BUILDING CODE REVISIONS

2023 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Calvin R. Musselman

Senate Sponsor: Curtis S. Bramble

LONG TITLE

General Description:

This bill modifies construction and fire codes under Title 15A, State Construction and Fire Codes Act.

Highlighted Provisions:

This bill:

- adopts, with certain statewide amendments, the International Code Council's 2021 edition of the:
  - International Building Code, including Appendices C and J;
  - certain International Residential Code, including Appendices AE and AQ;
  - International Plumbing Code;
  - International Mechanical Code;
  - International Fuel Gas Code;
  - commercial provisions of the International Energy Conservation Code;
  - International Existing Building Code; and
  - International Swimming Pool and Spa Code; and
- makes technical and conforming changes.

Money Appropriated in this Bill:

None

Other Special Clauses:

This bill provides a special effective date.

Utah Code Sections Affected:

AMENDS:

15A-1-204, as last amended by Laws of Utah 2021, First Special Session, Chapter 3

15A-1-403, as last amended by Laws of Utah 2021, Chapter 199

15A-2-103, as last amended by Laws of Utah 2021, Chapter 199

15A-2-104, as last amended by Laws of Utah 2016, Chapter 249

15A-2-105, as enacted by Laws of Utah 2011, Chapter 14

15A-3-102, as last amended by Laws of Utah 2019, Chapter 20

15A-3-103, as last amended by Laws of Utah 2020, Chapters 243, 441

15A-3-104, as last amended by Laws of Utah 2019, Chapter 20

15A-3-105, as last amended by Laws of Utah 2019, Chapter 20

15A-3-107, as last amended by Laws of Utah 2019, Chapter 20

15A-3-108, as last amended by Laws of Utah 2016, Chapter 249

15A-3-112, as last amended by Laws of Utah 2020, Chapter 441

15A-3-202, as last amended by Laws of Utah 2022, Chapter 28

15A-3-203, as last amended by Laws of Utah 2022, Chapter 28

15A-3-204, as last amended by Laws of Utah 2021, Chapter 102

15A-3-205, as last amended by Laws of Utah 2022, Chapter 28

15A-3-206, as last amended by Laws of Utah 2022, Chapter 28

15A-3-302, as last amended by Laws of Utah 2019, Chapter 20

15A-3-303, as last amended by Laws of Utah 2019, Chapter 20

15A-3-304, as last amended by Laws of Utah 2020, Chapter 441

15A-3-306, as last amended by Laws of Utah 2022, Chapter 28

15A-3-309, as last amended by Laws of Utah 2013, Chapter 297

15A-3-310, as last amended by Laws of Utah 2019, Chapter 20

15A-3-313, as last amended by Laws of Utah 2020, Chapter 441

15A-3-315, as enacted by Laws of Utah 2016, Chapter 249

15A-3-402, as last amended by Laws of Utah 2022, Chapters 28, 415

15A-3-601, as last amended by Laws of Utah 2021, Chapter 199

15A-3-701, as last amended by Laws of Utah 2019, Chapter 20

15A-3-801, as last amended by Laws of Utah 2020, Chapter 441

15A-3-1001, as enacted by Laws of Utah 2020, Chapter 441

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

Section 1. Section **15A-1-204** is amended to read:

15A-1-204. Adoption of State Construction Code -- Amendments by commission -- Approved codes -- Exemptions.

(1) (a) The State Construction Code is the construction codes adopted with any modifications in accordance with this section that the state and each political subdivision of the state shall follow.

(b) A person shall comply with the applicable provisions of the State Construction Code when:

(i) new construction is involved; and

(ii) the owner of an existing building, or the owner's agent, is voluntarily engaged in:

(A) the repair, renovation, remodeling, alteration, enlargement, rehabilitation, conservation, or reconstruction of the building; or

(B) changing the character or use of the building in a manner that increases the occupancy loads, other demands, or safety risks of the building.

(c) On and after July 1, 2010, the State Construction Code is the State Construction Code in effect on July 1, 2010, until in accordance with this section:

(i) a new State Construction Code is adopted; or

(ii) one or more provisions of the State Construction Code are amended or repealed in accordance with this section.

(d) A provision of the State Construction Code may be applicable:

(i) to the entire state; or

(ii) within a county, city, or town.

(2) (a) The Legislature shall adopt a State Construction Code by enacting legislation that adopts a nationally recognized construction code with any modifications.

(b) Legislation described in Subsection (2)(a) shall state that the legislation takes effect on the July 1 after the day on which the legislation is enacted, unless otherwise stated in the legislation.

(c) Subject to Subsection (6), a State Construction Code adopted by the Legislature is the State Construction Code until, in accordance with this section, the Legislature adopts a new State Construction Code by:

(i) adopting a new State Construction Code in its entirety; or

(ii) amending or repealing one or more provisions of the State Construction Code.

(3) (a) Except as provided in Subsection (3)(b), for each update of a nationally recognized construction code, the commission shall prepare a report described in Subsection (4).

(b) For the provisions of a nationally recognized construction code that apply only to detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with separate means of egress and their accessory structures, the commission shall prepare a report described in Subsection (4) in 2022 and, thereafter, for every second update of the nationally recognized construction code.

(4) (a) In accordance with Subsection (3), on or before September 1 of the year after the year designated in the title of a nationally recognized construction code, the commission shall prepare and submit, in accordance with Section 68-3-14, a written report to the Business and Labor Interim Committee that:

(i) states whether the commission recommends the Legislature adopt the update with any modifications; and

(ii) describes the costs and benefits of each recommended change in the update or in any modification.

(b) After the Business and Labor Interim Committee receives the report described in Subsection (4)(a), the Business and Labor Interim Committee shall:

(i) study the recommendations; and

(ii) if the Business and Labor Interim Committee decides to recommend legislative action to the Legislature, prepare legislation for consideration by the Legislature in the next general session.

(5) (a) (i) The commission shall, by no later than September 1 of each year in which the commission is not required to submit a report described in Subsection (4), submit, in accordance with Section 68-3-14, a written report to the Business and Labor Interim Committee recommending whether the Legislature should amend or repeal one or more provisions of the State Construction Code.

(ii) As part of a recommendation described in Subsection (5)(a)(i), the commission shall describe the costs and benefits of each proposed amendment or repeal.

(b) The commission may recommend legislative action related to the State Construction Code:

(i) on the commission's own initiative;

(ii) upon the recommendation of the division; or

(iii) upon the receipt of a request by one of the following that the commission recommend legislative action related to the State Construction Code:

(A) a local regulator;

(B) a state regulator;

(C) a state agency involved with the construction and design of a building;

(D) the Construction Services Commission;

(E) the Electrician Licensing Board;

(F) the Plumbers Licensing Board; or

(G) a recognized construction-related association.

(c) If the Business and Labor Interim Committee decides to recommend legislative

action to the Legislature, the Business and Labor Interim Committee shall prepare legislation for consideration by the Legislature in the next general session.

(6) (a) Notwithstanding the provisions of this section, the commission may, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, amend the State Construction Code if the commission determines that waiting for legislative action in the next general legislative session would:

(i) cause an imminent peril to the public health, safety, or welfare; or

(ii) place a person in violation of federal or other state law.

(b) If the commission amends the State Construction Code in accordance with this Subsection (6), the commission shall file with the division:

(i) the text of the amendment to the State Construction Code; and

(ii) an analysis that includes the specific reasons and justifications for the commission's findings.

(c) If the State Construction Code is amended under this Subsection (6), the division shall:

(i) publish the amendment to the State Construction Code in accordance with Section 15A-1-205; and

(ii) prepare and submit, in accordance with Section 68-3-14, a written notice to the Business and Labor Interim Committee containing the amendment to the State Construction Code, including a copy of the commission's analysis described in Subsection (6)(b)(ii).

(d) If not formally adopted by the Legislature at the next annual general session, an amendment to the State Construction Code under this Subsection (6) is repealed on the July 1 immediately following the next annual general session that follows the adoption of the amendment.

(7) (a) The division, in consultation with the commission, may approve, without adopting, one or more approved codes, including a specific edition of a construction code, for use by a compliance agency.

(b) If the code adopted by a compliance agency is an approved code described in Subsection (7)(a), the compliance agency may:

(i) adopt an ordinance requiring removal, demolition, or repair of a building;

(ii) adopt, by ordinance or rule, a dangerous building code; or

(iii) adopt, by ordinance or rule, a building rehabilitation code.

(8) Except as provided in Subsections (6), (7), (9), and (10), or as expressly provided in state law, a state executive branch entity or political subdivision of the state may not, after December 1, 2016, adopt or enforce a rule, ordinance, or requirement that applies to a subject specifically addressed by, and that is more restrictive than, the State Construction Code.

(9) A state executive branch entity or political subdivision of the state may:

(a) enforce a federal law or regulation;

(b) adopt or enforce a rule, ordinance, or requirement if the rule, ordinance, or requirement applies only to a facility or construction owned or used by a state entity or a political subdivision of the state; or

(c) enforce a rule, ordinance, or requirement:

(i) that the state executive branch entity or political subdivision adopted or made effective before July 1, 2015; and

(ii) for which the state executive branch entity or political subdivision can demonstrate, with substantial evidence, that the rule, ordinance, or requirement is necessary to protect an individual from a condition likely to cause imminent injury or death.

(10) The Department of Health and Human Services or the Department of Environmental Quality may enforce a rule or requirement adopted before January 1, 2015.

(11) (a) Except as provided in Subsection (11)(b), a structure used solely in conjunction with agriculture use, and not for human occupancy, or a structure that is no more than 1,500 square feet and used solely for the type of sales described in Subsection 59-12-104(20), is exempt from the requirements of the State Construction Code.

(b) (i) Unless exempted by a provision other than Subsection (11)(a), a plumbing,

electrical, and mechanical permit may be required when that work is included in a structure described in Subsection (11)(a).

(ii) Unless located in whole or in part in an agricultural protection area created under Title 17, Chapter 41, Agriculture, Industrial, or Critical Infrastructure Materials Protection Areas, a structure described in Subsection (11)(a) is not exempt from a permit requirement if the structure is located on land that is:

(A) within the boundaries of a city or town, and less than five contiguous acres; or

(B) within a subdivision for which the county has approved a subdivision plat under Title 17, Chapter 27a, Part 6, Subdivisions, and less than two contiguous acres.

(12) (a) A remote yurt is exempt from the State Construction Code including the permit requirements of the State Construction Code.

(b) Notwithstanding Subsection (12)(a), a county may by ordinance require remote yurts to comply with the State Construction Code, if the ordinance requires the remote yurts to comply with all of the following:

(i) the State Construction Code;

(ii) notwithstanding Section 15A-5-104, the State Fire Code; and

(iii) notwithstanding Section 19-5-125, Title 19, Chapter 5, Water Quality Act, rules made under that chapter, and local health department's jurisdiction over onsite wastewater disposal.

Section 2. Section **15A-1-403** is amended to read:

15A-1-403. Adoption of State Fire Code.

(1) (a) The State Fire Code is:

(i) a code promulgated by a nationally recognized code authority that is adopted by the Legislature under this section with any modifications; and

(ii) a code to which cities, counties, fire protection districts, and the state shall adhere in safeguarding life and property from the hazards of fire and explosion.

