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H.B. 518

STATE CONSTRUCTION CODE MODIFICATIONS

2024 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Thomas W. Peterson

Senate Sponsor: _____

LONG TITLE

General Description:

This bill modifies State Construction Code.

Highlighted Provisions:

This bill:

- amends the State Construction Code to:
  - align with updated standards in the International Residential Code (IRC); and
  - modify provisions of the IRC;
- creates a mass timber construction loan program; and
- makes technical changes.

Money Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:

AMENDS:

15A-1-104, as enacted by Laws of Utah 2014, Chapter 197

15A-2-103, as last amended by Laws of Utah 2023, Chapters 160, 209

15A-3-105, as last amended by Laws of Utah 2023, Chapter 209

15A-3-202, as last amended by Laws of Utah 2023, Chapter 209

15A-3-203, as last amended by Laws of Utah 2023, Chapter 209

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15A-3-204, as last amended by Laws of Utah 2023, Chapter 209
15A-3-205, as last amended by Laws of Utah 2023, Chapter 209
15A-3-206, as last amended by Laws of Utah 2023, Chapter 209
15A-3-401, as last amended by Laws of Utah 2019, Chapter 20
15A-3-701, as last amended by Laws of Utah 2023, Chapter 209
15A-3-801, as last amended by Laws of Utah 2023, Chapter 209
58-55-102, as last amended by Laws of Utah 2023, Chapter 223
ENACTS:
63N-3-13, Utah Code Annotated 1953
REPEALS:
15A-6-101, as enacted by Laws of Utah 2016, Chapter 249
15A-6-102, as last amended by Laws of Utah 2020, Chapter 136

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **15A-1-104** is amended to read:

15A-1-104. Permit approval required -- Certificate of occupancy valid.

(1) As used in this section:

(a) "Compliance agency" is as defined in Section 15A-1-202.

(b) "Project" is as defined in Section 15A-1-209.

(2) A compliance agency for a political subdivision may not reject a permit, or otherwise withhold approval of a project whenever approval is required, for failure to comply with the applicable provisions of this title unless the compliance agency:

(a) cites with specificity the applicable provision with which the project has failed to comply; and

(b) describes how the project has failed to comply.

(3) A municipality may not withhold a permit or project approval for a project because of a noncomplying or non-conforming structure on the same property provided:

(a) it has been in place for a minimum of one year; and

(b) it does not pose an immediate health or life safety concerns.

(4) A municipality may not require additional permitting, engineering or inspections for a non-conforming and non-complying structures after it has been in place for one year or

more if the work in question does not pose an immediate health or life safety concern.

(5) If a compliance agency or a representative of a compliance agency issues a certificate of occupancy, the compliance agency may not withdraw the certificate of occupancy or exert additional jurisdiction over the elements of the project for which the certificate was issued unless additional changes or modifications requiring a building permit are made to elements of the project after the certificate was issued.

Section 2. Section **15A-2-103** is amended to read:

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) [~~except as provided in Subsection (1)(c),~~] 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;~~]

[~~(d)~~] (c) Appendix AQ of the 2021 edition of the International Residential Code, issued by the International Code Council;

[~~(e)~~] (d) the 2021 edition of the International Plumbing Code, issued by the International Code Council;

[~~(f)~~] (e) the 2021 edition of the International Mechanical Code, issued by the International Code Council;

[~~(g)~~] (f) the 2021 edition of the International Fuel Gas Code, issued by the International Code Council;

[~~(h)~~] (g) the 2020 edition of the National Electrical Code, issued by the National Fire Protection Association;

[~~(i) the residential provisions of the 2015 edition of the International Energy Conservation Code, issued by the International Code Council;~~]

[~~(j)~~] (h) [~~the commercial provisions of~~] the 2021 edition of the International Energy Conservation Code, issued by the International Code Council;

[~~(k)~~] (i) the 2021 edition of the International Existing Building Code, issued by the International Code Council;

[~~(l)~~] (j) subject to Subsection 15A-2-104(2), the HUD Code;

[~~(m)~~] (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;

[~~(n)~~] (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;

[~~(o)~~] (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

[~~(p)~~] (n) the residential provisions of the 2021 edition of the International Swimming Pool and Spa Code, issued by the International Code Council.

(2) Consistent with Title 65A, Chapter 8, Management of Forest Lands and Fire Control, the Legislature adopts the 2006 edition of the Utah 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)(o)~~] (1)(n) 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.

Section 3. Section **15A-3-105** is amended to read:

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 1010.2.14.1."

(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 Alzheimers 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 operate the locking systems;

(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)."

[~~(2)~~] (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."

[~~(3)~~] (5) IBC, Section 1025, is deleted.

Section 4. Section **15A-3-202** is amended to read:

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 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."

[~~(3) IRC, Section R105.2, number 10, is deleted and replaced with the following: "10. Decks that are not more than 30 inches (762 mm) above grade at any point and not requiring guardrails, that do not serve the exit door required by Section R311.4."~~]

(3) 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."

