as follows: "A duct leakage test shall not be required for any system designed such that no air handlers or ducts are located within unconditioned attics."
- (b) the following is added at the end of the section: "The following parties shall be approved to conduct testing:
  - (i) Parties certified by BPT or RESNET
  - (ii) Licensed contractors who have completed training provided by Duct Test equipment manufacturers or other comparable training."

(25)(24) In IECC, Section N1103.3.6 (R403.3.6) the following changes are made:

(a) in Subsection 1:

- (i) the number 4.0 is changed to 6.0;
- (ii) the number 113.3 is changed to 170;
- (iii) the number 3.0 is changed to 5.0; and
- (iv) the number 85 is changed to 141;(b) in Subsection 2:

(i) the number 4.0 is changed to 5.0; and (ii)

the number 113.3 is changed to 141; and (c)

Subsection 3 is deleted.

(26)(25) In IECC, Section N1103.3.7 (R403.3.7) the words "or plenums" are deleted.

(27)(26) In IECC, Section N1103.5.1.1 (R403.5.1.1) the words "Where installed" are added at the beginning of the first sentence.

(28)(27) IECC, Section R403.6.2, is deleted and replaced with the following: "R403.6.2 Whole-house mechanical ventilation system fan efficacy. Fans used to provide whole-house mechanical ventilation shall meet the efficacy requirements of Table R403.6.2."

"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."

(29)(28) In IECC, Section R403.6.2, the table is deleted and replaced with the following:

"TABLE R403.6.2"

"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"

(30)(29) In IECC, Section R403.6.3 is deleted.

(31)(30) In IECC, Section R403.7, the word "approved" is deleted in the first sentence and the following is added after the word "methodologies": "complying with R403.7.1."

(32)(31) A new IECC, Section R403.7.1, is added as follows: "R403.7.1 Qualifications. An individual performing load calculations shall be qualified by completing HVAC training from one of the following:

1. HVAC load calculation education from ACCA;
2. A recognized educational institution;
3. HVAC equipment manufacturer's training; or
4. Other recognized industry certification."

(33)(32) In IECC, Section R404.1, the word "All" is replaced with "Not less than 90 percent of the lamps in."

(34)(33) In IECC, Section R404.1.1 is deleted.

(35)(34) In IECC, Section R404.2 is deleted.

(36)(35) In IECC, Section R404.3 is deleted.

(37)(36) In IECC, Section R405.2 the following changes are made:

- (a) in Subsection 3, the words "approved by the code official" are deleted; and
- (b) in Subsection 3, the following words are added at the end of the sentence: "when applicable and readily available."

(38)(37) In IECC, Section R406.3 "Building thermal envelope" is deleted, and replaced with the following: "Building thermal envelope and on-site renewables. The proposed total building thermal envelope UA, which is the sum of U-factor times assembly area, shall be less than or equal to the building thermal envelope UA using the prescriptive U-factors From Table N1102.1.2 multiplied by 1.15 in accordance with Equation 11-4. The area-weighted maximum fenestration SHGC permitted in Climate Zones 0 through 3 shall be 0.30.UAProposed design = 1.15 x UA Prescriptive reference design (Equation 11-4)."

(39)(38) In IECC, Section R406.3.1 is deleted.

(40)(39) In IECC, Section R406.3.2 is deleted.

(41)(40) In IECC, Section R406.4 the following changes are made:

- (a) in the first sentence, the words "in accordance with Equation 11-5" are deleted and replaced with: "permitted to be calculated using the minimum total air exchange Rate for the rated home (Qtot) and for the index adjustment factor in accordance with Equation 11.5. ";
- (b) in equation 11-5, the words "Ventilation rate, CFM" are deleted and replaced with: "Qtot";
- and(c) in the last sentence, the number "5" is deleted and replaced with "15".

(42)(41) In IECC, Section R406.5 in the column titled ENERGY RATING INDEX of Table R406.5, the following changes are made:

- (a) in the row for Climate Zone 3, "51" is deleted and replaced with "65";

(b) in the row for Climate Zone 5, "55" is deleted and replaced with "69"; and (c) in the row for Climate Zone 6, "54" is deleted and replaced with "68".

~~(43)(42)~~ In IECC, Section R408 is deleted.