(b) On and after July 1, 2010, the State Fire Code is the State Fire Code in effect on

July 1, 2010, until in accordance with this section:

(i) a new State Fire Code is adopted; or

(ii) one or more provisions of the State Fire Code are amended or repealed in accordance with this section.

(c) A provision of the State Fire Code may be applicable:

(i) to the entire state; or

(ii) within a city, county, or fire protection district.

(2) (a) The Legislature shall adopt a State Fire Code by enacting legislation that adopts a nationally recognized fire code with any modifications.

(b) Legislation described in Subsection (2)(a) shall state that the legislation takes effect on the July 1 after the day on which the legislation is enacted, unless otherwise stated in the legislation.

(c) Subject to Subsection (6), a State Fire Code adopted by the Legislature is the State Fire Code until in accordance with this section the Legislature adopts a new State Fire Code by:

(i) adopting a new State Fire Code in its entirety; or

(ii) amending or repealing one or more provisions of the State Fire Code.

(3) (a) Except as provided in Subsection (3)(b), for each update of a nationally recognized fire code, the board shall prepare a report described in Subsection (4).

(b) For the provisions of a nationally recognized fire code that apply only to detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with separate means of egress and their accessory structures, the board shall:

(i) prepare a report described in Subsection (4) in 2021 and, thereafter, for every second update of the nationally recognized fire code; and

(ii) not prepare a report described in Subsection (4) in 2018.

(4) (a) In accordance with Subsection (3), on or before September 1 of the same year as the year designated in the title of an update of a nationally recognized fire code, the board shall prepare and submit, in accordance with Section 68-3-14, a written report to the Business and

Labor Interim Committee that:

(i) states whether the board recommends the Legislature adopt the update with any modifications; and

(ii) describes the costs and benefits of each recommended change in the update or in any modification.

(b) After the Business and Labor Interim Committee receives the report described in Subsection (4)(a), the Business and Labor Interim Committee shall:

(i) study the recommendations; and

(ii) if the Business and Labor Interim Committee decides to recommend legislative action to the Legislature, prepare legislation for consideration by the Legislature in the next general session.

(5) (a) (i) The board shall, by no later than September 1 of each year in which the board is not required to submit a report described in Subsection (4), submit, in accordance with Section 68-3-14, a written report to the Business and Labor Interim Committee recommending whether the Legislature should amend or repeal one or more provisions of the State Fire Code.

(ii) As part of a recommendation described in Subsection (5)(a)(i), the board shall describe the costs and benefits of each proposed amendment or repeal.

(b) The board may recommend legislative action related to the State Fire Code:

(i) on its own initiative; or

(ii) upon the receipt of a request by a city, county, or fire protection district that the board recommend legislative action related to the State Fire Code.

(c) Within 45 days after the day on which the board receives a request under Subsection (5)(b), the board shall direct the division to convene an informal hearing concerning the request.

(d) The board shall conduct a hearing under this section in accordance with the rules of the board.

(e) The board shall decide whether to include the request in the report described in

Subsection (5)(a).

(f) (i) Within 15 days after the day on which the board conducts a hearing, the board shall direct the division to notify the entity that made the request of the board's decision regarding the request.

(ii) The division shall provide the notice:

(A) in writing; and

(B) in a form prescribed by the board.

(g) If the Business and Labor Interim Committee decides to recommend legislative action to the Legislature, the Business and Labor Interim Committee shall prepare legislation for consideration by the Legislature in the next general session that, if passed by the Legislature, would amend or repeal one or more provisions of the State Fire Code.

(6) (a) Notwithstanding the provisions of this section, the board may, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, amend a State Fire Code if the board determines that waiting for legislative action in the next general legislative session would:

(i) cause an imminent peril to the public health, safety, or welfare; or

(ii) place a person in violation of federal or other state law.

(b) If the board amends a State Fire Code in accordance with this Subsection (6), the board shall:

(i) publish the State Fire Code with the amendment; and

(ii) prepare and submit, in accordance with Section 68-3-14, written notice to the Business and Labor Interim Committee of the adoption, including a copy of an analysis by the board identifying specific reasons and justifications for its findings.

(c) If not formally adopted by the Legislature at the next annual general session, an amendment to a State Fire Code adopted under this Subsection (6) is repealed on the July 1 immediately following the next annual general session that follows the adoption of the amendment.

(7) (a) Except as provided in Subsection (7)(b), a legislative body of a political subdivision may enact an ordinance in the political subdivision's fire code that is more restrictive than the State Fire Code:

(i) in order to meet a public safety need of the political subdivision; and

(ii) subject to the requirements of Subsection (7)(c).

(b) Except as provided in Subsections (7)(c), (10), and (11), or as expressly provided in state law, a political subdivision may not, after December 1, 2016, enact or enforce a rule or ordinance that applies to a structure built in accordance with the International Residential Code, as adopted in the State Construction Code, that is more restrictive than the State Fire Code.

(c) (i) Except as provided in Subsection (7)(c)(ii), a political subdivision may adopt:

(A) the appendices of the International Fire Code; and

(B) a fire sprinkler ordinance in accordance with Section 15A-5-203.

(ii) If a political subdivision adopts International Fire Code Appendix B, the political subdivision may not require:

(A) a subdivision of structures built in accordance with the International Residential Code to have a fire flow rate that is greater than 2000 gallons per minute;

(B) an individual structure built in accordance with the International Residential Code to have a fire flow rate that is greater than 2000 gallons per minute; or

(C) a one- or two-family dwelling or a town home to have a fire sprinkler system, except in accordance with Section 15A-5-203.

(d) The board shall submit, in accordance with Section 68-3-14, to the Business and Labor Interim Committee each year with the recommendations submitted in accordance with Subsection (4), recommendations, if any, for legislative action related to an ordinance enacted under this Subsection (7).

(8) Except as provided in Subsections (9), (10), and (11), or as expressly provided in state law, a state executive branch entity may not, after December 1, 2016, adopt or enforce a

rule or requirement that:

(a) is more restrictive than the State Fire Code; and

(b) applies to detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures.

(9) A state government entity may adopt a rule or requirement regarding a residential occupancy that is regulated by:

(a) the State Fire Prevention Board; or

(b) the Department of Health and Human Services[~~; or~~]

[~~(c) the Department of Human Services~~].

(10) A state executive branch entity or political subdivision of the state may:

(a) enforce a federal law or regulation;

(b) adopt or enforce a rule, ordinance, or requirement if the rule, ordinance, or requirement applies only to a facility or construction owned or used by a state entity or a political subdivision of the state; or

(c) enforce a rule, ordinance, or requirement:

(i) that the state executive branch entity or political subdivision adopted or made effective before July 1, 2015; and

(ii) for which the state executive branch entity or political subdivision can demonstrate, with substantial evidence, that the rule, ordinance, or requirement is necessary to protect an individual from a condition likely to cause imminent injury or death.

(11) The Department of Health and Human Services or the Department of Environmental Quality may enforce a rule or requirement adopted before January 1, 2015.

Section 3. 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 [~~2018~~] 2021 edition of the International Building Code, including Appendices C and J, issued by the International Code Council;

(b) [~~the 2015~~] 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;

[~~(c)~~] (d) Appendix [~~Q~~] AQ of the [~~2018~~] 2021 edition of the International Residential Code, issued by the International Code Council;

[~~(d)~~] (e) the [~~2018~~] 2021 edition of the International Plumbing Code, issued by the International Code Council;

[~~(e)~~] (f) the [~~2018~~] 2021 edition of the International Mechanical Code, issued by the International Code Council;

[~~(f)~~] (g) the [~~2018~~] 2021 edition of the International Fuel Gas Code, issued by the International Code Council;

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

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

[~~(i)~~] (j) the commercial provisions of the [~~2018~~] 2021 edition of the International Energy Conservation Code, issued by the International Code Council;

[~~(j)~~] (k) the [~~2018~~] 2021 edition of the International Existing Building Code, issued by the International Code Council;

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

[~~(l)~~] (m) subject to Subsection 15A-2-104(1), Appendix [~~E~~] AE of the [~~2015~~] 2021 edition of the International Residential Code, issued by the International Code Council;

[~~(m)~~] (n) 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;

[~~(n)~~] (o) subject to Subsection (3), for standards and guidelines pertaining to plaster on a historic property, as defined in Section 9-8-302, the U.S. Department of the Interior Secretary's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; and

[~~(o)~~] (p) the residential provisions of the [~~2018~~] 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)(n)~~] (1)(o) 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 4. Section **15A-2-104** is amended to read:

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

(1) The following are the installation standards for manufactured housing for new installations or for existing manufactured or mobile homes that are subject to relocation,

building alteration, remodeling, or rehabilitation in the state:

(a) The manufacturer's installation instruction for the model being installed is the primary standard.

(b) If the manufacturer's installation instruction for the model being installed is not available or is incomplete, the following standards apply:

(i) Appendix E of the [~~2015~~] 2021 edition of the IRC, as issued by the International Code Council for installations defined in Section AE101 of Appendix E; or

(ii) if an installation is beyond the scope of the [~~2015~~] 2021 edition of the IRC as defined in Section AE101 of Appendix E, the 2005 edition of the NFPA 225 Model Manufactured Home Installation Standard, issued by the National Fire Protection Association.

(c) A manufacturer, dealer, or homeowner is permitted to design for unusual installation of a manufactured home not provided for in the manufacturer's standard installation instruction, Appendix E of the [~~2015~~] 2021 edition of the IRC, or the 2005 edition of the NFPA 225, if the design is approved in writing by a professional engineer or architect licensed in Utah.

(d) For a mobile home built before June 15, 1976, the mobile home shall also comply with the additional installation and safety requirements specified in Chapter 3, Part 8, Statewide Amendments to International Existing Building Code.

(2) Pursuant to the HUD Code Section 604(d), a manufactured home may be installed in the state that does not meet the local snow load requirements as specified in Chapter 3, Part 2, Statewide Amendments to International Residential Code, except that the manufactured home shall have a protective structure built over the home that meets the IRC and the snow load requirements under Chapter 3, Part 2, Statewide Amendments to International Residential Code.

Section 5. Section **15A-2-105** is amended to read:

15A-2-105. Scope of application.

(1) To the extent that a construction code adopted under Section 15A-2-103 establishes

a local administrative function or establishes a method of appeal which pursuant to Section 15A-1-207 is designated to be established by the compliance agency:

(a) that provision of the construction code is not included in the State Construction Code; and

(b) a compliance agency may establish provisions to establish a local administrative function or a method of appeal.

(2) (a) To the extent that a construction code adopted under Subsection (1) establishes a provision, standard, or reference to another code that by state statute is designated to be established or administered by another state agency, or a local city, town, or county jurisdiction:

(i) that provision of the construction code is not included in the State Construction Code; and

(ii) the state agency or local government has authority over that provision of the construction code.

(b) Provisions excluded under this Subsection (2) include:

(i) the International Property Maintenance Code;

(ii) the International Private Sewage Disposal Code, authority over which is reserved to the Department of Health and Human Services and the Department of Environmental Quality;

(iii) the International Fire Code, authority over which is reserved to the board, pursuant to Section 15A-1-403;

(iv) a day care provision that is in conflict with Title 26, Chapter 39, Utah Child Care Licensing Act, authority over which is designated to the [~~Utah~~] Department of Health and Human Services; and

(v) a wildland urban interface provision that goes beyond the authority under Section 15A-1-204, for the State Construction Code, authority over which is designated to the Utah Division of Forestry, Fire, and State Lands or to a local compliance agency.