(4) In IRC, Section R105.2 a new exception is added: "11. Single level, non-connected conex boxes."

[~~(4)~~] (5) In IRC, Section R108.3, the following sentence is added at the end of the section: "The building official shall not request proprietary information."

[~~(5)~~] (6) IRC, Section 109.1.5, is deleted and replaced with the following: "R109.1.5 Weather-resistant exterior wall envelope inspections. An inspection shall be made of the weather-resistant exterior wall envelope as required by Section R703.1 and flashings as required by Section R703.4 to prevent water from entering the weather-resistive barrier."

[~~(6)~~] (7) 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."

[~~(7)~~] (8) 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."

[~~(8)~~] (9) In IRC, Section R202, the definition for "Approved Agency" is modified by replacing the word "and" with "or."

[~~(9)~~] (10) In IRC, Section 202, the definition for "Approved Source" is modified by adding the words "or licensed engineer or architect" after the word "official."

[~~(10)~~] (11) In IRC, Section R202, the following definition is added: "CERTIFIED BACKFLOW PREVENTER ASSEMBLY TESTER: A person who has shown competence to test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction under Utah Code, Subsection 19-4-104(4)."

[~~(11)~~] (12) 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")."

[~~(12)~~] (13) In IRC, Section 202, the following definition is added: "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, but not both at the same time. The potable water supply line shall be protected by a reduced pressure backflow preventer."

[~~(13)~~] (14) 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."

[~~(14)~~] (15) 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."

[~~(15)~~] (16) 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."

[~~(16)~~] (17) 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/ft2)	Elevation (ft)
Beaver	Beaver	35	5886
Brigham City	Box Elder	42	4423
Castle Dale	Emery	32	5669
Coalville	Summit	57	5581
Duchesne	Duchesne	39	5508
Farmington	Davis	35	4318
Fillmore	Millard	30	5138
Heber City	Wasatch	60	5604
Junction	Piute	27	6030
Kanab	Kane	25	4964
Loa	Wayne	37	7060
Logan	Cache	43	4531
Manila	Daggett	26	6368
Manti	Sanpete	37	5620
Moab	Grand	21	4029
Monticello	San Juan	67	7064
Morgan	Morgan	52	5062
Nephi	Juab	39	5131
Ogden	Weber	37	4334
Panguitch	Garfield	41	6630

Parowan	Iron	32	6007
Price	Carbon	31	5558
Provo	Utah	31	4541
Randolph	Rich	50	6286
Richfield	Sevier	27	5338
St. George	Washington	21	2585
Salt Lake City	Salt Lake	28	4239
Tooele	Tooele	35	5029
Vernal	Uintah	39	5384
Note: To convert lb/ft2 to kN/m2, multiply by 0.0479. To convert feet to meters, multiply by 0.3048.1. Statutory requirements of the Authority Having Jurisdiction are not included in this state ground snow load table. 2. For locations where there is substantial change in altitude over the city/town, the load applies at and below the cited elevation, with a tolerance of 100 ft (30 m). 3. For other locations in Utah, see Bean, B., Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental Engineering Faculty Publications, Paper 3589, http://utahsnowload.usu.edu/, for ground snow load values."			

[~~(17)~~] (18) 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."

[~~(18)~~] (19) 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."

[~~(19)~~] (20) 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."

[~~(20)~~] (21) In IRC, Section R302.5.1, the last sentence is deleted.

[~~(21)~~] (22) IRC, Section R302.13, is deleted.

[~~(22)~~] (23) 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."

(24) In IRC, Section R310.1, all words in the last sentence after "or to a yard or court", are deleted.

[~~(23)~~] (25) In IRC, Section R310.7, in the exception, the words "or accessory dwelling units" are added after the words "sleeping rooms".

[~~(24)~~] (26) IRC, Sections R311.7.45 through R311.7.5.3, are deleted and replaced with the following: "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."

[~~(25)~~] (27) IRC, Section R312.2, is deleted.

[~~(26)~~] (28) 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."

[~~(27)~~] (29) In IRC, Section R314.2.2, the words "or accessory dwelling units" are added after the words "sleeping rooms".

[~~(28)~~] (30) In IRC, Section R315.2.2, the words "or accessory dwelling units" are added after the words "sleeping rooms".

[~~(29)~~] (31) 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."

[~~(30)~~] (32) A new IRC, Section R328.12, is added as follows:

"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."

[~~(31)~~] (33) 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."

[~~(32)~~] (34) 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."

[~~(33)~~] (35) 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."

[~~(34)~~] (36) 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."

[~~(35)~~] (37) 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."

[~~(36)~~] (38) 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.

Section 5. Section **15A-3-203** is amended to read:

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

(1) IRC, Section [~~609.4.1~~] 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."

[~~(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 to be submitted in order to issue a building permit."~~] 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."

