UNIFORM BUILDING CODE COMMISSION MEETING

PUBLIC HEARING

December 20, 2023 9:00 AM

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Anchor Location

Room 475 Heber M Wells Building 160 E 300 S

- 1. Roll call
- 2. Public Hearing for Title 15A
- 3. Approve minutes from the December 13, 2023
- 4. Make a recommendation to the Business and Labor Interim Committee

Next meeting date: as needed

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 Carol Inglesby, ADA Coordinator, Division of Occupational and Professional Licensing, 160 East 300 South, Salt Lake City UT 84111, Phone 530-6626, at least three working days prior to the meeting.

Added text (Deleted text)

15A Chapter 1 (No changes recommended)

15A-2-101, 102 (No changes recommended)

Chapter 2

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 edition of the International Building Code, including Appendices C and J, issued by the International Code Council;
 - (b) <u>[except as provided in Subsection (1)(c),]</u> the 2021 edition of the International Residential Code, issued by the International Code Council
 - [(c) the residential provisions of Chapter 11, Energy Efficiency, of the 2015 edition of the International Residential Code, issued by the International Code Council;
 - (i) the residential provisions of the 2015 edition of the International Energy Conservation Code, issued by the International Code Council;]
 - (j) [the commercial provisions of] the 2021 edition of the International Energy Conservation Code,

(remaining sections are renumbered accordingly)

Chapter 3

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

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

(Remaining sections are renumbered.)

15A-3-105 Amendments to Chapter 10 through 12 of JBC.

(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 1010.2.14.1."

- (2) A new IBC Section 1010.2.14.1 is added as follows: 1010.2.14.1 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:
 - <u>1. Locks in the means of egress comply with all IBC requirements for controlled egress</u> <u>doors</u>,
 - 2. All residents without a clinical need for their containment shall have the keys, codes or other means necessary to operate the locking systems.
 - 3. Residents or their legal representative acknowledge in writing that they understand and agree to living in a facility where egress is controlled.
 - 4. The number of residents housed in a smoke compartment with controlled egress shall not be greater than 30.

(remaining sections are renumbered as needed)

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

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

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

- (3) In IRC Section R105.2, [number 10, is deleted] under Building, the following changes are made:
 - 1. 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.
 - 2. 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) [IRC, Section 109.1.5, is deleted and replaced with the following: "R109.1.5 Weatherresistant exterior wall envelope inspections. An inspection shall be made of the weatherresistant 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."]
- (5) IRC Section R109.1.5, 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.
- (6)"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 [R703.8] R703.4 to prevent water from entering the weatherresistive barrier.

(7)"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.

(Remaining sections are renumbered)

(23)(26) In IRC, Section R310.7, [in the exception,] the words "or accessory dwelling units" are added after the words "sleeping rooms".

(27) (30)In IRC, Section R314.2.2, the words "[or] "<u>, accessory dwelling units</u>" are added after the words ["sleeping rooms"] "Where alterations, repairs".

(28)(31) In IRC, Section R315.2.2, the words [or] ", accessory dwelling units", are added after the words [sleeping rooms] "Where alterations, repairs".

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

(1) IRC, Section <u>R</u>609.4.1, 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 andN1102.1.3 of the 2009 IRC.

- (2)(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 10-5-132(8) of the Utah Municipal Code. [to be submitted in order to issue a building permit.]"
- (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: <u>"Total Energy Transmittance values may be substituted for SHGC, and Luminous</u> <u>Transmission values may be substituted for VT".</u>

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

(4)(6) In IRC, Section N1101.13 (R401.2), in the first sentence, the words "Section N1101.13.5 and" are deleted. [add Exception as follows:

"2. Exception: A project complies if the project demonstrates compliance, using the software RES Check 2012 Utah Energy Conservation Code, of:

(a) on or after January 1, 2017, and before January 1, 2019, "3 percent better than code"; (b) on or after January 1, 2019, and before January 1, 2021, "4 percent better than code";

and

- (c) after January 1, 2021, "5 percent better than code."]=
- (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
 - (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 changes are made: (i) 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 0.033
 - (ii) In the row titled "Climate Zone 5 and Marine 4" delete 0.024 and replace it with 0.030
 - (iii) In the row titled "Climate Zone 6" delete 0.024 and replace it with 0.030
 - (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 0.065
 (ii) In the row titled "Climate Zone 5 and Marine 4" delete0.045 and replace it with 0.065
 (iii) In the row titled "Climate Zone 6" delete 0.045 and replace it with 0.065
 - (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
 (ii) In the row titled "Climate Zone 6" delete 0.50 and replace it with0.065
 - (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(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"
 - (i) 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 3 and 5, an R-15, and in climate zone 6, an R-20 shall be acceptable where air-impermeable insulation is installed in the cavity space."

(ii) 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

(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 changes are made: (i) In the row titled "Climate Zone 3" deleted 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 32
 (ii) In the row titled "Climate Zone 5 and Marine 4" delete 60 and replace it with 38
 (iii) In the row titled "Climate Zone 6" delete 60 and replace it with 38
- (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 "19+ Oci or 11 + 5ci or 0 +15ci"
 - (ii) In the row titled "Climate Zone 5 or Marine 4" delete all values and replace with <u>"19+ Oci or 13 + 5ci or 0 +15ci"</u>
 - (iii) In the row titled " Climate Zone 6" delete all values and replace with "19 + Oci or 13 + 5ci or 0 + 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 or 0+ 11ci or 11+5ci"
 - (ii) <u>In the row titled " Climate Zone 6" delete all values and replace with "19 +</u> Oci or 0 + 13ci or 11 + 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"
- (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 or 0 + 11ci or 11 +5ci"
- (ii) In the row titled " Climate Zone 6" delete all values and replace with "19 + Oci or 0 + 13ci or 0 + 11 + 5 ci"

(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-facter = 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).

(6)(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 < 2.5 ACH (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) A new IRC, Section N1102.2.1.3(R402.2.1.3) is added as follows:
 - N1102.2.13(R402.2.1.3) Walls with Air-Impermeable Insulation. Where IECC Table R402.1.2 or IRC Table N1102.1.2 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 6-B shall be deemed equivalent to the provisions in IECC Table R402.1.2 or IRC Table N1102.1.2, provided the home attains a blower door test < 2.5ACH.
- (15) In IRC, Section N1102.2.9.1 (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."
- (7)(16) In IRC, Section N1102.4.1 (R402.4.1), in the first sentence, the word "and" is deleted and replaced with the word "or."
- (8)(17) In IRC, Section N1102.4.1.1 (R402.4.1.1), <u>the second and the last sentence</u> [is] are deleted and replaced with the following: "Where [allowed] required by the code official, the builder [may] shall certify compliance [to components] with criteria indicated in Table N1102.4.1

(R402.4.1) for items which [may] are not [be inspected] readily visible during regularly scheduled inspections."

- (18) 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.
- (9)(19) In IRC, Section N1102.4.1.2 (R402.4.1.2), the following changes are made:
 - (a) In the [first] fourth sentence:, the word "third" is deleted.
 - (i) ["The building or dwelling unit" is deleted and replaced with "A single-family dwelling";
 - (ii) after January 1, 2019, replace the word "five" with "3.5"; and
 - (iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8" are deleted .]
 - (b) The following sentence is [inserted after the first sentence: "A multi-family dwelling and townhouse shall be tested and verified as having an air leakage rate of not exceeding five air changes per hour In the third sentence, the word "third" is deleted] added after the fourth sentence:

[The following sentence is inserted after the third sentence:] "The following parties shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed contractors who have completed training provided by Blower Door Test equipment manufacturers or other comparable training."

- (c) In the first Exception the second sentence is deleted.
- (20) In IRC, Section N1102.4.1.3 (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"
 - (c) In Number 2 the words "of conditioned floor area" are inserted before the words "or smaller".
- (21) IRC, Section N1102.4.6 (R402.6) is deleted.
- (22) In IRC, Section N1103.3.1 (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*."