(3) If a construction code adopted under Subsection 15A-2-103(1) establishes a

provision that exceeds the scope described in Chapter 1, Part 2, State Construction Code Administration Act, to the extent the scope is exceeded, the provision is not included in the State Construction Code.

Section 6. Section **15A-3-102** is amended to read:

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

(1) IBC, Section 106, is deleted.

(2) In IBC, Section 110, a new section is added as follows: "[~~110.3.5.1~~] 110.3.13, Weather-resistant exterior wall envelope. An inspection shall be made of the weather-resistant exterior wall envelope as required by Section 1404.2, and flashing as required by Section 1404.4 to prevent water from entering the weather-resistive barrier."

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

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

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

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

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

(8) In IBC, Section 202, the definition for "Approved Source" is modified by adding

the words "or licensed engineer" after the word "official."

[~~(5)~~] (9) In IBC, Section 202, the following definition is added for Assisted Living Facility, Residential Treatment and Support: "ASSISTED LIVING FACILITY, RESIDENTIAL TREATMENT AND SUPPORT. [~~See Residential Treatment/Support Assisted Living Facility, Type I Assisted Living Facility, and Type II Assisted Living Facility."~~] A residential facility that provides a group living environment for four or more residents licensed by the Department of Health and Human Services and provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the physical assistance of another person.

ASSISTED LIVING FACILITY, TYPE I. A residential facility licensed by the Department of Health and Human Services that provides a protected living arrangement, assistance with activities of daily living, and social care to two or more ambulatory, non-restrained persons who are capable of mobility sufficient to exit the facility without the assistance of another person.

ASSISTED LIVING FACILITY, TYPE II. A residential facility licensed by the Department of Health and Human Services that provides an array of coordinated supportive personal and health care services to two or more residents who are:

(i) Physically disabled but able to direct his or her own care; or

(ii) Cognitively impaired or physically disabled but able to evacuate from the facility, or to a zone or area of safety, with the physical assistance of one person.

ASSISTED LIVING FACILITY, LIMITED CAPACITY. A Type I or Type II assisted living facility having two to five residents.

ASSISTED LIVING FACILITY, SMALL. A Type I or Type II assisted living facility having six to sixteen residents.

ASSISTED LIVING FACILITY, LARGE. A Type I or Type II assisted living facility having more than sixteen residents."

[~~(6)~~] (10) In IBC, Section 202, the following definition is added for [~~Foster Care~~

~~Facilities is modified by deleting the word "Foster" and replacing it with the word "Child."~~]

Child Care Facility: "CHILD CARE FACILITY. A facility where care and supervision is provided for four or more children for less than 24 hours a day and for direct or indirect compensation in place of care ordinarily provided in their home."

[~~(7)~~] (11) In IBC, Section 202, the definition for "[~~[F]~~] [A] Record Drawings" is modified by deleting the words "a fire alarm system" and replacing them with "any fire protection system."

[~~(8) In IBC, Section 202, the following definition is added for Residential Treatment/Support Assisted Living Facility: "RESIDENTIAL TREATMENT/SUPPORT ASSISTED LIVING FACILITY. A residential facility that provides a group living environment for four or more residents licensed by the Department of Human Services, and provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the physical assistance of another person."~~]

[~~(9) In IBC, Section 202, the following definition is added for Type I Assisted Living Facility: "TYPE I ASSISTED LIVING FACILITY. A residential facility licensed by the Department of Health that provides a protected living arrangement, assistance with activities of daily living and social care to two or more ambulatory, non-restrained persons who are capable of mobility sufficient to exit the facility without the assistance of another person. Subcategories are:~~]

[~~Limited Capacity: two to five residents;~~]

[~~Small: six to sixteen residents; and~~]

[~~Large: over sixteen residents."~~]

[~~(10) In IBC, Section 202, the following definition is added for Type II Assisted Living Facility: "TYPE II ASSISTED LIVING FACILITY. A residential facility licensed by the Department of Health that provides an array of coordinated supportive personal and health care services to two or more residents who are:~~]

[~~A. Physically disabled but able to direct his or her own care; or~~]

[~~B. Cognitively impaired or physically disabled but able to evacuate from the facility, or to a zone or area of safety, with the physical assistance of one person. Subcategories are:~~]

[~~Limited Capacity: two to five residents;~~]

[~~Small: six to sixteen residents; and~~]

[~~Large: over sixteen residents."~~]

[~~(11) In IBC, Section 305.2, the following changes are made:~~]

[~~(a) delete the words "more than five children older than 2 1/2 years of age" and replace with the words "five or more children 2 years of age or older";~~]

[~~(b) after the word "supervision" insert the words "child care services"; and~~]

[~~(c) add the following sentence at the end of the paragraph: "See Section 429, Day Care, for special requirements for day care."~~]

[~~(12) In IBC, Section 305.2.2 and 305.2.3, the word "five" is deleted and replaced with the word "four" in all places.~~]

[~~(13) A new IBC Section 305.2.4 is added as follows: "305.2.4 Child day care -- residential child care certificate or a license. Areas used for child day care purposes with a residential child care certificate, as described in Utah Administrative Code, R430-50, Residential Certificate Child Care, or a residential child care license, as described in Utah Administrative Code, R430-90, Licensed Family Child Care, may be located in a Group R-2 or R-3 occupancy as provided in Sections 310.3 and 310.4 comply with the International Residential Code in accordance with Section R101.2."~~]

[~~(14) A new IBC Section 305.2.5 is added as follows: "305.2.5 Child care centers. Each of the following areas may be classified as accessory occupancies, if the area complies with Section 508.2:~~]

[~~1. Hourly child care centers, as described in Utah Administrative Code, R381-60, Hourly Child Care Centers;~~]

[~~2. Child care centers, as described in Utah Administrative Code, R381-100, Child Care~~

~~Centers; and~~]

[~~3. Out-of-school-time programs, as described in Utah Administrative Code, R381-70, Out of School Time Child Care Programs."~~]

[~~(15)~~] (12) In IBC, Section 305, Sections 305.2 through 305.2.3 are deleted and replaced with the following:

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

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

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

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

305.2.4 Child day care -- residential child care certificate or a license. Areas used for child day care purposes with a residential child care certificate, as described in Utah Administrative Code, R430-50, Residential Certificate Child Care, or a residential child care license, as described in Utah Administrative Code, R430-90, Licensed Family Child Care, may be located in a Group R-2 or R-3 occupancy as provided in Sections 310.3 and 310.4 or shall comply with the International Residential Code in accordance with Section R101.2.

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

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

2. Child care centers, as described in Utah Administrative Code, R381-100, Child Care Centers;

3. Out-of-school-time programs, as described in Utah Administrative Code, R381-70, Out of School Time Child Care Programs; and

4. Commercial preschools, as described in Utah Administrative Code, R381-40, Commercial Preschool Programs."

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

[~~(16)~~] (14) In IBC, Section 308.2, in the list of items under "This group shall include," the words "Type-I Large and Type-II Small, see Section 308.2.5" are added after "Assisted living facilities."

[~~(17)~~] (15) In IBC, Section 308.2.4, all of the words after the first International Residential Code are deleted.

[~~(18)~~] (16) A new IBC, Section 308.2.5 is added as follows:

[~~"308.2.5 Group I-1 assisted living facility occupancy groups. The following occupancy groups shall apply to assisted living facilities:~~]

[~~Type I assisted living facilities with seventeen or more residents are Large Facilities classified as an Institutional Group I-1, Condition 1 occupancy.~~]

[~~Type II assisted living facilities with six to sixteen residents are Small Facilities classified as an Institutional Group I-1, Condition 2 occupancy. See Section 202 for definitions."~~]

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

[~~(19)~~] (17) [~~In~~] IBC, Section 308.3 is deleted and replaced with the following:

"308.3 Institutional Group I-2[~~, the following changes are made:~~]. Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis

for more than four persons who are incapable of self-preservation. This group shall include, but not be limited to the following:

Assisted living facilities, Type-II Large, see Section 308.3.3

Child care facilities

Foster care facilities

Detoxification facilities

Hospitals

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

Psychiatric hospitals"

[~~(a) The words "more than five" are deleted and replaced with "four or more";~~]

[~~(b) The group "Assisted living facilities, Type-II Large" is added to the list of groups;~~]

[~~(c) The words "Foster care facilities" are deleted and replaced with the words "Child care facilities"; and~~]

[~~(d) The words "(both intermediate care facilities and skilled nursing facilities)" are added after "Nursing homes."~~]

[~~(20)~~] (18) In IBC, Section 308.3.2, the number "five" is deleted and replaced with the number "four" in each location.

[~~(21)~~] (19) A new IBC, Section 308.3.3 is added as follows:

"308.3.3 [~~Group I-2 assisted~~] Assisted living facilities. [~~Type II~~] A Type-II, Large assisted living [~~facilities with seventeen or more residents are Large Facilities~~] facility is classified as [~~an Institutional~~] occupancy Group I-2, Condition 1 [~~occupancy~~]. See Section 202 for definitions."

[~~(22)~~] (20) In IBC, Section 308.5, the words "more than five" are deleted and replaced with the words "five or more in each location."

[~~(23)~~] (21) [~~In~~] IBC, Section 308.5.1, [~~the following changes are made~~] is deleted and replaced with the following:

[~~(a) The words "more than five" are deleted and replaced with the words "five or~~

~~more."~~]

[~~(b) The words "2-1/2 years or less of age" are deleted and replaced with "under the age of two."~~]

[~~(c) The following sentence is added at the end: "See Section 429 for special requirements for Day Care."~~]

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

[~~(24)~~] (22) In IBC, Sections 308.5.3 and 308.5.4, the words "five or fewer" are deleted and replaced with the words "four or fewer" in [~~both places~~] each location and the following sentence is added at the end: "See Section 429 for special requirements for Day Care."

[~~(25)~~] (23) [~~In~~] IBC, Section 310.4, [~~the following changes are made~~] is deleted and replaced with the following:

[~~(a) The words "and single family dwellings complying with the IRC" are added after "Residential Group-3 occupancies."~~]

[~~(b) The words "Assisted Living Facilities, limited capacity" are added to the list of occupancies.~~]

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

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

Buildings that do not contain more than two dwellings

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

Congregate living facilities (nontransient) with 16 or fewer occupants

Boarding houses (nontransient)

Convents

Dormitories

Fraternities and sororities

Monasteries

Congregate living facilities (transient) with 10 or fewer occupants

Boarding houses (transient)

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

[~~(26)~~] (24) [~~In~~] IBC, Section 310.4.1, [~~the following changes are made~~] is deleted and replaced with the following:

[~~(a) The words "other than Child Care" are inserted after the words "Care facilities" in the first sentence.~~]

[~~(b) All of the words after the first "International Residential Code" are deleted.~~]

[~~(c) The following sentence is added at the end of the last sentence: "See Section 429 for special requirements for Child Day Care."~~]

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

[~~(27)~~] (25) A new IBC Section 310.4.3 is added as follows: " 310.4.3 Child Care. Areas used for child care purposes may be located in a residential dwelling unit under all of the following conditions and Section 429:

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

2. Use is approved by the [~~Utah~~] Department of Health and Human Services, as enacted under the authority of the Utah Code, Title 26, Chapter 39, Utah Child Care Licensing Act, and in any of the following categories:

a. Utah Administrative Code, R430-50, Residential Certificate Child Care.

b. Utah Administrative Code, R430-90, Licensed Family Child Care.