[~~(3)~~] (5) In IRC, Section N1101.12 (R303.3), all wording after the first sentence is deleted. [~~(4) In IRC, Section N1101.13 (R401.2), add Exception as follows:~~]

[~~"2. Exception: A project complies if the project demonstrates compliance, using the software RESCheck 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."" (5) In IRC, Table N1102.2 (R402.1.2), in the column titled MASS WALL R-VALUE, a new footnote j is added as follows:~~]

[~~"j. Log walls complying with ICC400 and with a minimum average wall thickness of 5 inches or greater shall be permitted in Zones 5 through 8 when overall window glazing has a .31 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil), and all other component requirements are met."~~]

(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 "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; and

(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" delete 0.045 and replace it with 0.065; and

(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; 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.

[~~(6)~~] (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" 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; and

(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 015ci;

(ii) in the row titled "Climate Zone 5 or Marine 4" delete all values and replace with 19+Oci or 13+5ci or 0+15ci; and

(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; and

(ii) 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:

(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; 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 or 0 + 11ci or 11 +5ci; and

(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-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."

[~~(7)~~] (14) 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".

(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."

[~~(8)~~] (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."

[~~(9)~~] (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 [~~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." (c) In the third sentence, the word "third" is deleted. (d) The following sentence is inserted after the third sentence:~~] 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.

[~~(10)~~] (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."

(22) [~~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."~~]

[~~(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;~~]

[~~(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.~~]

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

[~~(13)~~] (24) 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:

(i) Parties certified by BPT or RESNET;

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

[~~(14) In IRC, Section N1103.5.3 (R403.5.3), Subsection 5 is deleted and Subsections 6 and 7 are renumbered.~~]

(25) 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 number113.3 is changed to 141;

(c) Subsection 3 is deleted.

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

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

(28) In IRC, Section N1103.5.2 (R403.5.2) the following change is made:

(a) Subsections 5 and 6 are deleted and Subsection 7 is renumbered to 5.

[~~(15)~~] (29) 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)~~] (30) In IRC, Section [~~N1103.6.1 (R403.6.1),~~] N1103.6.2 (R403.6.2), 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"

[~~(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"~~]

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

[~~(18)~~] (32) 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)~~] (33) 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.~~]

[~~(21)~~] (34) In IRC, Section N1104.1 (R404.1), the word "All" is replaced with "Not less than 90 percent of the lamps in".

(35) IRC, Section N1104.1.1 (R404.1.1) is deleted.

(36) IRC, Section N1104.2 (R404.2) is deleted.

(37) IRC, Section N1104.3 (R404.3) is deleted.

(38) 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".

(39) 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.UAProposed design =1.15xUAPrescriptive reference design (Equation 11-4)."

(40) In IRC, Section N1106.3.1 (R406.3.1) is deleted.

(41) In IRC, Section N1106.3.2 (R403.3.2) is deleted.

(42) 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".

(43) 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".

(44) In IRC, Section N1108 (R408) is deleted.

(45) 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".

[~~(22)~~] (46) 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."

[~~(23)~~] (47) In IRC, Section M1402.1, the following is added at the end of the second sentence: "or UL/CSA 60335-2-40."

[~~(24)~~] (48) In IRC, Section M1403.1, the characters "/ANCE" are deleted.

[~~(25)~~] (49) IRC, Section M1411.9, is deleted.

[~~(26)~~] (50) In IRC, Section M1412.1, the characters "/ANCE" are deleted.

[~~(27)~~] (51) In IRC, Section M1413.1, the characters "/ANCE" are deleted.

Section 6. Section **15A-3-204** is amended to read:

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 8 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) IRC, Section P2503.2, 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."~~]

(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) Contractor shall recognize that plastic is extremely brittle at lower temperatures and can explode, causing serious injury or death.

(b) 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.

(c) 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.

(d) Contractor shall take all precautions necessary to limit the pressure within the plastic piping.

(e) 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.

(f) The pressure gauge shall be monitored during the test period, which should not exceed 15 minutes.

(g) 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."

Section 7. Section **15A-3-205** is amended to read:

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, devises, 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.[~~2~~] 1 General Installation Criteria.

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

P2902.1.2 Specific Installation Criteria.

P2902.1.[~~2~~] 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.

P2902.1.2.[~~2~~] 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.

P2902.1.2.[~~3~~] 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 FLOW RATE 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.

Section 8. Section **15A-3-206** is amended to read:

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 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.

(4) IRC, Section E3901.4.3, is deleted and replaced with the following:

"E3901.4.3 Receptacle Outlet Location. 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 work surface.

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."

(5) In IRC, Section 3902.1, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(6) In IRC, Section 3902.2, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(7) In IRC, Section 3902.3, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(8) In IRC, Section 3902.4, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(9) 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.

(10) In IRC, Section 3902.6, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(11) In IRC, Section 3902.7, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(12) In IRC, Section 3902.8, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(13) In IRC, Section 3902.9, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(14) IRC, Section 3902.10, is deleted.

