Part 7
Statewide Amendments to International Energy Conservation Code

15A-3-701 General provisions.

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

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

(2) In IECC, Section R102.1.1, a new section R102.1.1 is added as follows: "R102.1.1 National Green Building Standard complying with ICC 700-2020 National Green Building Standard and achieving the Gold rating level for the energy efficiency category shall be deemed to exceed the energy efficiency required by this code. The building shall also meet the requirements identified in table N1105.2 and the building thermal envelope efficiency is greater than or equal to levels of efficiency and solar heat gain coefficients (SHGC) in Tables N1102.2.2 and N1102.1.3 of the 2009 IRC."

(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 for building permits shall include only those items specified in 10-5-132(8) of the Utah Municipal Code."

(4) In IECC, Section R303.1.3, the following changes are made:

(a) The following is added at the end of the first sentence: "or EN 14351-1:2006+A1:2010."

(b) The word "accredited" is replaced with "approved" in the third sentence.

(c) The following sentence is added after the third sentence: "A conversion factor of 5.678 shall be used to convert from U values expressed in SI units: ()/53678=."

(d) After "NFRC 200" the following words are added: "or EN 14351-1:2006+A1:2010", and in the sentence the word "accredited" is replaced with the word "approved".

(e) The following new sentence shall be inserted immediately prior to the last sentence: "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.

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

(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 0.030;

(ii) in the row titled "Climate Zone 5 and Marine 4", delete 0.024 and replace it with 0.026; and

(iii) in the row titled "Climate Zone 6", delete 0.024 and replace it with 0.026;

(d) in the column titled "Wood Frame Wall U Factor", the following changes are made:

(i) in the row titled "Climate Zone 3", delete 0.060 and replace it with 0.060;

(ii) in the row titled "Climate Zone 5 and Marine 4", delete 0.045 and replace it with 0.060; and

(iii) in the row titled "Climate Zone 6", delete 0.045 and replace it with 0.060;

(e) in the column titled "Basement wall U-Factor", the following changes are made:

(i) in the row titled "Climate Zone 5 and Marine 4", delete 0.050 and replace it with 0.075; and
(ii) in the row titled "Climate Zone 6", delete 0.50 and replace it with 0.065; and
(f) in the column titled "Crawl Space Wall U-Factor", the following changes are made:
(i) in the row titled "Climate Zone 5 and Marine 4", delete 0.055 and replace it with 0.078; and
(ii) in the row titled "Climate Zone 6", delete 0.55 and replace it with 0.065.
(10) In IECC, Table R402.1.3, the following changes are made:
(a) in the column titled "Fenestration U-Factor", the following changes are made:
(i) in the row titled "Climate Zone 3", delete 0.30 and replace it with 0.32;
(ii) in the row titled "Climate Zone 5 and Marine 4", delete 0.30 and replace it with 0.32; and
(iii) in the row titled "Climate Zone 6", delete 0.30 and replace it with 0.32;
(b) in the column titled "Glazed Fenestration SHGC", the following change is made: in the row titled "Climate Zone 3" delete 0.25 and replace it with 0.35;
(c) in the column R-Value the following changes are made:
(i) in the row titled "Climate Zone 3", delete 49 and replace it with 38;
(ii) in the row titled "Climate Zone 5 and Marine 4", delete 60 and replace it with 49; and
(iii) in the row titled "Climate Zone 6", delete 60 and replace it with 49;
(d) in the column titled "Wood Frame Wall R-Value", the following changes are made:
(i) in the row titled "Climate Zone 3", delete all values and replace with "20+Oci or 13+5ci or 0+15ci";
(ii) in the row titled "Climate Zone 5 or Marine 4", delete all values and replace with "21+Oci or 15+5ci or 0+15ci"; and
(iii) in the row titled "Climate Zone 6", delete all values and replace with "21+Oci or 15+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+5ci"; and
(h) in IECC, Table R402.2, in the column titled "MASS WALL R-VALUE", a new footnote "j" is added as follows: "j Log walls complying with ICC400 and with a minimum average wall thickness of 5 inches or greater shall be permitted in "Zones 5 through 8" when overall window glazing has a .31 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil), and all other component requirements are met."
(11) 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.

(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".

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

(17) 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 fourth sentence, the word "third" is deleted.

(b) The following sentence is added after the fourth sentence:"The following parties shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed contractors who

have completed training provided by Blower Door Test equipment manufacturers or other comparable training."

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

(19) 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) In 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.

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

(a) a second Exception is added as follows: "A duct leakage test shall not be required for any system designed such that no air handlers or ducts are located within unconditioned attics."

(b) the following is added at the end of the section: "The following parties shall be approved to conduct testing:

(i) Parties certified by BPT or RESNET

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

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

(a) in Subsection 1:

(i) the number 4.0 is changed to 6.0;

(ii) the number 113.3 is changed to 170;

(iii) the number 3.0 is changed to 5.0; and

(iv) the number 85 is changed to 141;

(b) in Subsection 2:

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

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

(c) Subsection 3 is deleted.

(26) 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.

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

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

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

"TABLE R403.6.2"

"MECHANICAL VENTILATION SYSTEM FAN EFFICACY"

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM (CFM)
HRV or ERV	Any	1.2 cfm/watt	Any
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	90
Bathroom, utility room	90	2.8 cfm/watt	Any"

(30) In 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) In IECC, Section R404.1.1 is deleted.

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

(36) In 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 R406.3.2 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.

(a)

(i)

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

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

Amended by Chapter 505, 2024 General Session