3. Compliance with all zoning regulations of the local regulator."

[~~(28)~~] (26) A new IBC, Section 310.4.4 is added as follows: "310.4.4 Assisted living facilities. Type I assisted living facilities with two to five residents are Limited Capacity facilities classified as a Residential Group R-3 occupancy or are permitted to comply with the International Residential Code. See Section 202 for definitions."

[~~(29)~~] (27) In IBC, Section 310.5, the words "Type II Limited Capacity and Type I Small, see Section 310.5.3" are added after the words "assisted living facilities."

[~~(30)~~] (28) A new IBC, Section 310.5.3, is added as follows: "310.5.3 Group R-4 Assisted living facility occupancy groups. The following occupancy groups shall apply to Assisted Living Facilities: Type II Assisted Living Facilities with two to five residents are Limited Capacity Facilities classified as a Residential Group R-4, Condition 2 occupancy. Type I assisted living facilities with six to sixteen residents are Small Facilities classified as Residential Group R-4, Condition 1 occupancies. See Section 202 for definitions."

Section 7. Section **15A-3-103** is amended to read:

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

(1) IBC Section 403.5.5 is deleted.

(2) In IBC, Section 404.5, Exception 2.3 is added as follows:

"2.3 The atrium does not contain any means of egress component above the two lowest stories."

[~~(2)~~] (3) In IBC, Section 407.2.5, the words "and assisted living facility" are added in the title and first sentence after the words "nursing home."

[~~(3)~~] (4) In IBC, Section 407.2.6, the words "and assisted living facility" are added in the title after the words "nursing home."

(5) In IBC, Section 407.3.1.1, Item 3 is deleted and replaced with the following:

"3. To provide makeup air for exhaust systems in accordance with Section 1020.6,

Exception 1, doors to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces that do not contain flammable or combustible materials are permitted to have louvers or an undercut of 2/3 inch (19.1 mm) maximum."

(6) In IBC, Section 407.4.1, Exception 3 is added as follows:

"3. Only one exit access with direct access to a corridor is required from an assisted living facility, single resident sleeping unit that consists of a living space and one or two separate sleeping rooms. For other than closets, toilet and shower rooms, occupants may not be required to pass through more than one room before reaching the exit access."

(7) In IBC, Section 407.4.3, the words "and assisted living facility" are added in the title and after the words "nursing home."

[~~(4)~~] (8) In IBC, Section 407.11, a new exception is added as follows: "Exception: An essential electrical system is not required in assisted living facilities."

[~~(5)~~] (9) In IBC, Section 412.3.1, a new exception is added as follows: "Exception: Aircraft hangars of Type I or II construction that are less than 5,000 square feet (464.5m2) in area."

[~~(6)~~] (10) A new IBC, Section 422.2.1 is added as follows: " 422.2.1 Separations: Ambulatory care facilities licensed by the Department of Health and Human Services shall be separated from adjacent tenants with a fire partition having a minimum one hour fire-resistance rating. Any level below the level of exit discharge shall be separated from the level of exit discharge by a horizontal assembly having a minimum one hour fire-resistance rating.

Exception: A fire barrier is not required to separate the level of exit discharge when:

1. Such levels are under the control of the Ambulatory Care Facility.

2. Any hazardous spaces are separated by horizontal assembly having a minimum one hour fire-resistance rating."

[~~(7)~~] (11) A new IBC Section 429, Day Care, is added as follows:

" 429.1 Detailed Requirements. In addition to the occupancy and construction requirements in this code, the additional provisions of this section shall apply to all Day Care in

accordance with Utah Administrative Code R710-8 Day Care Rules.

429.2 Definitions.

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

429.2.2 Day Care Facility: Any building or structure occupied by clients of any age who receive custodial care for less than 24 hours by individuals other than parents, guardians, relatives by blood, marriage or adoption.

429.2.3 Day Care Center: Providing care for five or more clients in a place other than the home of the person cared for. This would also include Child Care Centers, Out of School Time or Hourly Child Care Centers licensed by the Department of Health and Human Services.

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

429.2.4.1 Type 1: Services provided for five to eight clients in a home. This would also include a home that is certified by the Department of Health and Human Services as Residential Certificate Child Care or licensed as Family Child Care.

429.2.4.2 Type 2: Services provided for nine to sixteen clients in a home with sufficient staffing. This would also include a home that is licensed by the Department of Health and Human Services as Family Child Care.

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

429.3 Family Day Care.

429.3.1 Family Day Care units shall have on each floor occupied by clients, two separate means of egress, arranged so that if one is blocked the other will be available.

429.3.2 Family Day Care units that are located in the basement or on the second story shall be provided with two means of egress, one of which shall discharge directly to the outside.

429.3.2.1 Residential Certificate Child Care and Licensed Family Child Care with five to eight clients in a home, located on the ground level or in a basement, may use an emergency

escape or rescue window as allowed in IFC, Chapter 10, Section 1030.

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

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

429.3.4.1 Clients under the age of two may be housed above or below the first story where there is at least one exit that leads directly to the outside and complies with IFC, Section 1011 or Section 1012 or Section 1027.

429.3.5 Family Day Care units located in split entry/split level type homes in which stairs to the lower level and upper level are equal or nearly equal, may have clients housed on both levels when approved by the AHJ.

429.3.6 Family Day Care units shall have a portable fire extinguisher on each level occupied by clients, which shall have a classification of not less than 2A:10BC, and shall be serviced in accordance with NFPA, Standard 10, Standard for Portable Fire Extinguishers.

429.3.7 Family Day Care units shall have single station smoke detectors in good operating condition on each level occupied by clients. Battery operated smoke detectors shall be permitted if the facility demonstrates testing, maintenance, and battery replacement to insure continued operation of the smoke detectors.

429.3.8 Rooms in Family Day Care units that are provided for clients to sleep or nap, shall have at least one window or door approved for emergency escape.

429.3.9 Fire drills shall be conducted in Family Day Care units quarterly and shall include the complete evacuation from the building of all clients and staff. At least annually, in Type I Family Day Care units, the fire drill shall include the actual evacuation using the escape or rescue window, if one is used as a substitute for one of the required means of egress.

429.4 Day Care Centers.

429.4.1 Day Care Centers shall comply with either I-4 requirements or E requirements of the IBC, whichever is applicable for the type of Day Care Center.

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

Section 405.

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

429.4.3.1 Child day care spaces for children over the age of 24 months may be located on the second floor of buildings equipped with automatic fire protection throughout and an automatic fire alarm system.

429.4.4 Egress. All Group E child day care spaces with an occupant load of more than 10 shall have a second means of egress. If the second means of egress is not an exit door leading directly to the exterior, the room shall have an emergency escape and rescue window complying with Section 1030.

429.4.5 All Group E Child Day Care Centers shall comply with Utah Administrative Code, R430-100 Child Care Centers, R430-60 Hourly Child Care Centers, and R430-70 Out of School Time.

429.5 Requirements for all Day Care.

429.5.1 Heating equipment in spaces occupied by children shall be provided with partitions, screens, or other means to protect children from hot surfaces and open flames.

429.5.2 A fire escape plan shall be completed and posted in a conspicuous place. All staff shall be trained on the fire escape plan and procedure."

[~~(8)~~] (12) In IBC, Section 504.4, a new section is added as follows: "504.4.1 Group I-2 Assisted Living Facilities. Notwithstanding the allowable number of stories permitted by Table 504.4 Group I-2 Assisted Living Facilities of type VA, construction shall be allowed on each level of a two-story building when all of the following apply:

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

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

[~~(9)~~] (13) A new IBC, Section 504.5, is added as follows: "504.5 Group 1-2 Secured

areas in Assisted Living Facilities. In Type IIIB, IV, and V construction, all areas for the use and care of residents required to be secured shall be located on the level of exit discharge with door operations in compliance with Section [~~1010.1.9.7, as amended~~] 1010.2.14."

Section 8. Section **15A-3-104** is amended to read:

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

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

[~~(1) In IBC, Section 704.13.2, the following sentence is added to the end of the section: "An individual spraying fire-resistant materials may obtain a certificate that demonstrates that the individual has undergone training on how to spray fire-resistant materials to manufacturer's specifications."~~]

(2) IBC, Section (F) 902.1, is deleted and replaced with the following: "(F) 902.1 Pump and riser room size. Fire pump rooms and automatic sprinkler system riser rooms shall be designed with adequate space for all installed equipment necessary for the installation and to provide sufficient working [~~space~~] room around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be [~~in accordance with manufacturer requirements~~] sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly and not less than the following minimum elements:

[~~902.1.5~~] 902.1.1 A minimum clear and unobstructed distance of 12-inches shall be provided from the installed equipment to the elements of permanent construction.

[~~902.1.6~~] 902.1.2 A minimum clear and unobstructed distance of 12-inches shall be provided between all other installed equipment and appliances.

[~~902.1.7~~] 902.1.3 A clear and unobstructed width of 36-inches shall be provided in front of all installed equipment and appliances, to allow for inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly."

[~~902.1.8 Automatic sprinkler system riser rooms shall be provided with a clear and unobstructed passageway to the riser room of not less than 36-inches, and openings into the room shall be clear and unobstructed, with doors swinging in the outward direction from the room and the opening providing a clear width of not less than 34-inches and a clear height of the door opening shall not be less than 80-inches.~~]

[~~902.1.9 Fire pump rooms shall be provided with a clear and unobstructed passageway to the fire pump room of not less than 72-inches, and openings into the room shall be clear, unobstructed and large enough to allow for the removal of the largest piece of equipment, with doors swinging in the outward direction from the room and the opening providing a clear width of not less than 68-inches and a clear height of the door opening shall not be less than 80-inches."~~]

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

"(F) 902.2 Fire pump room. Fire pumps and controllers shall be provided with ready access. Fire pump rooms shall be provided with doors and an unobstructed passageway large enough to allow for the removal of the largest piece of equipment. The passageway shall have a clear width not less than 72 inches. Openings into the room shall be clear and unobstructed, with doors swinging in the outward direction from the fire pump room and the opening providing a clear width of not less than 68 inches and a clear height of the door opening shall not be less than 80 inches. The door shall be permitted to be locked provided that the key is available at all times and located in a Key Box in accordance with Section 506 of the International Fire Code.

(F) 902.3 Automatic sprinkler riser room. Automatic sprinkler system risers shall be provided with ready access. Automatic sprinkler system riser rooms shall be provided with doors and an unobstructed passageway large enough to allow for the removal of the largest piece of equipment. The passageway shall have a clear width not less than 36 inches. Openings into the room shall be clear and unobstructed, with doors swinging in the outward direction from the riser room and the opening providing a clear width of not less than 32 inches and a

clear height of the door opening shall not be less than 80 inches. The door shall be permitted to be locked provided that the key is available at all times and located in a Key Box in accordance with Section 506 of the International Fire Code.