- (10)(23) In IRC, Section N1103.3.3 (R403.3.3), [the exception for duct air leakage testing is deleted and replaced with the following] 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.";
 - (b) on or after January 1, 2019, and before January 1, 2021, with the following: "Exception: The duct air leakage test is not required for systems with all air handlers and at least 75% of all ducts (measured by length) located entirely within the building thermal envelope."; and
 - (c) on or after January 1, 2021, with the following: "Exception: The duct air leakage test is not required for systems with all air handlers and at least 80% of all ducts (measured by length) located entirely within the building thermal envelope."
- (11) In IRC, Section N1103.3.3 (R403.3.3), the following is added after the second exception: "The following parties shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed contractors who have completed either training provided by Duct Test equipment manufacturers or other comparable training."]

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

[(12) In IRC, Section N1103.3.4 (R403.3.4):

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

(b) in Subsection 2:

- (i) on or after January 1, 2017, and before January 1, 2019, the number 4 is changed to 8 and the number 113.3 is changed to 226.5;
- (i) on or after January 1, 2019, and before January 1, 2021, the number 4 is changed to 7 and the number 113.3 is changed to 198.2; and
- (ii) on or after January 1, 2021, the number 4 is changed to 6 and the number 113.3 is changed to 169.9.]
- (13)(25) In IRC, Section N1103.3.5 (R403.3.5), the [words "or plenums" are deleted] 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:

1. Parties certified by BPT or RESNET

2. Licensed contractors who have completed training provided by Duct Test equipment manufacturers or other comparable training."

(26) 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,

(iv) the number 85 is changed to 141

(b) in Subsection 2,

(i) the number 4.0 is changed to 5.0

(ii) the number113.3 is changed to 141

- (c) Subsection 3 is deleted.
- (27) In IRC, Section N1103.3.7 (R403.3.7) the words "or plenums" are deleted.
- (28) In IRC, Section N1103.5.1.1 (R403.5.1.1) the words "Where installed" are added at the beginning of the first sentence.
- (29) In IRC, Section N1103.5.2 (R403.5.2) the following change is made:
 (a) Subsections 5 and 6 are deleted and Subsections number 7 is renumbered to 5.
- [(14) In IRC, Section N1103.5.3 (R403.5.3), Subsection 5 is deleted and Subsections 6 and 7 are renumbered.]
- (15)(30) IRC, Section [N1103.6.1 (R403.6.1)] N1103.6.2 (R403.6.2), is deleted and replaced with the following:

"[N1103.6.1 (R403.6.1)] 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 [N1103.6.1 (R403.6.1)] 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."

(16)(31) In IRC, Section [<u>N1103.6.1 (R403.6.1)</u>]<u>N1103.6.2 (R403.6.2)</u>, the table is deleted and replaced with the following:

"TABLE [N1103.6.1 (R403.6.1)] 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"

(32) IRC, Section N1103.6.3 (R403.6.3) is deleted.

[(17) In IRC, Section N1106.4 (R406.4), the table is deleted and replaced with the following: "TABLE N1106.4 (R406.4)

MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX		
3	65		
5	69		
6	68"]		

(18)(33) 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)".

(19)(34) 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."
- [(20) In IRC, Section M1307.2, the words "In Seismic Design Categories D0, D1, and D2, and In townhouses in Seismic Design Category C", are deleted, and in Subparagraph 1, the last sentence is deleted.]
- (35) In IRC, Section N1104.1 (R404.1), the word "All" is replaced with "Not less than 90 percent of the lamps in".
- (36) IRC, Section N1104.1.1 (R404.1.1) is deleted.
- (37) IRC, Section N1104.2 (R404.2) is deleted.
- (38) IRC, Section N1104.3 (R404.3) is deleted.
- (39) 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 Subsection3 the following words are added at the end of the sentence: "when applicable and readily available".
- (40) 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 areaweighted maximum fenestration SHGC permitted in Climate Zones 0 through 3 shall be 0.30.

UAProposed design = 1.15 x UAPrescriptive reference design

(Equation 11-4)

- (41) In IRC, Section N1106.3.1 (R406.3.1) is deleted:
- (42) In IRC, section N1106.3.2 (R403.3.2) is deleted:
- (43) 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 (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".