(a)

(i)

(A) In IECC, Chapter 6, the standard for ANSI/RESNET/ICC 201-2019 section 4.4.4 is added as follows: "4.4.4. Air Source Heat Pumps and Air Conditioners. For Heat Pumps and Air Conditioners with the more recent Manufacturers Equipment Performance Ratings (HSPF2 or SEER2) available, and HSPF and SEER are not available, these ratings shall be converted to HSPF and SEER values by dividing HSPF2 or SEER2 by the conversion factors in Table 4.4.4.1(1). If the type of equipment is not determined, the conversion shall default to the Ducted Split System factors. All calculations, including Equation 4.1-1a shall use HSPF or SEER values as made available by the Manufacturer or converted as specified in this section. Table 4.4.4.1(1) SEER2 and HSPF2 Conversion"

Equipment Type	SEER2/SEER	EER2/EER4	HSPF2/HSPF
Ductless Systems	1.00	1.00	0.90
Ducted Split System	0.95	0.95	0.85
Ducted Packaged System	0.95	0.95	0.84
Small Duct High Velocity System	1.00	Not Applicable	0.85
Ducted Space Constrained Air Conditioner	0.97	Not Applicable	Not Applicable
Ducted Space-Constrained Heat Pump	0.99	Not Applicable	0.85"

Amended by Chapter 505, 2024 General Session

## Part 8

### Statewide Amendments to International Existing Building Code

#### **15A-3-801 General provisions.**

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

- (1) In IEBC, Section 202, the definition for "Approved" is modified by adding the words "or independent third-party licensed engineer or architect and submitted to the building official" after the word official.
- (2) In IEBC, Section 202, the following definition is added: "BUILDING OFFICIAL. See Code official."
- (3) In IEBC, Section 202, the definition for "Code official" is deleted and replaced with the following:

"CODE OFFICIAL. The officer or other designated authority having jurisdiction (AHJ) charged with the administration and enforcement of this code."

(4) In IEBC, Section 202, the definition for "Existing buildings" is deleted and replaced with the following:

"EXISTING BUILDING. A building that is not a dangerous building and that was either lawfully erected under a prior adopted code, or deemed a legal non-conforming building by the code official."

(5) In IEBC, Section 302.3, the following is added after the words "code official" in the last sentence: "or independent third-party licensed engineer or architect and submitted to the building official."

(6) In IEBC, Section 301.3, the exception is deleted.

(7) In IEBC, Section 503.5 the following is added after the words "BSE-1E earthquake hazard level in the last sentence": "and using an objective of Life Safety Nonstructural Performance with the BSE-2E earthquake hazard level."

(7)(8) IEBC, Section 503.6 is deleted and replaced with the following:

"503.6 Bracing for unreinforced masonry parapets and other appendages upon reroofing. Where the intended alteration requires a permit for reroofing and involves removal of roofing materials from more than 25% of the roof area of a building assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. Reduced seismic ~~forces are permitted for design purposes~~. criteria of IEBC Section 304.3.2 is permitted."

(9) In IEBC, Section 503.11 the following is added after the words "BSE-1E earthquake hazard level in the last sentence": "and using an objective of Life Safety Nonstructural Performance with the BSE-2E earthquake hazard level."

(10) In IEBC, Section 705.2 a new exception 2 is added as follows:

(2) Any existing layers of polyisocyanurate insulation shall be permitted to remain in place if the roof decking is in serviceable condition and that the insulation is not damaged, deteriorated or water soaked. All other types of roof insulation and any areas of damaged, deteriorated or water soaked polyisocyanurate insulation are to be removed and replaced with new.

(8)(11) IEBC, Section 706.3.1 is deleted and replaced with the following:

"706.3.1 Bracing for unreinforced masonry bearing wall parapets and other appendages. Where a permit is issued for reroofing more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of bracing to resist the reduced International Building Code level seismic forces as specified in Section ~~303~~304.3.2 of this code unless an evaluation demonstrates compliance of such items."

(12) In IEBC, Section 906.2 the following is added after the words "BSE-1E earthquake hazard level in the last sentence": "and using an objective of Life Safety Nonstructural Performance with the BSE-2E earthquake hazard level."

(13) In IEBC, Section 906.3 the following is added after the words "BSE-1E earthquake hazard level in the last sentence": "and using an objective of Life Safety Nonstructural Performance

with the BSE-2E earthquake hazard level "

(9)(14) IEBC, Section 906.6 is deleted and replaced with the following:

"906.6 Bracing for unreinforced masonry parapets and other appendages upon reroofing. Where the intended alteration requires a permit for reroofing and involves removal of roofing materials from more than 25% of the roof area of a building assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance with such items. Reduced seismic ~~forces are permitted for design purposes~~ criteria of IEBC. Section 304.3.2 is permitted"

(10)(15) (a) Section 1006.3 is deleted and replaced with the following:

~~"1006.3 Seismic loads. Where a change of occupancy results in a building being assigned to a higher risk category, or when a change of occupancy results in a design occupant load increase of 100% or more, the building shall satisfy the requirements of Section 1613 of the International Building Code using full seismic forces."~~ In IEBC Section 1006.3 Seismic Loads, following the words, "higher risk category", in the first sentence add the following: "or when a change of occupancy results in a design occupant load increase of 100% or more."