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

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

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

[~~(3)~~] (4) [~~In~~] IBC, Section (F)903.2.2, [~~the words "the entire floor" are~~] is deleted and replaced with [~~"a building" and the last paragraph is deleted.~~] the following:

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

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

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

[~~(4)~~] (5) IBC, Section (F)903.2.4, condition 2, is deleted and replaced with the following: "2. A Group F-1 fire area is located more than three stories above the lowest level of fire department vehicle access."

[~~(5)~~] (6) IBC, Section (F)903.2.7, condition 2, is deleted and replaced with the following: "2. A Group M fire area is located more than three stories above the lowest level of fire department vehicle access."

[~~(6)~~] (7) [~~IBC, Sections (F)903.2.8, (F)903.2.8.1, and (F)903.2.8.2, are deleted and~~

~~replaced with the following: "(F)903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.~~] In IBC, Section (F)903.2.8, the following exceptions are added:

"Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) constructed in accordance with the International Residential Code For One- and Two-Family Dwellings.

2. Single story Group R-1 occupancies with fire areas not more than 2,000 square feet that contain no installed plumbing or heating, where no cooking occurs, and constructed of Type I-A, I-B, II-A, or II-B construction.[~~"~~]

3. Group R-4 fire areas not more than 4,500 gross square feet and not containing more than 16 residents, provided all residents are housed on a level of exit discharge and the building is equipped throughout with an approved fire alarm system that is interconnected and receives its primary power from the building wiring and a commercial power system."

[~~(7) IBC, Section (F)903.2.8.3 is renumbered to (F)903.2.8.1 and the following exception is added:~~]

[~~"Exception: Group R-4 fire areas not more than 4,500 gross square feet and not containing more than 16 residents, provided the building is equipped throughout with an approved fire alarm system that is interconnected and receives its primary power from the building wiring and a commercial power system."~~]

[~~(8) IBC, Section (F)903.2.8.4, is deleted.~~]

[~~(9)~~] (8) IBC, Section (F) 903.2.8.1 is deleted.

(9) IBC, Section (F)903.2.9, condition 2, is deleted and replaced with the following: "2. A Group S-1 fire area is located more than three stories above the lowest level of fire department vehicle access."

[~~(10) IBC, Section (F)904.12, is deleted and replaced with the following: "(F)904.12 Commercial cooking systems. The automatic fire-extinguishing system for commercial~~

~~cooking systems shall be of a type recognized for protection of commercial cooking equipment and exhaust systems. Pre-engineered automatic extinguishing systems shall be tested in accordance with UL 300 and listed and labeled for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer's installation instructions.~~]

[~~Exception: Factory-built commercial cooking recirculating systems that are tested in accordance with UL 710B and listed, labeled, and installed in accordance with Section 304.1 of the International Mechanical Code."~~]

[~~(11) IBC, Sections (F)904.12.3, (F)904.12.3.1, (F)904.12.4, and (F)904.12.4.1, are deleted.~~]

[~~(12)~~] (10) In IBC, Section 905, a new subsection, Section (F)905.3.9, is added as follows:

"Open Parking Garages. Open parking garages shall be equipped with an approved Class 1 manual standpipe system when fire department access is not provided for firefighting operations to within 150 feet of all portions of the open parking garage as measured from the approved fire department vehicle access. Class 1 manual standpipe shall be accessible throughout the parking garage such that all portions of the parking structure are protected within 150 feet of a hose connection."

[~~(13)~~] (11) In IBC, Section (F)905.8, the exception is deleted and replaced with the following:

"Exception: Where subject to freezing and approved by the fire code official."

[~~(14)~~] (12) In IBC, Section (F)907.2.3 Group E is deleted and rewritten as follows: "A manual fire alarm system that initiates the occupant notification signal using an emergency voice/alarm communication system that meets the requirements of Section (F) 907.5.2.2, or a manual fire alarm system that initiates an approved audible and visual occupant notification signal that meets the requirements of Sections (F)907.5.2.1, (F)907.5.2.1.1, [~~(F)907.5.2.2~~] (F)907.5.2.1.2, and (F)907.5.2.3, and is installed in accordance with Section (F)907.6 shall be

installed in Group E occupancies. Where automatic fire sprinkler systems or smoke detectors are installed, the fire sprinkler systems [~~or~~] and smoke detectors shall be connected to the building fire alarm system."

[~~(15) IBC, Sections (F)915 through (F)915.6, are deleted and replaced with the following:~~]

[~~"(F)915 Where required.~~]

[~~Group I-1, I-2, I-4, and R occupancies located in a building containing a fuel-burning appliance or in a building that has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 or UL 2075 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage, ventilated in accordance with Section 404 of the International Mechanical Code, shall not be considered an attached garage. A minimum of one carbon monoxide alarm shall be installed on each habitable level.~~]

[~~(F) 915.1 Interconnection.~~]

[~~Where more than one carbon monoxide alarm is required to be installed within Group I-1, I-2, I-4, or R occupancies, the carbon monoxide alarm shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms. Physical interconnection of carbon monoxide alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.~~]

[~~(F) 915.2 Power source.~~]

[~~In new construction, required carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Carbon monoxide alarms with integral strobes that are not equipped with a battery backup shall be connected to an emergency electrical system. Carbon monoxide alarms shall emit a signal when the batteries are low. Wiring shall be~~

~~permanent and without a disconnecting switch other than as required for overcurrent protection.~~]

[~~Exceptions.~~]

[~~1. Carbon monoxide alarms are not required to be equipped with a battery backup where they are connected to an emergency electrical system.~~]

[~~2. Hard wiring of carbon monoxide alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space, or basement available that could provide access for hard wiring without the removal of interior finishes.~~]

[~~(F) 915.3 Group E.~~]

[~~A carbon monoxide detection system shall be installed in new buildings that contain Group E occupancies in accordance with IFC, Chapter 9, Section 915. A carbon monoxide detection system shall be installed in existing buildings that contain Group E occupancies in accordance with IFC, Chapter 11, Section 1103.9.~~]

[~~(F) 915.3.1 Where required.~~]

[~~In Group E occupancies, a carbon monoxide detection system shall be provided where a fuel-burning appliance, a fuel-burning fireplace, or a fuel-burning forced air furnace is present.~~]

[~~(F) 915.3.2 Detection equipment.~~]

[~~Each carbon monoxide detection system shall be installed in accordance with NFPA 720 and the manufacturer's instructions and be listed as complying with, for single station detectors, UL 2034 and, for system detectors, UL 2075.~~]

[~~(F) 915.3.3 Locations.~~]

[~~Each carbon monoxide detection system shall be installed in the locations specified in NFPA 720.~~]

[~~(F) 915.3.4 Combination detectors.~~]

[~~A combination carbon monoxide/smoke detector is an acceptable alternative to a~~

~~carbon monoxide detection system if the combination carbon monoxide/smoke detector is listed in accordance with UL 2075 and UL 268.~~]

[~~(F) 915.3.5 Power source.~~]

[~~Each carbon monoxide detection system shall receive primary power from the building wiring if the wiring is served from a commercial source. If primary power is interrupted, each carbon monoxide detection system shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than that required for overcurrent protection.~~]

[~~(F) 915.3.6 Maintenance.~~]

[~~Each carbon monoxide detection system shall be maintained in accordance with NFPA 720. A carbon monoxide detection system that becomes inoperable or begins to produce end of life signals shall be replaced."~~]

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

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

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

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

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

(F) 907.2.3.3 An approved key plan drawing and operating instructions shall be posted

at the main fire alarm panel which displays the location of all alarm zones and if applicable, device addresses.

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

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

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

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

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

(F) 907.2.3.6 Fan Shutdown shall be as follows:

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

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

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

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

(1) Boiler rooms, furnace rooms, and similar rooms, or in adjacent areas where carbon

monoxide is likely to spread. (The installation of carbon monoxide detectors in boiler rooms and furnace rooms may cause a false alarm problem. Installing these detectors in adjacent spaces where the carbon monoxide is likely to spread from these spaces may be a better option.)

(2) Home economics rooms with gas appliances.

(3) School kitchens with gas appliances. (Commercial kitchens).

(4) Arts rooms and other areas with a gas kiln or open flame.

(5) Gas roof top units, and other carbon monoxide producing HVAC units, one per zone. (The zone shall be the area covered by the HVAC unit.)

(6) In areas with gas wall units.

(7) In areas with a gas water heater or boiler.

(8) Areas with a forge or foundry.

(9) Metal shop or auto shop areas or in adjacent areas where carbon monoxide is likely to spread. (The installation of carbon monoxide detectors in metal shop or auto shop areas may cause a false alarm problem. Installing these detectors in adjacent spaces, i.e. class rooms or corridors, where the carbon monoxide is likely to spread from these spaces may be a better option.)

(10) Labs with open flame.

(11) HVAC units drawing outside air that could be contaminated with carbon monoxide.

(12) Other areas with an open flame or fuel fired appliance.

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

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

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

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

(F) 915.7.1 Power and wiring.

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

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

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

(F) 915.7.3 Notification.

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

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

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

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

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

(F) 915.7.5 Inspection.

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

testing" of the system and its components.

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

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

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

Section 9. Section **15A-3-105** is amended to read:

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

[~~(1) In IBC, Section 1010.1.9, an exception is added as follows: "Exception: Group E occupancies for purposes of a lockdown or a lockdown drill in accordance with Section 1010.1.9.5 Exception 5."~~]

[~~(2) In IBC, Section 1010.1.9.2, "Exception:" is deleted and replaced with "Exceptions: 1."~~]

[~~(3) In IBC, Section 1010.1.9.2, a new exception 2 is added as follows: "2. Group E occupancies for purposes of a lockdown or a lockdown drill may have one lock below 34 inches in accordance with Section 1010.1.9.5 Exception 5."~~]

[~~(4) In IBC, Section 1010.1.9.4, a new number 7 is added as follows: " 7. Group E occupancies for purposes of a lockdown or a lockdown drill in accordance with Section 1010.1.9.5 Exception 5."~~]

[~~(5) In IBC, Section 1010.1.9.5, a new exception 6 is added as follows: "6. Group E occupancies for purposes of a lockdown or a lockdown drill in accordance with Section~~

~~1010.1.9.5 Exception 5."~~]

[~~(6) In IBC, Section 1010.1.9.6, a new exception 5 is added as follows: "5. Group E occupancies may have a second lock on classrooms for purposes of a lockdown or lockdown drill, if:~~]

[~~5.1 The application of the lock is approved by the code official.~~]

[~~5.2 The unlatching of any door or leaf does not require more than two operations.~~]

[~~5.3 The lock can be released from the opposite side of the door on which it is installed.~~]

[~~5.4 The lock is only applied during lockdown or during a lockdown drill.~~]

[~~5.5 The lock complies with all other state and federal regulations, including the Americans with Disabilities Act of 1990, 42 U.S.C. Sec. 12101 et seq."~~]

[~~(7) In IBC, Section 1010.1.9.7, a new number 9 is added as follows: " 9. The secure area or unit with special egress locks shall be located at the level of exit discharge in Type IIIB, IV, and V construction."~~]

[~~(8)~~] (1) 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)."

[~~(9)~~] (2) In IBC, Section 1011.11, a new exception [~~5~~] 6 is added as follows: " [~~5~~] 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."