(44) 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

(c)In the row for Climate Zone 6 "54" is deleted and replaced with 68

(45) In IRC, Section N1108 (R408) is deleted

(remaining sections are renumbered as needed)

15A-3-206 Amendments to Chapters 36, 37, 39 and 44 and Appendix F of IRC.

(21) A new IRC, Chapter 44, the standard for ANSI/RESNET/ICC 201-2019 section 4.4.4 is added follows: 4.4.4. Air Source Heat Pumps and Air Conditioners.

For Heat Pumps and Air Conditioners with the more recent Manufacturer's 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.

Equipment Type	SEER2/SEER		HSPF2/HSPF
		EER2/EER ⁴	
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	0.97	Not Applicable	Not Applicable
Conditioner			
Ducted Space-Constrained Heat	0.99	Not Applicable	0.85
Pump			

Table 4.4.4.1(1) SEER2 and HSPF2 Conversion Factors3

(Remaining sections are renumbered.)

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

(11) In IRC, Section P2902.1, the following subsections are added as follows:
 [P2902.1.2] P2902.1.1 General Installation Citeria.
 [P2902.1.2] P2902.1.2 Specific Installation Criteria.

<u>[P2902.1.2] P2902.1.3</u> Reduced Pressure Principle Backflow Prevention Assembly. [P2902.1.2.2] P2902.1.4 Double Check Valve <u>[P2902.1.2.3] P2902.1.5</u> Pressure Vacuum Break Assembly

15A-3-206 Amendments to Chapters 36, 37, 39, and 44 and Appendix F of IRC.

(1) 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:

- 1. Fixed outdoor electric deicing and snow-melting equipment;
- 2. motors;
- 3. generators;
- 4. transformers;
- 5. phase converters;
- 6. stationary standby batteries;
- 7. elevators;
- 8. dumbwaiters;
- 9. platform lifts;
- 10. stairway chairlifts;
- 11. electric vehicle power transfer systems;
- 12. electric welders;
- 13. audio signal processing, amplification, and reproduction equipment;
- 14. information technology equipment;
- 15. solar photovoltaic (PV) systems;
- 16. optional standby systems;
- 17. interconnected electric power production sources;
- 18. energy storage systems; and
- 19. energy management systems.

(3) IRC, Section E3601.7 is deleted and replaced with the following: E3601.7 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. This provision has a sunset date of 7-1-2027."

(Remaining sections are renumbered.)

(17) In IRC, Section E3902.15 Crawl space lighting outlets is deleted.

(17) (18) IRC, Section E3902.16 Equipment requiring servicing is deleted.

(18) (19) IRC Section E3902.17 Outdoor outlets is deleted.

[(19) IRC, Section E3902.18 is deleted.]

(20) IRC Section E3902.19 Location of arc-fault circuit interrupters, is deleted.

(21) IRC Section E3902.20 Arc-fault circuit interrupter protection is deleted.

(22) IRC Section E3902.21 Arc-fault circuit interrupter protection for branch circuit extensions or modification is deleted.

(Remaining sections are renumbered.)

[(6) In IMC, Section 1101.2, the words "471 or 1995"; are deleted and replaced with 2551;471, 1995, or UL/CSA 60335-2-40";]

(Remaining sections are renumbered)

15A-3-601 General provisions.

(9) 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

(4) Power-operable service disconnecting means

(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 This provision has a sunset date of 7-1-2027..

(10) In NEC, Section 230.72, Section 230.72(A) is deleted and replaced with the following: 230.72 Grouping of Disconnects.

(A) General. The two to six disconnects as permitted in 230.71 shall be grouped. Each disconnect shall be marked to indicate the load served.

Exception: One of the two to six service disconnecting means permitted in 230.71, where used only for a water pump also intended to provide fire protection, shall be permitted to be located remote from the other means. If remotely installed in accordance with this exception, a plaque shall be posted at the location of the remaining grouped disconnects denoting its location. This provision has a sunset date of 7-1-2027.

(Remaining sections are renumbered.)

15A-3-701 General provisions.

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) 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 andN1102.1.3 of the 2009 IRC.