(15) In IRC, Section 3902.12, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

(16) In IRC, Section 3902.13, after the word "125-volt" add "single phase 15 and 20 ampere" and strike the words "through 250 volt."

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

(18) IRC Section E3902.17 is deleted.

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

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

(21) In IRC, Chapter 44, the standard for ASHRAE is amended by changing "34-2013" to "34-2019."

(22) 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/CSA 60335-2-40-2019"; 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."

(23) 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/CSA 60335-2-40-2019"; 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."

(24) In 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 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.

(a) (i) (A) Table 4.4.4.1(1) SEER2 and HSPF2 Conversion Factors3.

Equipment Type	SEER2/SEER	EER/EER4	HSPF/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

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

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

[~~(25)~~] (26) In 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."

[~~(26)~~] (27) (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 [~~(22)(a)~~] (27)(a) is not required.

Section 9. Section **15A-3-401** is amended to read:

15A-3-401. General provisions.

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

(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 units air barrier are all direct-vent or use a mechanical draft venting system."

(3) 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."

[~~(3)~~] (4) In IMC, Section 1004.3.1, the word "unlisted" is inserted before the word "boilers".

[~~(4)~~] (5) In IMC, Section 1209.3, the following words are added at the end of the section: "or other methods approved for the application."

Section 10. Section **15A-3-701** is amended to read:

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 and N1102.1.3 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."

[~~(3)~~] (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: "Total Energy Transmittance values may be substituted for SHGC, and Luminous Transmission values may be substituted for VT."

(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 RESCheck 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"."~~]

[~~(5) In IECC, Table R402.2, in the column entitled 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, for gas, 90 AFUE, or, for oil, 84 AFUE, and all other component requirements are met."~~]

(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; 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 0.033;

(ii) in the row titled "Climate Zone 5 and Marine 4" delete 0.024 and replace it with 0.030; and

(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" delete 0.045 and replace it with 0.065; and

(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; and

(ii) in the row titled "Climate Zone 6" delete 0.50 and replace it with0.065; 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 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" 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; and

(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 19+Oci or 13+5ci or 0+15ci"; and

(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"; and

(ii) 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:

(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 or 0 + 11ci or 11 +5ci"; and

(ii) in the row titled Climate Zone 6 delete all values and replace with "19 + Oci or 0 + 13ci or 0 + 11 + 5 ci"; 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."

[~~(6)~~] (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-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) 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.

[~~(7)~~] (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 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, provided the home attains a blower door test < 2.5ACH."

(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."

(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 [~~last sentence is~~] second and the last sentences are deleted and replaced with the following: "Where [~~allowed~~] required by the code official, the builder [~~may~~] shall certify compliance [~~to components criteria for items which may not be inspected during regularly scheduled inspections~~] with criteria indicated in Table R1102.4.1 for items which are not readily visible during regularly scheduled inspections."

[~~(9)~~] (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."

(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:

[~~(c) In the third sentence, the word "third" is deleted.~~]

[~~(d) The following sentence is inserted after the third sentence:~~] "The following parties

shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed contractors who have completed training provided by Blower Door Test equipment manufacturers or other comparable training."

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

[~~(10) 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."~~]

[~~(11) In IECC, Section R403.3.3, the following is added after the exception:~~]

[~~"The following parties shall be approved to conduct testing:~~]

[~~1. Parties certified by BPI or RESNET.~~]

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

[~~(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.~~]

(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; and

(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."

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

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

[~~(13)~~] (24) 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:

(i) Parties certified by BPT or RESNET

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

[~~(14) In IECC, Section R403.5.3, Subsection 5 is deleted and Subsections 6 and 7 are renumbered.~~]

(25) 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 number113.3 is changed to 141; and

(c) Subsection 3 is deleted.

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

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

[~~(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"

"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"

[~~(17) In IECC, Section R406.5, the table is deleted and replaced with the following:~~]

[~~"TABLE R406.5~~]

[~~MAXIMUM ENERGY RATING INDEX~~]

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

[~~(18)~~] (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."

(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 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 Subsection 3 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 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 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"; and

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

(43) In IECC, Section R408 is deleted.

(44) 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"

Section 11. Section **15A-3-801** is amended to read:

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 Section 202, the following definition is added: "BUILDING OFFICIAL. See Code Official."

[~~(2)~~] (3) In 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."

[~~(3)~~] (4) In 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."

[~~(4)~~] (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 Section 301.3, the exception is deleted.

[~~(5)~~] (7) 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."

[~~(6)~~] (8) 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."

[~~(7)~~] (9) 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."

[~~(8)~~] (10) 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 of this code unless an evaluation demonstrates compliance of such items."

[~~(9)~~] (11) 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."

[~~(10)~~] (12) (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."

(b) Section 1006.3, exceptions 1 through 3 remain unchanged.