[~~(10) In IBC, Section 1013.5, the words ", including when the building may not be fully occupied" are added at the end of the sentence.~~]

[~~(11)~~] (3) IBC, Section 1025, is deleted.

[~~(12) In IBC, Section 1029.15, exception 2 is deleted.~~]

[~~(13) In IBC, Section 1207.4, subparagraph 1 is deleted and replaced with the following: "1. The unit shall have a living room of not less than 165 square feet (15.3 m2) of floor area. An additional 100 square feet (9.3 m2) of floor area shall be provided for each occupant of such unit in excess of two."~~]

Section 10. Section **15A-3-107** is amended to read:

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

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

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

"2. Where the allowable stress design load combinations of ASCE 7 Section 2.4 are used, flat roof snow loads of 30 pounds per square foot (1.44kN/m2) or less and roof live loads of 30 pounds per square foot (1.44kN/m2) or less need not be combined with seismic loads. Where flat roof snow loads exceed 30 pounds per square foot (1.44kN/m2), the snow loads may be reduced in accordance with the following in load combinations including both snow and seismic loads. S as calculated below, shall be combined with seismic loads.

S = (0.20 + 0.025 (A-5))Proof, where S shall be greater than or equal to 0.20Proof.

Where:

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

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

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

For the purpose of this section, snow load shall be assumed uniform on the horizontal

projection without including the effects of drift or sliding. The Importance Factor, I, used in calculating Pf may be considered 1.0."

(3) In IBC, Section 1605.1 a new exception 4 is added as follows:

"4. ASCE 7-16 Section 2.3.6 Equation 6 shall be modified to 1.2D + Ev + Eh + L +f2S and 1.2D + Ev + Emh + L +f2S with f2 = (0.20 +0.025(A-5)) where the roof snow load exceeds 30 pounds per square foot (1.44kN/m2). Where A = Elevation above sea level at the location of the structure (ft/1000). f2 = 0 for roof snow loads of 30 pounds per square foot (1.44kN/m2) or less."

[~~(2) In IBC, Section 1605.2, in the portion of the definition for the value of f2, the words "and 0.2 for other roof configurations" are deleted and replaced with the following: "f2 = 0.20 + .025(A-5) for other configurations where roof snow load exceeds 30 psf;~~]

[~~f2 = 0 for roof snow loads of 30 psf (1.44kN/m2) or less.~~]

[~~Where A = Elevation above sea level at the location of the structure (ft./1,000).~~"]

[~~(3) In IBC, Sections 1605.3.1 and 1605.3.2, exception 2 in each section is deleted and replaced with the following: "2. Flat roof snow loads of 30 pounds per square foot (1.44 kNm2) or less need not be combined with seismic loads. Where flat roof snow loads exceed 30 pounds per square foot (1.44 kNm2), the snow loads may be reduced in accordance with the following in load combinations including both snow and seismic loads. S as calculated below, shall be combined with seismic loads.~~]

[~~S = (0.20 + 0.025(A-5))Pf is greater than or equal to 0.20 Pf.~~]

[~~Where:~~]

[~~S = Weight of snow to be used in combination with seismic loads~~]

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

[~~Pf = Design roof snow load, psf.~~]

[~~For the purpose of this section, snow load shall be assumed uniform on the roof footprint without including the effects of drift or sliding. The Importance Factor, I, used in calculating Pf may be considered 1.0 for use in the formula for Ws".~~]

(4) IBC, Section 1608.1, is deleted and replaced with the following: "1608.1 General. Except as modified in Sections 1608.1.1[~~;~~] and 1608.1.2[~~, and 1608.1.3~~], design snow loads shall be determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall not be less than that determined by Section 1607. Where the minimum live load, in accordance with Section 1607, is greater than the design roof snow load[~~, pf~~], the live load shall be used for design, but it may not be reduced to a load lower than the design roof snow load. Drifting need not be considered for design roof snow loads[~~, pf~~], less than 20 psf."

(5) A new IBC, Section 1608.1.1, is added as follows: "1608.1.1 Ice dams and icicles along eaves. Section 7.4.5 of Chapter 7 of ASCE 7 referenced in IBC Section 1608.1 is deleted and replaced with the following: 7.4.5 Ice Dams and Icicles Along Eaves. Where ground snow loads exceed 75 psf, eaves shall be capable of sustaining a uniformly distributed load of 2pf on all overhanging portions. No other loads except dead loads shall be present on the roof when this uniformly distributed load is applied. All building exits under down-slope eaves shall be protected from sliding snow and ice."

[~~(6) A new IBC, Section 1608.1.2, is added as follows: "1608.1.2 Thermal factor. The value for the thermal factor, Ct, used in calculation of pf shall be determined from Table 7.3-2 in ASCE 7. Exception: Except for unheated structures, the value of Ct need not exceed 1.0 when ground snow load, pg, is calculated using Section 1608.2.1."~~]

[~~(7)~~] (6) A new [~~IBC, Section 1608.1.3~~] IBC, Section 1608.1.2 is added as follows: [~~"1608.1.3~~] "1608.1.2 Drifts on adjacent structures. Section 7.7.2 of ASCE 7 referenced in IBC, Section 1608.1, is deleted and replaced with the following: 7.7.2 Adjacent structures. At lower adjacent structures, the requirements of Section 7.7.1 shall be used to calculate windward and leeward drifts. The resulting drift is permitted to be truncated."

[~~(8)~~] (7) A new IBC, Section 1608.2.1 is added as follows: "1608.2.1 Utah ground snow loads. Section 7.2 of ASCE 7 referenced in IBC, Section 1608.1 is modified as follows:

(a) In paragraph 1, 7.2-8 is deleted and replaced with 7.2-9.

(b) On Figure 7.2-1, remove CS and other ground snow load values in the state of

Utah. Add red shaded region for the state of Utah with the following note: See note for Utah.

(c) The following is added to the Note on Figure 7.2.1: See Table 7.2-9 for Utah.

(d) Add Table [~~7-2.9~~] 7.2-9 as follows:

TABLE 7.2-9

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."

[~~(9)~~] (8) A new IBC, Section 1613.1.1, is added as follows: "1613.1.1 Effective Seismic Weight. In ASCE 12.7.2 and 12.14.8.1 as referenced in Section 1613.1, Definition of W, Item 4 is deleted and replaced with the following:

4. Where flat roof snow load, Pf, exceeds 30 psf (1.44kN/m2), the snow load included in the effective seismic weight shall be calculated, in accordance with the following equation: Ws = (0.20 + 0.025(A-5))Pf >= 0.20 Pf.

WHERE:

Ws = Weight of snow to be included as effective seismic weight

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

Pf = Design flat roof snow load, psf.

For the purposes of this section, snow load shall be assumed uniform on the [~~roof footprint~~] horizontal projection without including the effects of drift or sliding. The Importance Factor, Is, used in calculating Pf may be considered 1.0 for use in the formula for Ws."

Section 11. Section **15A-3-108** is amended to read:

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

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

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

"TABLE 1807.1.6.4

EMPIRICAL FOUNDATION WALLS (1,7,8)

Max. Height	Top Edge Support	Min. Thickness	Vertical Steel (2)	Horizontal Steel (3)	Steel at Openings (4)	Max. Lintel Length	Min. Lintel Length
2'(610 mm)	None	6"	(5)	2- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"
3'(914 mm)	None	6"	#4@32"	3- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	2'(610 mm)	2" for each foot of opening width; min. 6"

4'(1,219 mm)	None	6"	#4@32"	4- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	3'(914 mm)	2" for each foot of opening width; min. 6"
6'(1,829 mm)	Floor or roof Diaphragm (6)	8"	#4@24"	5- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
8'(2,438 mm)	Floor or roof Diaphragm (6)	8"	#4@24"	6- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
9'(2,743 mm)	Floor or roof Diaphragm (6)	8"	#4@16"	7- #4 Bars	2- #4 Bars above 1- #4 Bar each side 1- #4 Bar below	6'(1,829 mm)	2" for each foot of opening width; min. 6"
Over 9'(2,743 mm), Engineering required for each column							
Footnotes:							
(1) Based on 3,000 psi (20.6 Mpa) concrete and 60,000 psi (414 Mpa) reinforcing steel.							
(2) To be placed in the center of the wall, and extended from the footing to within three inches (76 mm) of the top of the wall; dowels of #4 bars to match vertical steel placement shall be provided in the footing, extending 24 inches (610 mm) into the foundation wall.							
(3) One bar shall be located in the top four inches (102 mm), one bar in the bottom four inches (102 mm) and the other bars equally spaced between. Such bar placement satisfies the requirements of Section [~~1805.9~~] 1808.8.6. Corner reinforcing shall be provided so as to lap 24 inches (610 mm).							
(4) Bars shall be placed within two inches (51 mm) of the openings and extend 24 inches (610 mm) beyond the edge of the opening; vertical bars may terminate three inches (76 mm) from the top of the concrete.							
(5) Dowels of #4 bar at 32 inches on center shall be provided in the footing, extending 18 inches (457 mm) into the foundation wall.							

(6) Diaphragm shall conform to the requirements of Section 2308.
(7) Footing shall be a minimum of nine inches thick by 20 inches wide.
(8) Soil backfill shall be soil classification types GW, GP, SW, or SP, per Table 1610.1. Soil shall not be submerged or saturated in groundwater."

(3) A new IBC, Section 1905.1.9, is added as follows: "1905.1.9 ACI 318, [~~Table 4.2.1~~] Section 19.3.1.1." Modify ACI 318, Table 19.3.1.1 to read as follows: In the portion of the table designated as [~~"Conditions~~] "Conditions", the following Exposure category and class is deleted and replaced with the following:

"F0: Concrete elements not exposed to freezing and thawing cycles [~~to include~~] including footing [~~and foundation~~] elements, such as footings, tie beams, piles, and pile caps, etc., that are completely buried in soil."

Section 12. Section **15A-3-112** is amended to read:

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

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

(a) In the row for "E" occupancy in the field for "OTHER" a new footnote i is added.

(b) In the row for "I-4" occupancy in the field for "OTHER" a new footnote i is added.

(c) A new footnote [~~h~~] g is added as follows: "FOOTNOTE: g. When provided, subject to footnote i, in public toilet facilities there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms."

(d) A new footnote h is added to the table as follows: "FOOTNOTE h: Non-residential child care facilities shall comply with additional sink requirements of Utah Administrative Code, R381-60-9, Hourly Child Care Centers, R381-70-9, Out of School Time Child Care Programs, and R381-100-9, Child Care Centers."

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

1. the building is newly constructed; or

2. a bathroom in the building is renovated."

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

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

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

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

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

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

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

[~~(2)~~] (4) A new IBC, Section [P]2902[~~.7~~].8, is added as follows:

"[P]2902[~~.7~~].8 Toilet Facilities for Workers.

Toilet facilities shall be provided for construction workers and such facilities shall be maintained in a sanitary condition. Construction worker toilet facilities of the nonsewer type shall conform to ANSI Z4.3-2016."

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

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

[~~(3)~~] (7) IBC, Section 3001.2, is deleted.

[~~(4)~~] (8) In [~~IBC, Section 3006.5~~] IBC, Section 3005.5, a new exception is added as follows: "Exception: Hydraulic elevators and roped hydraulic elevators with a rise of 50 feet or less."