(b) In IEBC Section 1006.3, exceptions 1 through 4 remain unchanged.

(c) In IEBC Section 1006.3, add a new exception 5 as follows:

"5. Where the design occupant load increase is less than 25 occupants and the

(11)(16) In IEBC Section 1011.7.3, exception 2 is deleted.

Amended by Chapter 505, 2024 General Session

## Part 9

### Installation and Safety Requirements for Mobile Homes Built Before June 15, 1976

#### 15A-3-901 General provisions.

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

(1) Related to exits and egress windows:

(a) Egress windows. The home has at least one egress window in each bedroom, or a window that meets the minimum specifications of the United States Department of Housing and Urban Development's (HUD) Manufactured Homes Construction and Safety Standards (MHCSS) program as set forth in 24 C.F.R. Parts 3280 and 3282, MHCSS 3280.106 and 3280.404 for manufactured homes. These standards require the window to be at least 22 inches in the horizontal or vertical position in its least dimension and at least five square feet in area. The bottom of the window opening shall be no more than 36 inches above the floor, and the locks and latches and any window screen or storm window devices that need to be operated to permit exiting shall not be located more than 54 inches above the finished floor.

(b) Exits. The home is required to have two exterior exit doors, located remotely from each other, as required in MHCSS 3280.105. This standard requires that a single-section home have the doors no less than 12 feet, center-to-center, from each other, and a multisection home have

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

(2) Related to flame spread:

- (a) Walls, ceilings, and doors. Walls and ceilings adjacent to or enclosing a furnace or water heater shall have an interior finish with a flame-spread rating not exceeding 25. Sealants and other trim materials two inches or less in width used to finish adjacent surfaces within these spaces are exempt from this provision, provided all joints are supported by framing members or materials with a flame spread rating of 25 or less. Combustible doors providing interior or exterior access to furnace and water heater spaces shall be covered with materials of limited combustibility (i.e., 5/16-inch gypsum board, etc.), with the surface allowed to be interrupted for louvers ventilating the space. However, the louvers shall not be of materials of greater combustibility than the door itself (i.e., plastic louvers on a wooden door). Reference MHCSS 3280.203.
- (b) Exposed interior finishes. Exposed interior finishes adjacent to the cooking range (surfaces include vertical surfaces between the range top and overhead cabinets, the ceiling, or both) shall have a flame-spread rating not exceeding 50, as required by MHCSS 3280.203. Backsplashes not exceeding six inches in height are exempted. Ranges shall have a vertical clearance above the cooking top of not less than 24 inches to the bottom of combustible cabinets, as required by MHCSS 3280.204(e).

(3) Related to smoke detectors:

- (a) Location. A smoke detector shall be installed on any ceiling or wall in the hallway or space communicating with each bedroom area between the living area and the first bedroom door, unless a door separates the living area from that bedroom area, in which case the detector shall be installed on the living-area side, as close to the door as practicable, as required by MHCSS 3280.208. Homes with bedroom areas separated by any one or combination of common-use areas such as a kitchen, dining room, living room, or family room (but not a bathroom or utility room) shall be required to have one detector for each bedroom area. When located in the hallways, the detector shall be between the return air intake and the living areas.
- (b) Switches and electrical connections. Smoke detectors shall have no switches in the circuit to the detector between the overcurrent protection device protecting the branch circuit and the detector. The detector shall be attached to an electrical outlet box and connected by a permanent wiring method to a general electrical circuit. The detector shall not be placed on the same branch circuit or any circuit protected by a ground-fault circuit interrupter.

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

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

(b) Equipment. A solid-fuel-burning fireplace or fireplace stove shall be equipped with an integral door or shutters designed to close the fire chamber opening and shall include complete means for venting through the roof, a combustion air inlet, a hearth extension, and means to securely attach the unit to the manufactured home structure.

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

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

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

(5) Related to electrical wiring systems:

(a) Testing. All electrical systems shall be tested for continuity, in accordance with MHCSS3280.810, to ensure that metallic parts are properly bonded; tested for operation, to demonstrate that all equipment is connected and in working order; and given a polarity check, to determine that connections are proper.