(2)(3) 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 [to be submitted in order to issue a building permit] for building permits shall include only those items specified in 10-5-132(8) of the Utah Municipal Code."

- (4) 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: <u>"Total Energy Transmittance values may be substituted for SHGC, and Luminous</u> <u>Transmission values may be substituted for VT".</u>

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

(4)(6)In IECC, Section R401.2, [a new number 4 is added as follows: in the first sentence, the words "Section R401.13.5 and" are deleted.

"4. Compliance may be shown by demonstrating a result, using the software RES Check 2012 Utah Energy Conservation Code, of:

- (a) [on or after January 1, 2017, and before January 1, 2019, "3 percent better than code";
- (b) on or after January 1, 2019, and before January 1, 2021, "4 percent better than code"; and(c) after January 1, 2021, "5 percent better than code"."]

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

(8) In IECC, Section R401.3 Number 7, the words "and the compliance path used" are deleted. (9) 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
 - (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 changes are made: (i) 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 0.033
- (ii) In the row titled "Climate Zone 5 and Marine 4" delete 0.024 and replace it with 0.030
- (iii) In the row titled "Climate Zone 6" delete 0.024 and replace it with 0.030
- (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 0.065
 (ii) In the row titled "Climate Zone 5 and Marine 4" delete0.045 and replace it with 0.065
 (iii) In the row titled "Climate Zone 6" delete 0.045 and replace it with 0.065
- (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
 (ii) In the row titled "Climate Zone 6" delete 0.50 and replace it with0.065
- (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
 (ii) In the row titled "Climate Zone 6" delete 0.55 and replace it with 0.065
- (10) 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
- (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 changes are made: (i) In the row titled "Climate Zone 3" deleted 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 32
 (ii) In the row titled "Climate Zone 5 and Marine 4" delete 60 and replace it with 38
 (iii) In the row titled "Climate Zone 6" delete 60 and replace it with 38
- (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 "19+ Oci or 11 + 5ci or 0 + 15ci"
 - (ii) In the row titled "Climate Zone 5 or Marine 4" delete all values and replace with <u>"19+ Oci or 13 + 5ci or 0 +15ci"</u>
 - (iii) In the row titled " Climate Zone 6" delete all values and replace with "19 + Oci or <u>13 + 5ci or 0 + 15ci</u>"

(e) In the column titled "Basement Wall R Value" the following changes are made:

- (iii) In the row titled "Climate Zone 5 or Marine 4" delete all values and replace with "15+ Oci or 0+ 11ci or 11 +5ci"
- (iv) In the row titled " Climate Zone 6" delete all values and replace with "19 + Oci or 0 + 13ci or 11 + 5ci"

(f) In the column titled "Slab R Value and Depth" the following changes are made:

- (iii) In the row titled "Climate Zone 3" delete "10ci. 2ft" and replace it with NR"
- (iv) 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 or 0 + 11ci or 11 +5ci"

- (ii) In the row titled " Climate Zone 6" delete all values and replace with "19 + Oci or 0 + 13ci or 0 + 11 + 5 ci"
- (h) (5) 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) 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-facter = 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).
- (6)(12)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 < 2.5 ACH 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) 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 requiresR-20 for wood framed walls in climate zones 3-B and 5-B or R-20+5CI for climate zone6-B, an air-impermeable insulation installed in the wall cavity with R-value of R-15 forclimate zones 3-B and 5-B or R-20 for climate zone 6-B shall be deemed equivalent to theprovisions in IECC Table R402.1.2, provided the home attains a blower door test< 2.5ACH.</td>
- (14) 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."
- (7)(15)In IECC, Section R402.4.1, in the first sentence, the word "and" is deleted and replaced with the word "or".
- (8)(16)In IECC, Section R402.4.1.1, the second and the last sentence [is] are deleted and replaced with the following: "Where [allowed] required by the code official, the builder [may] shall certify compliance [to components] with criteria indicated in Table R1102.4.1 for items which [may] are not [be inspected] readily visible during regularly scheduled inspections."
- (17) 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.
- (9)(18)In IECC, Section R402.4.1.2, the following changes are made:
 - (a) In the [first] fourth sentence, the word "third" is deleted.
 - (i) ["The building or dwelling unit" is deleted and replaced with "A single-family dwelling";
 - (ii) after January 1, 2019, replace the word "five" with "3.5"; and
 - (iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8" are deleted.]