[~~(5)~~] (9) In IBC, Section 3109.1, the words "the International Swimming Pool and Spa Code" at the end of the section are deleted and replaced with the words "Utah Administrative Code, R392-302, Design, Construction and Operation of Public Pools."

Section 13. 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."

[~~(2)~~] (4) In IRC, Section R108.3, the following sentence is added at the end of the section: "The building official shall not request proprietary information."

[~~(3) In IRC, Section 109: (a) A new~~]

(5) IRC, Section 109.1.5, is [~~added as follows~~] 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 [~~R703.8~~] R703.4 to prevent water from entering the weather-resistive barrier."

[~~(b) The remaining sections are renumbered as follows: R109.1.6 Other inspections; R109.1.6.1 Fire- and smoke-resistance-rated construction inspection; R109.1.6.2 Reinforced masonry, insulating concrete form (ICF) and conventionally formed concrete wall inspection; and R109.1.7 Final inspection.~~]

[~~(4) IRC, Section R114.1, is deleted and replaced with the following: "R114.1 Notice to owner. Upon notice from the building official that work on any building or structure is being prosecuted contrary to the provisions of this code or other pertinent laws or ordinances or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent or to the person doing the work; and shall state the conditions under which work will be permitted to resume."~~]

[~~(5)~~] (6) 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) 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) In IRC, Section R202, the definition for "Approved Agency" is modified by replacing the word "and" with "or."

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

[~~(6)~~] (10) In IRC, Section R202, the following definition is added: "CERTIFIED BACKFLOW PREVENTER ASSEMBLY TESTER: A person who has shown competence to test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction under Utah Code, Subsection 19-4-104(4)."

[~~(7)~~] (11) 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) 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."

[~~(8)~~] (13) 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."

[~~(9)~~] (14) In IRC, Section 202, in the definition for gray water a comma is inserted after the word "washers"; the word "and" is deleted; and the following is added to the end: "and clear water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without objectionable odors; non-highly pigmented; and will not interfere with the operation of the sewer treatment facility."

[~~(10)~~] (15) In IRC, Section R202, the definition of "Potable Water" is deleted and replaced with the following: "POTABLE WATER. Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the Utah Code, Title 19, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and the regulations of the public health authority having jurisdiction."

[~~(11)~~] (16) IRC, Figure R301.2[~~(5),~~] (3), is deleted and replaced with R301.2[~~(5)~~] (3) as follows:

"TABLE R301.2[~~(5)~~] (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."

[~~(12)~~] (17) IRC, Section R301.6, is deleted and replaced with the following: "R301.6 Utah Snow Loads. The snow loads specified in Table R301.2(5b) shall be used for the jurisdictions identified in that table. Otherwise, for other locations in Utah, see Bean, B.,

Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental Engineering Faculty Publications, Paper 3589, http://utahsnowload.usu.edu/, for ground snow load values."

[~~(13)~~] (18) In IRC, Section R302.2, the following sentence is added [~~after the second sentence~~] 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."

[~~(14)~~] (19) 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."

[~~(15)~~] (20) In IRC, Section R302.5.1, the [~~words "self-closing device" are deleted and replaced with "self-latching hardware."~~] last sentence is deleted.

[~~(16)~~] (21) IRC, Section R302.13, is deleted.

[~~(17)~~] (22) In IRC, Section R303.4, the [~~number "5" is changed to "3" in the first sentence~~] 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."

[~~(18)~~] (23) In IRC, Section [~~R310.6~~] R310.7, in the exception, the words "or accessory dwelling units" are added after the words "sleeping rooms".

[~~(19)~~] (24) IRC, Sections [~~R311.7.4~~] R311.7.45 through R311.7.5.3, are deleted and replaced with the following: [~~"R311.7.4~~] "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 [~~Profile~~] 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."

[~~(20)~~] (25) IRC, Section R312.2, is deleted.

[~~(21)~~] (26) IRC, Sections R313.1 through R313.2.1, are deleted and replaced with the following: "R313.1 Design and installation. When installed, automatic residential fire sprinkler systems for townhouses or one- and two-family dwellings shall be designed and installed in accordance with Section P2904 or NFPA 13D."

[~~(22)~~] (27) In IRC, Section R314.2.2, the words "or accessory dwelling units" are

added after the words "sleeping rooms".

[~~(23)~~] (28) In IRC, Section R315.2.2, the words "or accessory dwelling units" are added after the words "sleeping rooms".

[~~(24)~~] (29) In IRC, Section 315.3, the following words are added to the first sentence after the word "installed": "on each level of the dwelling unit and."

[~~(25) In IRC, Section R315.5, a new exception, 3, is added as follows:~~]

[~~"3. Hard wiring of carbon monoxide alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring, without the removal of interior finishes."~~]

[~~(26) A new IRC, Section R315.7, is added as follows: " R315.7 Interconnection. Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section R315.1, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.~~]

[~~Exception: Interconnection of carbon monoxide alarms in existing areas shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes."~~]

[~~(27) In IRC, Section R317.1.5, the period is deleted and the following language is added to the end of the paragraph: "or treated with a moisture resistant coating."~~]

[~~(28) In IRC, Section 326.1, the words "residential provisions of the" are added after the words "pools and spas shall comply with".~~]

[~~(29)~~] (30) A new IRC, Section [~~327~~] R328.12, [~~Stationary Storage Battery Systems,~~] is added as follows:

[~~"327.1 General. Energy storage systems (ESS) shall comply with the provisions of this~~

~~section.~~]

[~~Exceptions:~~]

[~~1. ESS listed and labeled in accordance with UL 9540 and marked "For use in residential dwelling units", where installed in accordance with the manufacturer's instruction and NFPA 70.~~]

[~~2. ESS less than 1kWh (3.6 megajoules).~~]

[~~327.2 Equipment listings. ESS shall be listed and labeled in accordance with UL 9540.~~]

[~~Exception: Where approved, repurposed unlisted battery systems from electric vehicle are allowed to be installed outdoors or in detached sheds located not less than 5 feet (1524 mm) from exterior walls, property lines and public ways.~~]

[~~327.3 Installation. ESS shall be installed in accordance with the manufacturer's instructions and their listing.~~]

[~~327.3.1 Spacing. Individual units shall be separate from each other by not less than three feet (914 mm) except where smaller separation distances are documented to be adequate based on large-scale fire testing complying with Section 1206.2.3 of the adopted International Fire Code.~~]

[~~327.4 Locations. ESS shall be installed only in the following locations:~~]

[~~1. Detached garages and detached accessory structures.~~]

[~~2. Attached garages separated from the dwelling unit living space in accordance with Section R302.6.~~]

[~~3. Outdoors or on the exterior side of exterior walls located not less than 3 feet (914 mm) from doors and windows directly entering the dwelling unit.~~]

[~~4. Enclosed utility closets, basements, storage or utility spaces within dwelling units with finished or noncombustible walls and ceilings. Walls and ceilings of unfinished wood-framed construction shall be provided with not less than 5/8-inch (15.9 mm) Type X gypsum wallboard.~~]

[~~ESS shall not be installed in sleeping rooms, or closets or spaces opening directly into sleeping rooms.~~]

[~~327.5 Energy ratings. Individual ESS units shall have a maximum rating of 20 kWh. The aggregate rating of the ESS shall not exceed:~~]

[~~1. 40 kWh within utility closets, basements, and storage or utility spaces.~~]

[~~2. 80 kWh in attached or detached garages and detached accessory structures.~~]

[~~3. 80 kWh on exterior walls.~~]

[~~4. 80 kWh outdoors on the ground.~~]

[~~ESS installations exceeding the permitted individual or aggregate ratings shall be installed in accordance with Sections 1206.2.1 through 1206.2.12 of the adopted International Fire Code.~~]

[~~327.6 Electrical installation. ESS shall be installed in accordance with NFPA 70. Inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL 9540 listing. Systems connected to the utility grid shall use inverters listed for utility interaction.~~]

[~~327.7 Fire detection. Rooms and areas within dwelling units, basements, and attached garages in which ESS are installed shall be protected by smoke alarms in accordance with Section R314. A heat detector, listed and interconnected to the smoke alarms, shall be installed in locations within dwelling units and attached garages where smoke alarms cannot be installed based on their listing.~~]

[~~327.8 Protection from impact. ESS installed in a location subject to vehicle damage shall be protected by approved barriers.~~]

[~~327.9 Ventilation. Indoor installations of ESS that include batteries that produce hydrogen or other flammable gasses during charging shall be provided with mechanical ventilation in accordance with Section M1307.4.~~]

[~~327.10 Electric vehicle use. The temporary use of an owner or occupant's electric-powered vehicle to power a dwelling unit while parked in an attached or detached~~

~~garage or outdoors shall comply with the vehicle manufacturer's instructions and NFPA 70.~~]

[~~327.11~~] "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) 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."

[~~(30)~~] (32) 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."

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

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

[~~(33)~~] (35) In IRC, Section R405.1, a [~~new~~] 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 [~~geological~~] geotechnical report shall make a recommendation regarding a drainage system."

(36) 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 14. 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, is deleted.

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

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

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

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

[~~(5)~~] (6) 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 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) In IRC, Section N1102.4.1 (R402.4.1), in the first sentence, the word "and" is deleted and replaced with the word "or."

[~~(6)~~] (8) In IRC, Section N1102.4.1.1 (R402.4.1.1), the last sentence is deleted and replaced with the following: "Where allowed by the code official, the builder may certify compliance to components criteria for items which may not be inspected during regularly scheduled inspections."

[~~(7)~~] (9) In IRC, Section N1102.4.1.2 (R402.4.1.2), the following changes are made:

(a) In the first sentence:

(i) "The building or dwelling unit" is deleted and replaced with "A single-family dwelling";

(ii) after January 1, 2019, replace the word "five" with "3.5"; and

(iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate 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: "The following parties shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed contractors who have completed training provided by Blower Door Test equipment manufacturers or other comparable training."

[~~(8)~~] (10) In IRC, Section N1103.3.3 (R403.3.3)[~~:~~], the exception for duct air leakage testing is deleted and replaced with the following:

[~~(a) the exception for duct air leakage testing is deleted; and~~]

[~~(b) the exception for duct air leakage is replaced:~~]

[~~(i)~~] (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.";

[~~(ii)~~] (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

[~~(iii)~~] (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."

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

[~~(10)~~] (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.

[~~(11)~~] (13) In IRC, Section N1103.3.5 (R403.3.5), the words "or plenums" are deleted.

[~~(12)~~] (14) In IRC, Section N1103.5.3 (R403.5.3), Subsection 5 is deleted and Subsections 6 and 7 are renumbered.

[~~(13)~~] (15) IRC, Section N1103.6.1 (R403.6.1), is deleted and replaced with the following: "N1103.6.1 (R403.6.1) Whole-house mechanical ventilation system fan efficacy. Fans used to provide whole-house mechanical ventilation shall meet the efficacy requirements of Table N1103.6.1 (R403.6.1).