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

(6) Related to replacement furnaces and water heaters:

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

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

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

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

(ii) Water heater. The floor area in the area of the water heater shall be free from damage from moisture to ensure that the floor will support the weight of the water heater. Enacted by Chapter 249, 2016 General Session

## Part 10 Statewide Amendments to International Swimming Pool and Spa Code

### 15A-3-1001 General provisions.

(1) In ISPSC, Section 202, the following definition is added for private residential swimming pool: "PRIVATE RESIDENTIAL SWIMMING POOL (*Residential Pool*)". A swimming pool, spa pool, or wading pool used only by an individual, family, or living unit members and guests, but not serving any type of multiple unit housing complex of four or more living units."

(2) In ISPSC, Section 202, the definition for Residential Swimming Pool is deleted and replaced with the following: "See the definition for Private Residential Swimming Pool (*Residential Pool*)."

(3) In ISPSC, Section 306.3, In the first sentence, the words "or private residential pools" are added after the word "pools" and the last sentence is deleted.

(3)(4) In ISPSC, Section 320.1321.1, the following changes are made:

- (a) the words "or storm" are deleted;
- (b) the words "onsite waste water" are added before the word "disposal"; and
- (c) the words "or shall be disposed of by other means approved by the state or local authority" are deleted.

(5) In ISPSC, Section 326.1, the following words are added after the word "indoor": "residential or".

(6) In ISPSC, a new Section 326.2 is added as follows: "326.2 Recirculation of Air. Supply air to a "residential" or public pool and spa and associated deck areas shall not be recirculated unless such air is dehumidified to maintain the relative humidity of the area at 60 percent or less. Air from this area shall not be recirculated to other spaces where more than 10 percent of the resulting supply airstream consists of air recirculated from these spaces. The design and installation of ventilation systems shall comply with ANSI/ACCA 10 Manual SPS."

(7) In Chapter 11, the following reference standard is added:

Standard reference number	Title	Referenced in code section number
<u>ACCA</u>	<u>Air Conditioning Contractors of America</u> <u>2800 Shirlington Road Ste 300</u> <u>Arlington, VA 22206</u>	<u>Section 326.2</u>
<u>ANSI/ACCA 10 Manual SPS – 2023 HVAC Design for Swimming Pools and Spas</u>		

Amended by Chapter 209, 2023 General Session

## Part 11 Statewide Amendments to International Wildland-Urban Interface Code

(1) In IWUIC, Section 602 is deleted.

# Advisory Committee Reports

## MINUTES

### UNIFORM BUILDING CODE COMMISSION MECHANICAL ADVISORY COMMITTEE

#### Meeting

October 8, 2024 3:00 pm

Convened 3:01 PM

Adjourned 3:49 PM

#### STAFF:

Steve Duncombe, Bureau Manager  
Sharon Smalley, Board Secretary

#### MECHANICAL ADVISORY COMMITTEE:

David Wilson	Martin Carrillo
Clay Monroe	Chris Jensen
Terry Palmer	Alyssa Wahlin
Trent Hunt, Commission Liaison	

#### VISITORS:

AJ Lowry

#### ELECT A NEW CHAIRMAN AND VICE CHAIRMAN

A motion was made by Dave Wilson to nominate Martin Carrillo as chairman for this committee. The motion was seconded by Chris Jensen and passed unanimously.

A motion was made by Dave Wilson to nominate Alyssa Wahlin as vice chairman. The motion was seconded by Terry Palmer and passed unanimously.

#### MINUTES

A motion was made by Terry Palmer to approve the minutes from the December 8, 2023, meeting as written. The motion was seconded by Chris Jensen and passed with a vote of six in favor and Dave Wilson abstaining.

#### PLAN REVIEW OF 2024 IMC, IFGC AND IECC

The committee discussed the review of the 2024 codes and volunteered to review the following chapters along with the current amendments for those chapters as follows:

International Mechanical Code: Alyssa Wahlin – Chapters 1, 2, and 7; Clay Monroe – Chapters 3 and 8; Martin

Carrillo – Chapters 4, 5, and 13; Dave Wilson – Chapter 6;  
Terry Palmer – Chapters 9 and 10; and Chris Jensen –  
Chapters 11, 12, and 14.

International Fuel Gass Code: Terry Palmer – Chapter 1, 2,  
and 3; Alyssa Wahlin – Chapter 4; Clay Monroe – Chapter  
5; Martin Carrillo – Chapter 6; and Chris Jensen – Chapter  
7.

Assignments for the International Energy Conservation  
Code will be made later. The committee will try to have all  
three codes reviewed by June, 2025.

The committee discussed when to hold the next meeting  
and agreed to schedule it for Monday, January 13, 2025.  
This will give everyone time to complete their reviews.