(b)The following sentence is [inserted after the first sentence: "A multi-family dwelling and townhouse shall be tested and verified as having an air leakage rate of not exceeding five air changes per hour] added after the fourth sentence."

[In the third sentence, the word "third" is deleted.]

[The following sentence is inserted after the third sentence:] "The following parties shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed contractors who have completed training provided by Blower Door Test equipment manufacturers or other comparable training."

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

(19) 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"
- (c) In Number 2 the words "of conditioned floor area" are inserted before the words "or smaller".
- (20) IECC, Section R402.6 is deleted.
- (21) 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*."

- -(11)(19)In IECC, Section R403.3.3, [the exception for duct air leakage testing] is deleted. [and replaced with the following:
 - (a) on or after January 1, 2017, and before January 1, 2019, with the following: "Exception: The total 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.";
 - (b) on or after January 1, 2019, and before January 1, 2021, with the following: "Exception: The duct air leakage test is not required for systems with all air handlers and at least 75% of all ducts (measured by length) located entirely within the building thermal envelope."; and
 - (c) on or after January 1, 2021, with the following: "Exception: The duct air leakage test is not required for systems with all air handlers and at least 80% of all ducts (measured by length) located entirely within the building thermal envelope."

1. Parties certified by BPI or RESNET.

2. Licensed contractors who have completed training provided by Duct Test equipment manufacturers or other comparable training."]

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

(12) [In-IECC, Section R403.3.4:

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

- (i) on or after January 1, 2017, and before January 1, 2019, the number 4 is changed to 8 and the number 113.3 is changed to 226.5;
- (ii) on or after January 1, 2019, and before January 1, 2021, the number 4 is changed to 7 and the number 113.3 is changed to 198.2; and
- (iii) on or after January 1, 2021, the number 4 is changed to 6 and the number 113.3 is changed to 169.9.]

(13)(23)In IECC, Section R403.3.5, the [words "or plenums" are deleted] 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:
 - 1. Parties certified by BPT or RESNET
 - 2. Licensed contractors who have completed training provided by Duct Test equipment manufacturers or other comparable training."
- (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,
 - (iv) the number 85 is changed to 141
 - (b) in Subsection 2,
 - (i) the number 4.0 is changed to 5.0
 - (ii) the number113.3 is changed to 141
 - (c) Subsection 3 is deleted.
- (25) In IECC, Section N1103.3.7 (R403.3.7) the words "or plenums" are deleted.
- (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.
- (27) In IEEC, Section N1103.5.2 (R403.5.2) the following change is made:
 (a) Subsections 5 and 6 are deleted and Subsections number 7 is renumbered to 5.
- (13) [In IECC, Section R403.5.3, Subsection 5 is deleted and Subsections 6 and 7 are renumbered.]

(15)(28)IECC, Section [R403.6.1]R403.6.2, is deleted and replaced with the following:

"[R403.6.1]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 [R403.6.1]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."

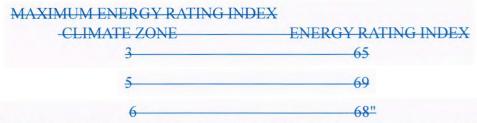
(16)(29)In IECC, Section [R403.6.1], R403.6.2 the table is deleted and replaced with the following:

"TABLE [R403.6.1]R403.6.2

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"

MECHANICAL VENTILATION SYSTEM FAN EFFICACY

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



(31) 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.