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

"5. Where the design occupant load increase is less than 25 occupants and the occupancy category does not change."

[~~(11)~~] (13) In Section [~~1012.7.3~~] 1011.7.3, exception 2 is deleted.

Section 12. Section **58-55-102** is amended to read:

58-55-102. Definitions.

In addition to the definitions in Section 58-1-102, as used in this chapter:

(1) (a) "Alarm business" or "alarm company" means a person engaged in the sale, installation, maintenance, alteration, repair, replacement, servicing, or monitoring of an alarm system, except as provided in Subsection (1)(b).

(b) "Alarm business" or "alarm company" does not include:

(i) a person engaged in the manufacture or sale of alarm systems unless:

(A) that person is also engaged in the installation, maintenance, alteration, repair, replacement, servicing, or monitoring of alarm systems;

(B) the manufacture or sale occurs at a location other than a place of business established by the person engaged in the manufacture or sale; or

(C) the manufacture or sale involves site visits at the place or intended place of installation of an alarm system; or

(ii) an owner of an alarm system, or an employee of the owner of an alarm system who is engaged in installation, maintenance, alteration, repair, replacement, servicing, or monitoring of the alarm system owned by that owner.

(2) "Alarm company agent":

(a) except as provided in Subsection (2)(b), means any individual employed within this state by an alarm business; and

(b) does not include an individual who:

(i) is not engaged in the sale, installation, maintenance, alteration, repair, replacement, servicing, or monitoring of an alarm system; and

(ii) does not, during the normal course of the individual's employment with an alarm business, use or have access to sensitive alarm system information.

(3) "Alarm company officer" means:

(a) a governing person, as defined in Section 48-3a-102, of an alarm company;

(b) an individual appointed as an officer of an alarm company that is a corporation in accordance with Section 16-10a-830;

(c) a general partner, as defined in Section 48-2e-102, of an alarm company; or

(d) a partner, as defined in Section 48-1d-102, of an alarm company.

(4) "Alarm company owner" means:

(a) a shareholder, as defined in Section 16-10a-102, who owns directly, or indirectly through an entity controlled by the individual, 5% or more of the outstanding shares of an alarm company that:

(i) is a corporation; and

(ii) is not publicly listed or traded; or

(b) an individual who owns directly, or indirectly through an entity controlled by the individual, 5% or more of the equity of an alarm company that is not a corporation.

(5) "Alarm company proprietor" means the sole proprietor of an alarm company that is registered as a sole proprietorship with the Division of Corporations and Commercial Code.

(6) "Alarm company trustee" means an individual with control of or power of administration over property held in trust.

(7) (a) "Alarm system" means equipment and devices assembled for the purpose of:

(i) detecting and signaling unauthorized intrusion or entry into or onto certain

premises; or

(ii) signaling a robbery or attempted robbery on protected premises.

(b) "Alarm system" includes a battery-charged suspended-wire system or fence that is part of and interfaces with an alarm system for the purposes of detecting and deterring unauthorized intrusion or entry into or onto certain premises.

(8) "Apprentice electrician" means a person licensed under this chapter as an apprentice electrician who is learning the electrical trade under the immediate supervision of a master electrician, residential master electrician, a journeyman electrician, or a residential journeyman electrician.

(9) "Apprentice plumber" means a person licensed under this chapter as an apprentice plumber who is learning the plumbing trade under the immediate supervision of a master plumber, residential master plumber, journeyman plumber, or a residential journeyman plumber.

(10) "Approved continuing education" means instruction provided through courses under a program established under Subsection 58-55-302.5(2).

(11) (a) "Approved prelicensure course provider" means a provider that is the Associated General Contractors of Utah, the Utah Chapter of the Associated Builders and Contractors, or the Utah Home Builders Association, and that meets the requirements established by rule by the commission with the concurrence of the director, to teach the 25-hour course described in Subsection 58-55-302(1)(e)(iii).

(b) "Approved prelicensure course provider" may only include a provider that, in addition to any other locations, offers the 25-hour course described in Subsection 58-55-302(1)(e)(iii) at least six times each year in one or more counties other than Salt Lake County, Utah County, Davis County, or Weber County.

(12) "Board" means the Electrician Licensing Board, Alarm System Security and Licensing Board, or Plumbers Licensing Board created in Section 58-55-201.

(13) "Combustion system" means an assembly consisting of:

(a) piping and components with a means for conveying, either continuously or intermittently, natural gas from the outlet of the natural gas provider's meter to the burner of the appliance;

(b) the electric control and combustion air supply and venting systems, including air

ducts; and

(c) components intended to achieve control of quantity, flow, and pressure.

(14) "Commission" means the Construction Services Commission created under Section 58-55-103.

(15) "Construction trade" means any trade or occupation involving:

(a) (i) construction, alteration, remodeling, repairing, wrecking or demolition, addition to, or improvement of any building, highway, road, railroad, dam, bridge, structure, excavation or other project, development, or improvement to other than personal property; and

(ii) constructing, remodeling, or repairing a manufactured home or mobile home as defined in Section 15A-1-302; or

(b) installation or repair of a residential or commercial natural gas appliance or combustion system.