The meeting adjourned at 4:49.

*Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.*

## MINUTES

### UNIFORM BUILDING CODE COMMISSION MECHANICAL ADVISORY COMMITTEE

#### Meeting

January 14, 2025 3:00 pm

Convened 3:02 PM

Adjourned 4:15 PM

#### STAFF:

Steve Duncombe, Bureau Manager  
Sharon Smalley, Board Secretary

#### MECHANICAL ADVISORY COMMITTEE:

David Wilson	Martin Carrillo (excused)
Clay Monroe	Chris Jensen (excused)
Terry Palmer	Alyssa Wahlin
Trent Hunt, Commission Liaison	(absent)

#### VISITORS:

#### MINUTES

A motion was made by Clay Monroe to approve the minutes from the October 8, 2024, meeting as written. The motion was seconded by Terry Palmer and passed unanimously.

#### START THE REVIEW OF THE 2024 IMC AND CURRENT AMENDMENTS

The committee started their review of the 2024 IMC along with the current amendments. Each committee member had submitted their review of the assigned chapters and those present discussed those reviews.

Alyssa Wahlin gave an overview of Chapter 1. She noted that the biggest change was in Section 104. Terry Palmer pointed out that the change was more of a reorganization and rewrite of the section than any major changes. In her review of Chapter 2, she found some definitions that had a significant change, but she did not feel that it would have a cost increase. Other definitions had been simplified and pulled together in one place.

Clay Monroe gave his review of Chapter 3 and noted that the changes he found were minimal and could be incorporated into the design. He found no major changes that would have an impact on cost.

The committee reviewed the comments from Martin Carrillo for his review of Chapters 4 and 5. Dave Wilson noted that in his review of the chapter, he found that many of the changes were for clarification. There is one current amendment for this chapter and a motion was made by Dave Wilson to keep the current amendment for Section 403.3.1.1, note "h". The motion was seconded by Terry Palmer and passed unanimously.

The changes that were found in Chapter 5 were found to be mostly for clarification. Terry Palmer pointed out that there are two amendments for this chapter. Following a discussion on the amendments, a motion was made by Terry Palmer to keep the current amendments for Sections 502.20 and 505.4. The motion was seconded by Clay Monroe and passed unanimously.

Dave Wilson gave his review of Chapter 6. He found no significant changes. Most of the changes were for clarification. The changes were found to be minimal.

Alyssa Whalin gave her review of Chapter 7 and Clay Monroe gave his review of Chapter 8. They noted that there were no changes in the chapters.

Terry Palmer gave his review of Chapters 9 and 10. He noted that there are three state amendments to Chapter 9 and that the wording in these three amendments is now a part of the 2024 code. He found no other significant changes. A motion was made by Dave Wilson to delete the current amendments for Sections 908.1, 918.1 and 918.2. The motion was seconded by Terry Palmer and passed unanimously.

It was pointed out that there are two amendments for Chapter 10. Following the review, a motion was made by Dave Wilson to keep the current amendment for Section 1004.2. The motion was seconded by Terry Palmer and passed unanimously. A second motion was made by Terry Palmer to keep the current amendment for Section

1004.3.1. The motion was seconded by Dave Wilson and passed unanimously.

The committee covered the review of Chapters 11 and 12 as submitted by Chris Jensen. Mr. Jensen noted that new reference standards have been added for refrigeration systems containing carbon dioxide and ammonia refrigeration systems. He is recommending that all the changes be accepted. Terry Palmer made a motion to keep the current amendment for Section 1101.6. The motion was seconded by Dave Wilson and passed unanimously.

Trent Hunt submitted a proposal for a new amendment for Section 1109.2.5. Following the discussion, a motion was made by Dave Wilson to accept the proposal for 1109.2.5 as a new amendment since it has already been approved as an amendment to the 2024 IMC by the ICC Code Making Panel. The motion was seconded by Terry Palmer and passed unanimously.

The summary of the changes to Chapter 12 only showed an addition for the requirement for the installation and identification of radiant tubing as embedded pipe and also the installation of snow and ice melt tubing. Terry Palmer noted that there is a current amendment for Section 1209.3. A motion was made by Terry Palmer to keep this current amendment. The motion was seconded by Clay Monroe and passed unanimously.

There were no changes noted for Chapters 13, 14, or 15. There are two current amendments for Chapter 15. A motion was made by Terry Palmer to keep the two current amendments. The motion was seconded by Dave Wilson and passed unanimously.

At the meeting in February, the committee will start the review of the IFGC along with the current amendments.