(18)(32)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 f 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) In IECC, Section R404.1, the word "All" is replaced with "Not less than 90 percent of the lamps in".
- (34) IECC, Section R404.1.1 is deleted.
- (35) IECC, Section R404.2is deleted.
- (36) IECC, Section R404.3 is deleted.
- (37) 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 Subsection3 the following words are added at the end of the sentence: "when applicable and readily available".
- (38) In IECC, Section 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.
 - UAProposed design = 1.15 x UAPrescriptive reference design
 - (Equation 11-4)

- (39) In IECC, Section R406.3.1 is deleted:
- (40) In IECC, Section R403.3.2 is deleted:
- (41) 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) 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 (c)In the row for Climate Zone 6 "54" is deleted and replaced with 68
- (43) In IECC, Section R408 is delete.
- (44) In IECC, Chapter 6, the standard for ANSI/RESNET/ICC 201-2019 section 4.4.4 is added follows:

4.4.4. Air Source Heat Pumps and Air Conditioners.

For Heat Pumps and Air Conditioners with the more recent Manufacturer's 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 4.4.1(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.

Equipment Type	SEER2/SEER		HSPF2/HSPF
		EER2/EER ⁴	
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	0.97	Not Applicable	Not Applicable
Conditioner			
Ducted Space-Constrained Heat	0.99	Not Applicable	0.85
Pump			

Table 4.4.4.1(1) SEER2 and HSPF2 Conversion Factors3

Part 4

15A-3-401 General provisions

(2) 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.

15A-3-801 General provisions.

(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".

(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."

[(5) In Section 305.4.2, number 7 is added after number 6 as follows: "7. When a change of occupancy in a building or portion of a building results in a Group R-2 occupancy, not less than 20% of the dwelling or sleeping units shall be Type-B dwelling or sleeping units. These dwelling or sleeping units may be located on any floor of the building provided with an accessible route. Two percent, but not less than one unit, of the dwelling or sleeping units shall be Type-A dwelling units.]

[(7) In Section 705.1, Exception number 3, the following is added at the end of the exception: This exception does not apply if the existing facility is undergoing a change of occupancy classification."]

(Remaining sections are renumbered as needed) (11) In Section [1012.7.3] 1011.7.3 exception 2 is deleted.

MINUTES

UTAH UNIFORM BUILDING CODE COMMISSION

December 13, 2023

9:00

Convened: 9:01

Adjourned: 10:07

STAFF: Stephen Duncombe, Bureau Manager Sharon Smalley, Board Secretary

COMMISSIONERS:

Thomas Peterson Josh Blazzard Lorianne Bisping Travis Dalley Trent Hunt Ken Adams Gary Bullock

VISITORS: Ron McArthur Ross Ford Ryan Jackson

MINUTES

REVIEW PROPOSED AMEND-MENTS 2021 IRC SECTION R105.2

IMC SECTION 505.4.1

Chris Hendrickson Art Anderson Karl Mott Joerg Ruegemer (excused) Scott Carpenter (excused) Steve Dailey

Rob Durfee Bryce McConkie

A motion was made by Ken Adams to approve the minutes from the November 29, 2023, meeting as written. The motion was seconded by Art Anderson and passed unanimously.

Ross Ford and Josh Blazzard spoke in connection with this proposal. The Structural Advisory Committee reviewed the proposal and approved the proposal with modifications. A motion was made by Ken Adams to approve the modified proposal. The motion was seconded by Josh Blazzard and passed unanimously.

Ross Ford and Ken Adams spoke on this proposal. A motion was made by Ken Adams to approve the proposal. The motion was seconded

2021 IRC CHAPTER 11

APPROVE CORRECTIONS AND ADDITIONS FOR TITLE 15A FOR THE PUBLIC HEARING

DISCUSS TITLE 10-9A-538 MODULAR HOMES

by Trent Hunt and passed unanimously .

Trent Hunt explained why the Mechanical Advisory Committee had a "no motion made" for this proposal. Following a discussion by all present in connection with this proposal, a motion was made by Ken Adams to approve the proposals for amendments to Chapter 11 and the adoption of the 2021 residential IECC. The motion was seconded by Steve Dailey and passed unanimously.

The Commission reviewed all the proposed corrections and additions for Title 15A. Following the review, a motion was made by Karl Mott to approve the document and move it forward to a public hearing. The motion was seconded by Ken Adams and passed unanimously.

Tom Peterson gave the background on this proposal for Title 10-9a-538 and Title 15A for the construction, transportation, installation, and inspection of modular homes. Several areas were pointed out that may need to be reviewed again and modified.

The meeting adjourned at 10:07.

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.