(16) "Construction trades instructor" means a person licensed under this chapter to teach one or more construction trades in both a classroom and project environment, where a project is intended for sale to or use by the public and is completed under the direction of the instructor, who has no economic interest in the project.

(17) (a) "Contractor" means any person who for compensation other than wages as an employee undertakes any work in the construction, plumbing, or electrical trade for which licensure is required under this chapter and includes:

(i) a person who builds any structure on the person's own property for the purpose of sale or who builds any structure intended for public use on the person's own property;

(ii) any person who represents that the person is a contractor, or will perform a service described in this Subsection (17) by advertising on a website or social media, or any other means;

(iii) any person engaged as a maintenance person, other than an employee, who regularly engages in activities set forth under the definition of "construction trade";

(iv) any person engaged in, or offering to engage in, any construction trade for which licensure is required under this chapter; or

(v) a construction manager, construction consultant, construction assistant, or any other person who, for a fee:

(A) performs or offers to perform construction consulting;

(B) performs or offers to perform management of construction subcontractors;

(C) provides or offers to provide a list of subcontractors or suppliers; or

(D) provides or offers to provide management or counseling services on a construction project.

(b) "Contractor" does not include:

(i) an alarm company or alarm company agent; or

(ii) a material supplier who provides consulting to customers regarding the design and installation of the material supplier's products.

(18) (a) "Electrical trade" means the performance of any electrical work involved in the installation, construction, alteration, change, repair, removal, or maintenance of facilities, buildings, or appendages or appurtenances.

(b) "Electrical trade" does not include:

(i) transporting or handling electrical materials;

(ii) preparing clearance for raceways for wiring;

(iii) work commonly done by unskilled labor on any installations under the exclusive control of electrical utilities;

(iv) work involving cable-type wiring that does not pose a shock or fire-initiation hazard; or

(v) work involving class two or class three power-limited circuits as defined in the National Electrical Code.

(19) "Elevator" means the same as that term is defined in Section 34A-7-202, except that for purposes of this chapter it does not mean a stair chair, a vertical platform lift, or an incline platform lift.

(20) "Elevator contractor" means a sole proprietor, firm, or corporation licensed under this chapter that is engaged in the business of erecting, constructing, installing, altering, servicing, repairing, or maintaining an elevator.

(21) "Elevator mechanic" means an individual who is licensed under this chapter as an elevator mechanic and who is engaged in erecting, constructing, installing, altering, servicing, repairing, or maintaining an elevator under the immediate supervision of an elevator contractor.

(22) "Employee" means an individual as defined by the division by rule giving consideration to the definition adopted by the Internal Revenue Service and the Department of

Workforce Services.

(23) "Engage in a construction trade" means to:

(a) engage in, represent oneself to be engaged in, or advertise oneself as being engaged in a construction trade; or

(b) use the name "contractor" or "builder" or in any other way lead a reasonable person to believe one is or will act as a contractor.

(24) (a) "Financial responsibility" means a demonstration of a current and expected future condition of financial solvency evidencing a reasonable expectation to the division and the board that an applicant or licensee can successfully engage in business as a contractor without jeopardy to the public health, safety, and welfare.

(b) Financial responsibility may be determined by an evaluation of the total history concerning the licensee or applicant including past, present, and expected condition and record of financial solvency and business conduct.

(25) "Gas appliance" means any device that uses natural gas to produce light, heat, power, steam, hot water, refrigeration, or air conditioning.

(26) (a) "General building contractor" means a person licensed under this chapter as a general building contractor qualified by education, training, experience, and knowledge to perform or superintend construction of structures for the support, shelter, and enclosure of persons, animals, chattels, or movable property of any kind or any of the components of that construction except plumbing, electrical work, mechanical work, work related to the operating integrity of an elevator, and manufactured housing installation, for which the general building contractor shall employ the services of a contractor licensed in the particular specialty, except that a general building contractor engaged in the construction of single-family and multifamily residences up to four units may perform the mechanical work and hire a licensed plumber or electrician as an employee.

(b) The division may by rule exclude general building contractors from engaging in the performance of other construction specialties in which there is represented a substantial risk to the public health, safety, and welfare, and for which a license is required unless that general building contractor holds a valid license in that specialty classification.

(27) (a) "General electrical contractor" means a person licensed under this chapter as a general electrical contractor qualified by education, training, experience, and knowledge to

perform the fabrication, construction, and installation of generators, transformers, conduits, raceways, panels, switch gear, electrical wires, fixtures, appliances, or apparatus that uses electrical energy.

(b) The scope of work of a general electrical contractor may be further defined by rules made by the commission, with the concurrence of the director, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act.