The meeting adjourned at 4:15.

## MINUTES

### UNIFORM BUILDING CODE COMMISSION MECHANICAL ADVISORY COMMITTEE

#### Meeting

February 11, 2025 3:00 pm

Convened 3:01 PM

Adjourned 4:16 PM

#### STAFF:

Steve Duncombe, Bureau Manager  
Sharon Smalley, Board Secretary

#### MECHANICAL ADVISORY COMMITTEE:

David Wilson (excused)	Martin Carrillo
Clay Monroe (excused)	Chris Jensen
Terry Palmer	Alyssa Wahlin
Trent Hunt, Commission Liaison (absent)	

#### VISITORS:

Kevin West	Joel Dzekciorius
Vince Orton	Issac Favata
Clay Smith	

#### MINUTES

A motion was made by Terry Palmer to approve the minutes from the January 14, 2025, meeting as written. The motion was seconded by Alyssa Wahlin and passed unanimously.

#### REVIEW PROPOSED AMENDMENTS TO IFGC 502.1 AND 503.4.1

The committee listened to and watched a presentation by Issac Favata in connection with the proposed amendments. He pointed out that there would be a minimal cost impact. Following the presentation, questions were asked by the committee and a discussion with those present followed. A motion was made by Terry Palmer to postpone the decision on the proposals until the next meeting as Chris Jensen informed the committee that he would have to abstain from voting. The motion was seconded by Martin Carrillo and passed unanimously.

**START THE REVIEW OF THE  
2024 IFGC AND CURRENT  
AMENDMENTS**

Terry Palmer gave his review of Chapters 1-3. He pointed out that the changes in Chapter 1 were for reformatting. He found no significant change in Chapters 2 and 3 and he recommended that the committee accept the chapters as written. There are no amendments for these three chapters.

Alyssa Wahlin gave her review of Chapter 4 and the two current amendments for this chapter. She pointed out the changes that she found and felt that these changes were not significant but that they were for clarification and would have a minimal cost impact.

The committee found no significant changes in the remaining chapters. A motion was made by Terry Palmer to keep the current amendments as written for Sections 404.9, 409.5.3, 503.6.11.1, and 631.2 as written. The motion was seconded by Martin Carrillo and passed unanimously.

A motion was made by Terry Palmer to accept the changes and recommend accepting the 2024 IFGC. The motion was seconded by Martin Carrillo and passed unanimously.

The committee will revisit the two proposed amendments for Chapter 5 of the IFGC and then start the review of the IECC, commercial portion. Chris Jensen volunteered to review Section C405. No assignments were made as each member of the committee with review the commercial portion of the energy code.

The meeting adjourned at 4:16.

*Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.*

## MINUTES

### UNIFORM BUILDING CODE COMMISSION MECHANICAL ADVISORY COMMITTEE

#### Meeting

March 11, 2025 3:00 pm

Convened 3:01 PM

Adjourned 4:16 PM

#### STAFF:

Steve Duncombe, Bureau Manager  
Sharon Smalley, Board Secretary

#### MECHANICAL ADVISORY COMMITTEE:

David Wilson (excused)	Martin Carrillo
Clay Monroe (excused)	Chris Jensen
Terry Palmer	Alyssa Wahlin
Trent Hunt, Commission Liaison (absent)	

#### VISITORS:

Kevin West	Chris Barker
Vince Orton	Issac Favata
Clay Smith	Travis Dalley

#### MINUTES

A motion was made by Chris Jensen to approve the minutes from the February 11, 2025, meeting as written. The motion was seconded by Alyssa Wahlin and passed unanimously.

#### REVIEW PROPOSED AMENDMENTS TO IFGC

A motion was made by Terry Palmer to table the decision on the two proposed amendments due to the absence of several committee members and Chris Jensen stating that he would abstain from voting again.

#### START THE REVIEW OF THE 2024 IECC AND CURRENT AMENDMENTS

The committee discussed the issues they were having with the review of the IECC due to the many formatting changes. The committee decided to divide Chapter 4 and have everyone review a portion of it. Chris Jensen will review Sections C405 and C406. Martin Carrillo will review Sections C402, C403, and C409. Terry Palmer will review Section C408, and Alyssa Wahlin will review

Section C404. Section C407 was assigned to Dave Wilson and Section C401 was assigned to Clay Monroe.

Chris Jensen raised a concern he has with the current amendment. He will address this further when he gives his review and if necessary, propose the change. He also informed the committee that he has started a chart to track all the changes.

The committee discussed changing the date of next month's meeting from the 8<sup>th</sup> to the 9<sup>th</sup>.

The meeting adjourned at 3:45.

*Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.*

## MINUTES

### UNIFORM BUILDING CODE COMMISSION MECHANICAL ADVISORY COMMITTEE

#### Meeting

April 9, 2025 3:00 pm

Convened 3:05 PM

Adjourned 5:00 PM

#### STAFF:

Steve Duncombe, Bureau Manager  
Sharon Smalley, Board Secretary

#### MECHANICAL ADVISORY COMMITTEE:

David Wilson	Martin Carrillo
Clay Monroe (excused)	Chris Jensen
Terry Palmer	Alyssa Wahlin
Trent Hunt, Commission Liaison (absent)	

#### VISITORS:

Clay Smith	Joel Dzekciorius
Brent Ursenbach	Kevin West

#### MINUTES

A motion was made by Terry Palmer to approve the minutes from the March 11, 2025, meeting as written. The motion was seconded by Chris Jensen and passed with a vote of four in favor and David Wilson abstaining.

#### REVIEW PROPOSED AMENDMENTS TO IFGC SECTIONS 502.1 & 503.4.1

Joel Dzekciorius gave a detailed power point presentation for their two proposals for amendments to the IFGC. Questions were asked by the committee. Following the discussion by all present, a motion was made by David Wilson to approve the two proposals as presented. The motion was seconded by Alyssa Wahlin and passed with a vote of four in favor and Chris Jensen abstaining.

Chris Jensen pointed out that there are current amendments to these two sections. He made a motion that these current state amendments be deleted and replaced with the proposals that were just approved. The motion was seconded by David Wilson and passed unanimously.

**START THE REVIEW OF THE  
2024 IECC AND CURRENT  
AMENDMENTS**

The committee started their review of the 2024 IECC. Clay Monroe submitted his review of Section 401 and reported he found no substantive changes.

Martin Carrillo gave his review of Sections 402 and 403. He noted that the changes were mostly updates for references and clarification for existing practices. He found no substantial changes to the code. He also felt that Section 403 was more organized and gave better clarity and aligned with the ASHRAE standard. Dave Wilson felt that the 2024 IECC gave increased clarity and alignment with current construction practices.

Alyssa Wahlin gave her review of Section 404. She noted that the sections have been reorganized and rewritten better. The changes were for clarification rather than technical changes.

Chris Jensen gave his review of Section 405. Once again, he noted that the changes were reorganizational and gave more clarification rather than technical changes. He noted that there may be some slight cost increase but will lead to long-term energy savings.

The committee agreed to change the meeting date for next month's meeting from the 13<sup>th</sup> to the 20<sup>th</sup>. This meeting will be the required in-person meeting. At the meeting Chris Jensen will complete his review of Sections 405 and 406, starting with Section 405.3.1 .

The meeting adjourned at 3:45.

*Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.*

## MINUTES

### UNIFORM BUILDING CODE COMMISSION MECHANICAL ADVISORY COMMITTEE

#### Meeting

May 20, 2025 3:00 pm

Convened 3:09 PM

Adjourned 4:23 PM

#### STAFF:

Steve Duncombe, Bureau Manager  
Sharon Smalley, Board Secretary

#### MECHANICAL ADVISORY COMMITTEE:

David Wilson	Martin Carrillo
Clay Monroe (excused)	Chris Jensen
Terry Palmer	Alyssa Wahlin
Trent Hunt, Commission Liaison (absent)	

#### VISITORS:

#### MINUTES

A motion was made by Chris Jensen to approve the minutes from the April 9, 2025, meeting as written. The motion was seconded by Dave Wilson and passed unanimously.

#### CONTINUE WITH THE REVIEW OF 2024 IECC, AND CURRENT AMENDMENTS

Dave Wilson gave his review of Section C407 and reported that software tools for simulated building performance must now be tested by a software vendor and test results must be published on a public website. This will computerize the approval and review process for commercial energy efficiency. He noted that this will make plan review easier for cities.

Chris Jensen continued with his review of the 2025 commercial portion of the IECC starting with Section C405.3.1. He reported that the table has been revised so that it addresses areas that do not have to be connected to the interior lighting power. There will be no increase or decrease as this was just a revision and reorganization of the table.

He reported that Table C405.3.2.(1) and C405.3.2(2) were also revised. The allowable lighting load has been lowered. This will lead to an overall reduction in construction costs.

Section C405.3.3 This is a new section that addresses lighting power for sleeping units and dwelling units in commercial buildings. This aligns with the requirements already in the IRC and will not increase or decrease requirements.