(28) (a) "General engineering contractor" means a person licensed under this chapter as a general engineering contractor qualified by education, training, experience, and knowledge to perform or superintend construction of fixed works or components of fixed works requiring specialized engineering knowledge and skill in any of the following:

(i) irrigation;

(ii) drainage;

(iii) water power;

(iv) water supply;

(v) flood control;

(vi) an inland waterway;

(vii) a harbor;

(viii) a railroad;

(ix) a highway;

(x) a tunnel;

(xi) an airport;

(xii) an airport runway;

(xiii) a sewer;

(xiv) a bridge;

(xv) a refinery;

(xvi) a pipeline;

(xvii) a chemical plant;

(xviii) an industrial plant;

(xix) a pier;

(xx) a foundation;

(xxi) a power plant; [~~or~~]

(xxii) a utility plant or installation[~~.~~]; or

(xxiii) electric utility piping.

(b) A general engineering contractor may not perform or superintend:

(i) construction of a structure built primarily for the support, shelter, and enclosure of persons, animals, and chattels; or

(ii) performance of:

(A) plumbing work;

(B) electrical work beyond electric utility piping; or

(C) mechanical work.

(29) (a) "General plumbing contractor" means a person licensed under this chapter as a general plumbing contractor qualified by education, training, experience, and knowledge to perform the fabrication or installation of material and fixtures to create and maintain sanitary conditions in a building by providing permanent means for a supply of safe and pure water, a means for the timely and complete removal from the premises of all used or contaminated water, fluid and semi-fluid organic wastes and other impurities incidental to life and the occupation of such premises, and a safe and adequate supply of gases for lighting, heating, and industrial purposes.

(b) The scope of work of a general plumbing contractor may be further defined by rules made by the commission, with the concurrence of the director, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act.

(30) "Immediate supervision" means reasonable direction, oversight, inspection, and evaluation of the work of a person:

(a) as the division specifies in rule;

(b) by, as applicable, a qualified electrician or plumber;

(c) as part of a planned program of training; and

(d) to ensure that the end result complies with applicable standards.

(31) "Individual" means a natural person.

(32) "Journeyman electrician" means a person licensed under this chapter as a journeyman electrician having the qualifications, training, experience, and knowledge to wire, install, and repair electrical apparatus and equipment for light, heat, power, and other purposes.

(33) "Journeyman plumber" means a person licensed under this chapter as a

journeyman plumber having the qualifications, training, experience, and technical knowledge to engage in the plumbing trade.

(34) "Master electrician" means a person licensed under this chapter as a master electrician having the qualifications, training, experience, and knowledge to properly plan, layout, and supervise the wiring, installation, and repair of electrical apparatus and equipment for light, heat, power, and other purposes.

(35) "Master plumber" means a person licensed under this chapter as a master plumber having the qualifications, training, experience, and knowledge to properly plan and layout projects and supervise persons in the plumbing trade.

(36) "Person" means a natural person, sole proprietorship, joint venture, corporation, limited liability company, association, or organization of any type.

(37) (a) "Plumbing trade" means the performance of any mechanical work pertaining to the installation, alteration, change, repair, removal, maintenance, or use in buildings, or within three feet beyond the outside walls of buildings, of pipes, fixtures, and fittings for the:

(i) delivery of the water supply;

(ii) discharge of liquid and water carried waste;

(iii) building drainage system within the walls of the building; and

(iv) delivery of gases for lighting, heating, and industrial purposes.

(b) "Plumbing trade" includes work pertaining to the water supply, distribution pipes, fixtures and fixture traps, soil, waste and vent pipes, the building drain and roof drains, and the safe and adequate supply of gases, together with their devices, appurtenances, and connections where installed within the outside walls of the building.

(38) "Ratio of apprentices" means the number of licensed plumber apprentices or licensed electrician apprentices that are allowed to be under the immediate supervision of a licensed supervisor as established by the provisions of this chapter and by rules made by the commission, with the concurrence of the director, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act.

(39) "Residential and small commercial contractor" means a person licensed under this chapter as a residential and small commercial contractor qualified by education, training, experience, and knowledge to perform or superintend the construction of single-family residences, multifamily residences up to four units, and commercial construction of not more

than three stories above ground and not more than 20,000 square feet, or any of the components of that construction except plumbing, electrical work, mechanical work, and manufactured housing installation, for which the residential and small commercial contractor shall employ the services of a contractor licensed in the particular specialty, except that a residential and small commercial contractor engaged in the construction of single-family and multifamily residences up to four units may perform the mechanical work and hire a licensed plumber or electrician as an employee.

(40) "Residential building," as it relates to the license classification of residential journeyman plumber and residential master plumber, means a single or multiple family dwelling of up to four units.

(41) (a) "Residential electrical contractor" means a person licensed under this chapter as a residential electrical contractor qualified by education, training, experience, and knowledge to perform the fabrication, construction, and installation of services, disconnecting means, grounding devices, panels, conductors, load centers, lighting and plug circuits, appliances, and fixtures in a residential unit.