Section C405.4 has a change in the title to "Horticultural Lighting". This section has added more requirements for lighting. Dave Wilson reported that he has received positive feedback from commercial growers as it has clarified the requirements and promotes energy efficiency.

Section C405.5.2.2 and .3 have a slight reduction in the allowances. There will be a slight reduction in cost as there will be a reduction in interior lighting allowances.

Section C405.9 is a new section for data centers and computer rooms for requirements for energy efficiency. This could be a slight increase in cost but there will be a long-term savings due to an increase in energy efficiency.

Section C405.12 (formerly C405.11 in the 2021) has a current amendment. Following the discussion, a motion was made by Terry Palmer to delete the current amendment. The motion was seconded by Dave Wilson and passed unanimously.

Section C405.13 has updated requirements for energy monitoring and has changed the square footage to 10,000 or larger buildings. This could be an increase in costs, but the benefits of energy monitoring will lead to long term cost savings by optimizing energy consumption.

Sections C405.13.3 & C405.15 have new requirements for monitoring onsite renewable energy production which could lead to long-term savings and increased resiliency.

Section C405.13.7 is a new section that requires submetering for non-electrical energy sources like HVAC, water heaters and pool. This will increase costs but will provide the building owners with data to monitor energy consumption.

Dave Wilson had to leave the meeting at this time.

Section C406 has been revised and has added energy efficiency credit requirements. It was pointed out that the methods for achieving energy credits remain optional for the building designer and owner. This will increase the cost of construction but will add to savings in the long run.

Terry Palmer gave his review of Section C408 and noted that receptacle switches and high-efficiency controls now require testing. These changes align with other changes in the code.

Martin Carrillo gave his review of Section C409 which is a new section. He noted that it aligns with the requirements in Section 406.2.2. This new section might have some design implications but no significant construction cost impact.

A motion was made by Terry Palmer to accept the changes to the 2024 IECC commercial portion as written in Chapter 4. The motion was seconded by Chris Jensen and passed unanimously.

The committee divided the review of Chapter 5 for the next meeting as follows: Alyssa will take Section 502, Martin will take Section 503, and Chris will take Section 505. Section 504 has no changes and will not need to be reviewed. They will also review all of the changes that they have recommended for the 2024 IMC and the IFGC.

The meeting adjourned at 4:23.

*Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.*

## MINUTES

### UNIFORM BUILDING CODE COMMISSION MECHANICAL ADVISORY COMMITTEE

#### Meeting

June 10, 2025 3:00 pm

Convened 3:09 PM

Adjourned 4:23 PM

#### STAFF:

Steve Duncombe, Bureau Manager  
Sharon Smalley, Board Secretary

#### MECHANICAL ADVISORY COMMITTEE:

David Wilson	Martin Carrillo
Clay Monroe	Chris Jensen
Terry Palmer	Alyssa Wahlin
Trent Hunt, Commission Liaison (absent)	

#### VISITORS:

#### MINUTES

A motion was made by Dave Wilson to approve the minutes from the May 20, 2025, meeting as written. The motion was seconded by Chris Jensen and passed unanimously.

#### COMPLETE THE REVIEW OF 2024 IECC, COMMERCIAL

Martin Carrillio gave his review of Section C503 and reported that this section has had clarifying language added regarding alterations to roofs, walls, floors and mechanical systems, interior and exterior lighting and controls.

Alyssa Wahlin gave her review of Section C502. She reported that this section has two new sections added but that they align with other parts of the code. There are additional energy efficiency credit requirements and renewable energy additions.

There were no changes to Section C504.

Chris Jensen gave his review of Section C505. This section covers changes in occupancy. He noted that there is a new definition for “energy use intensity”. This section now

requires review of mechanical systems based on the change of occupancy type.

A motion was made by Chris Jensen to approve the revision in the 2024 IECC for Chapter 5 as presented. The motion was seconded by Terry Palmer and passed unanimously.

**REVIEW RECOMMENDATION  
FOR THE 2024 IMC, IFGC, &  
IECC**

The committee reviewed all of their recommendations for the 2024 codes with current and new amendments. Terry Palmer made a motion to accept all of the changes in the 2024 IMC, IFGC, and commercial portion IECC along with the current and proposed new amendments. The motion was seconded by Clay Monroe and passed unanimously.

**MAKE A RECOMMENDATION  
FOR THE 2024 CODES**

Terry Palmer made a motion to forward their recommendations on to the UBC Commission for the 2024 codes, IMC, IFGC, and commercial portion of the IECC, along with current and proposed amendments as approved by this committee. The motion was seconded by Dave Wilson and passed unanimously.

The meeting adjourned at 3:34.

*Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.*