(b) The scope of work of a residential electrical contractor may be further defined by rules made by the commission, with the concurrence of the director, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act.

(42) "Residential journeyman electrician" means a person licensed under this chapter as a residential journeyman electrician having the qualifications, training, experience, and knowledge to wire, install, and repair electrical apparatus and equipment for light, heat, power, and other purposes on buildings using primarily nonmetallic sheath cable.

(43) "Residential journeyman plumber" means a person licensed under this chapter as a residential journeyman plumber having the qualifications, training, experience, and knowledge to engage in the plumbing trade as limited to the plumbing of residential buildings.

(44) "Residential master electrician" means a person licensed under this chapter as a residential master electrician having the qualifications, training, experience, and knowledge to properly plan, layout, and supervise the wiring, installation, and repair of electrical apparatus and equipment for light, heat, power, and other purposes on residential projects.

(45) "Residential master plumber" means a person licensed under this chapter as a residential master plumber having the qualifications, training, experience, and knowledge to

properly plan and layout projects and supervise persons in the plumbing trade as limited to the plumbing of residential buildings.

(46) (a) "Residential plumbing contractor" means a person licensed under this chapter as a residential plumbing contractor qualified by education, training, experience, and knowledge to perform the fabrication or installation of material and fixtures to create and maintain sanitary conditions in residential buildings by providing permanent means for a supply of safe and pure water, a means for the timely and complete removal from the premises of all used or contaminated water, fluid and semi-fluid organic wastes and other impurities incidental to life and the occupation of such premises, and a safe and adequate supply of gases for lighting, heating, and residential purposes.

(b) The scope of work of a residential plumbing contractor may be further defined by rules made by the commission, with the concurrence of the director, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act.

(47) "Residential project," as it relates to an electrician or electrical contractor, means buildings primarily wired with nonmetallic sheathed cable, in accordance with standard rules and regulations governing this work, including the National Electrical Code, and in which the voltage does not exceed 250 volts line to line and 125 volts to ground.

(48) "Responsible management personnel" means:

(a) a qualifying agent;

(b) an operations manager; or

(c) a site manager.

(49) "Sensitive alarm system information" means:

(a) a pass code or other code used in the operation of an alarm system;

(b) information on the location of alarm system components at the premises of a customer of the alarm business providing the alarm system;

(c) information that would allow the circumvention, bypass, deactivation, or other compromise of an alarm system of a customer of the alarm business providing the alarm system; and

(d) any other similar information that the division by rule determines to be information that an individual employed by an alarm business should use or have access to only if the individual is licensed as provided in this chapter.

(50) (a) "Specialty contractor" means a person licensed under this chapter under a specialty contractor classification established by rule, who is qualified by education, training, experience, and knowledge to perform those construction trades and crafts requiring specialized skill, the regulation of which are determined by the division to be in the best interest of the public health, safety, and welfare.

(b) A specialty contractor may perform work in crafts or trades other than those in which the specialty contractor is licensed if they are incidental to the performance of the specialty contractor's licensed craft or trade.

(51) "Unincorporated entity" means an entity that is not:

(a) an individual;

(b) a corporation; or

(c) publicly traded.

(52) "Unlawful conduct" means the same as that term is defined in Sections 58-1-501 and 58-55-501.

(53) "Unprofessional conduct" means the same as that term is defined in Sections 58-1-501 and 58-55-502 and as may be further defined by rule.

(54) "Wages" means amounts due to an employee for labor or services whether the amount is fixed or ascertained on a time, task, piece, commission, or other basis for calculating the amount.

Section 13. Section **63N-3-13** is enacted to read:

63N-3-13. Mass Timber Construction Program.

(1) A for-profit business may apply to receive a subordinate, low-interest loan from the restricted account, described in Section 63N-3-103, for a mass timber construction project in the state.

(2) In accordance with this section and in consultation with the GO Utah board, the administrator may loan up to ten percent of the total hard costs of the mass timber project, not to exceed $5,000,000.

(3) The administrator shall designate an application process for a business to apply for the loan.

(4) To apply for the loan, a borrower shall:

(a) meet the requirements described in Section 63N-3-105;

(b) demonstrate that the building will have a floor height of at least 75 feet and that at least 75% of the approved building height will be structurally supported by mass timber;

(c) provide an economic analysis report that states the economic benefit and impact to the state; and

(d) create an on-site training program to provide apprenticeship positions for Utah based apprentices that are a part of the mass timber development throughout the construction cycle.

(5) "The Go Utah Board" will establish the loan terms.

(6) Money loaned under this section shall be deducted from any other money or incentive awarded by the office to the business.

Section 14. **Repealer.**

This bill repeals:

Section **15A-6-101, Title.**

Section **15A-6-102, Nitrogen Oxide emission limits for natural gas-fired water heaters.**

Section 15. **Effective date.**

This bill takes effect on May 1, 2024.