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

[~~(14)~~] (16) In IRC, Section N1103.6.1 (R403.6.1), the table is deleted and replaced with the following:

"TABLE N1103.6.1 (R403.6.1)

MECHANICAL VENTILATION SYSTEM FAN EFFICACY

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

[~~(15)~~] (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"

[~~(16)~~] (18) In IRC, Section N1103.7 the word "approved" is deleted in the first sentence and the following is added after the word methodologies ", complying with N1103.7.1".

[~~(17)~~] (19) A new IRC, Section N1103.7.1 is added as follows: "N1103.7.1 Qualifications. An individual performing load calculations shall be qualified by completing HVAC [~~load calculation~~] 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."

[~~(18)~~] (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.

[~~(19)~~] (21) 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".

[~~(20)~~] (22) 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 [~~load calculation~~] 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."

[~~(21)~~] (23) In IRC, Section M1402.1, the following is added at the end of the second sentence: "or UL/CSA 60335-2-40."

[~~(22)~~] (24) In IRC, Section M1403.1, the characters "/ANCE" are deleted.

[~~(23)~~] (25) IRC, Section [~~M1411.8~~] M1411.9, is deleted.

[~~(24)~~] (26) In IRC, Section M1412.1, the characters "/ANCE" are deleted.

[~~(25)~~] (27) In IRC, Section M1413.1, the characters "/ANCE" are deleted.

Section 15. 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 [~~6~~] 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."

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

Section 16. 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."

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

[~~(3)~~] (4) In IRC, Section P2705, Item 5, the words "lavatory" and "lavatories" are deleted.

[~~(4)~~] (5) In IRC, Section P2705, a new Item [~~6~~] 9 is added as follows: [~~"6~~] "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."

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

[~~(6)~~] (10) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly testing. [~~The premise owner or the premise owner's designee shall have backflow prevention assemblies operation tested in accordance with administrative rules made by the Drinking Water Board at the time of installation, repair, and relocation and at least on an annual basis thereafter, or more frequently as required by the authority having jurisdiction. Testing shall be performed by a Certified Backflow Preventer Assembly Tester. The assemblies that are subject to this paragraph are the Spill Resistant Vacuum Breaker, the Pressure Vacuum Breaker Assembly, the Double Check Backflow Prevention Assembly, the~~

~~Double Check Detector Assembly Backflow Preventer, the Reduced Pressure Principle Backflow Preventer, and Reduced Pressure Detector Assembly. Third-party certification for backflow prevention assemblies will consist of any combination of two certifications, laboratory or field. Acceptable third-party laboratory certifying agencies are ASSE, IAPMO, and USC-FCCCHR. USC-FCCCHR currently provides the only field testing of backflow protection assemblies. Also see www.drinkingwater.utah.gov and rules made by the Drinking Water Board."~~] 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.

[~~(7)~~] (11) In IRC, Section P2902.1, the following subsections are added as follows:

[~~"P2902.1.1~~] "P2902.1.2 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~~] P2902.1.2 Specific Installation Criteria.

[~~P2902.1.2.1~~] P2902.1.2 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 Double Check Valve Backflow Prevention Assembly.

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

a. The assembly shall be installed in a horizontal position only, unless listed or approved for vertical installation.

b. The bottom of the assembly shall be a minimum of 12 inches above the ground or floor.

c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

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

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

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

a. The assembly shall not be installed in an area that could be subject to backpressure or back drainage conditions.

b. The assembly shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.

c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

d. The assembly shall not be installed below ground, in a vault, or in a pit.

e. The assembly shall be installed in a vertical position."

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

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

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

[~~(11)~~] (16) IRC, Section P2910.5, is deleted and replaced with the following:

"P2910.5 Potable water connections.

[~~When a potable water system is connected to a nonpotable water system, the potable water system shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 2901."~~] 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."

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

[~~(13)~~] (18) In IRC, Section P2911.12.4, the following words are deleted: "and backwater valves."

[~~(14)~~] (19) In IRC, Section P2912.15.6, the following words are deleted: "and backwater valves."

[~~(15)~~] (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 Connected to nonpotable water from on-site water reuse systems.~~]

[~~Nonpotable systems utilized for subsurface irrigation for single-family residences shall comply with the requirements of R317-401, UAC, Graywater Systems."~~] "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."

[~~(16)~~] (22) In IRC, Section [~~P3103.6~~] 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."

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

Section 17. 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) [~~In IRC, Section E3705.4.5, the following words are added after the word "assemblies": "with ungrounded conductors 10 AWG and smaller".~~] IRC, Section E3606.5, is deleted.

(3) [~~In IRC, Section E3901.4.5, the last sentence in the exception is deleted and replaced with the following: "Receptacles mounted below the countertop in accordance with this exception shall not be located more than 14 inches from the bottom leading edge of the countertop."~~] 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) In IRC, Section E3901.9, the following exception is added:~~]

[~~"Exception: Receptacles or other outlets adjacent to the exterior walls of the garage, outlets adjacent to an exterior wall of the garage, or outlets in a storage room with entry from the garage may be connected to the garage branch circuit."~~]

[~~(5)~~] (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.

[~~(6)~~] (18) [~~In~~] IRC Section E3902.17[~~:~~] is deleted.

[~~(a) following the word "Exception" the number "1." is added; and~~]

[~~(b) at the end of the section, the following sentences are added:~~]

[~~"2. This section does not apply for a simple move or an extension of a branch circuit or an outlet which does not significantly increase the existing electrical load. This exception does not include changes involving remodeling or additions to a residence."~~]

[~~(7)~~] (19) IRC, Section E3902.18 is deleted.

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

[~~(8)~~] (21) In IRC, Chapter 44, the standard for ASHRAE is amended by changing "34-2013" to "34-2019."

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

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

[~~(11)~~] (24) 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"

[~~(12)~~] (25) In IRC, Chapter 44, is amended by adding the following reference standard: "UL 9540-20: Energy Storage Systems and Equipment; [~~R327.1, R327.2 and R327.6~~] R328.1, R328.2, and R328.6."

[~~(13)~~] (26) (a) When passive radon controls or portions thereof are voluntarily installed, the voluntary installation shall comply with Appendix F of the IRC.

(b) An additional inspection of a voluntary installation described in Subsection [~~(9)(a)~~] (22)(a) is not required.

Section 18. Section **15A-3-302** is amended to read:

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

[~~(1) In IPC, Section 202, the definition for "Backflow Backpressure, Low Head" is deleted.~~]

[~~(2)~~] (1) In IPC, Section 202, the following definition is added: "Utah Certified Backflow Preventer Assembly Tester. A person who has shown competence to test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction under Utah Code, Subsection 19-4-104(4) and Utah Administrative Code, R309-305."

[~~(3) In IPC, Section 202, the following definition is added: "Contamination (High Hazard). An impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or waste."~~]

[~~(4)~~] (2) In IPC, Section 202, the definition for "Cross Connection" is deleted and replaced with the following: "Cross Connection. Any physical connection or potential connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other either water of unknown or questionable safety or steam, gas, or chemical, whereby there exists the possibility for flow from one system to the other, with the direction of flow depending on the pressure differential between the two systems (see "Backflow")."

[~~(5)~~] (3) In IPC, Section 202, the following definition is added: "Deep Seal Trap. A manufactured or field fabricated trap with a liquid seal of 4" or larger."

[~~(6)~~] (4) In IPC, Section 202, the definition for "Essentially Nontoxic Transfer Fluid" is deleted and replaced with the following:

"ESSENTIALLY NONTOXIC TRANSFER FLUID. Fluids [~~having a Gosselin rating of 1~~], including propylene glycol[~~;~~] and mineral oil."

[~~(7)~~] (5) In IPC, Section 202, the definition for "Essentially Toxic Transfer Fluid" is deleted and replaced with the following:

"ESSENTIALLY TOXIC TRANSFER FLUID. Soil, waste, or gray water; and any fluid that is not an essentially nontoxic transfer fluid under this code."

[~~(8) In IPC, Section 202, the following definition is added: "High Hazard. See Contamination."~~]

[~~(9) In IPC, Section 202, the following definition is added: "Low Hazard. See Pollution."~~]

[~~(10)~~] (6) In IPC, Section 202, the following definition is added: "Motor Vehicle Waste Disposal Well. An injection well that discharges to the subsurface by way of a floor drain, septic system, French drain, dry well, or similar system that receives or has received fluid from a facility engaged in vehicular repair or maintenance activities, including an auto body repair shop, automotive repair shop, new and used car dealership, speciality repair shop, or any other facility that does any vehicular repair work. A motor vehicle waste disposal well is subject to rulemaking under Section 19-5-104 regarding underground injection."

[~~(11) In IPC, Section 202, the following definition is added: "Pollution (Low Hazard). An impairment of the quality of the potable water to a degree that does not create a hazard to the public health but that does adversely and unreasonably affect the aesthetic qualities of such potable water for domestic use."~~]

[~~(12)~~] (7) In IPC, Section 202, the definition for "Potable Water" is deleted and replaced with the following: "Potable Water. Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the Utah Code, Title 19, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and the regulations of the public health authority having jurisdiction."

(8) In IPC, Section 202, the following definition is added for Dual Source Connection: "Dual Source Connection. A pipe that is installed so that either the nonpotable (i.e. secondary) irrigation water or the potable water is connected to a pressurized irrigation system at one time, but not both at the same time; or a pipe that is installed so that either the potable water or private well water is connected to a residence at one time, not both at the same time. The

potable water supply line shall be protected by a reduced pressure backflow preventer."

Section 19. Section **15A-3-303** is amended to read:

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

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

"Exception: Third-party certification for backflow prevention assemblies will consist of any combination of two certifications, laboratory or field. Acceptable third party laboratory certifying agencies are ASSE, IAPMO, and USC-FCCCHR. USC-FCCCHR currently provides the only field testing of backflow protection assemblies. Also see www.drinkingwater.utah.gov and Division of Drinking Water Rule, Utah Administrative Code, R309-105-12(4)."

(2) IPC, Section 311.1, is deleted.

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

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

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

2. Contractor assumes all liability for injury or death to persons or damage to property or for claims for labor and/or material arising from any alleged failure of the system during testing with air or compressed gasses.

3. Proper personal protective equipment, including safety eyewear and protective headgear, should be worn by all individuals in any area where an air or gas test is being conducted.

4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.

5. No drain and vent system shall be pressurized in excess of 6 psi as measured by accurate gauges graduated to no more than three times the test pressure.

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

7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or gases should be vented, and test balls and plugs should be removed with caution."

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

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

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

2. Contractor assumes all liability for injury or death to persons or damage to property or for claims for labor and/or material arising from any alleged failure of the system during testing with air or compressed gasses.

3. Proper personal protective equipment, including safety eyewear and protective headgear, should be worn by all individuals in any area where an air or gas test is being conducted.

4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.

5. Water supply systems shall be pressure tested to a minimum of 50 psi but not more than 80 psi as measured by accurate gauges graduated to no more than three times the test pressure.

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

7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or gases should be vented, and test balls and plugs should be removed with caution."

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

"312.10.2 Testing. Reduced pressure principle, double check, pressure vacuum breaker,

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

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

Section 20. Section **15A-3-304** is amended to read:

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

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

(a) In row number "3", for in the field for "OTHER", a new footnote h is added.

(b) In row number "5", for "Adult day care and child day care" occupancy, in the field for "OTHER", a new footnote h is added.

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

(d) A new footnote g is added as follows: "FOOTNOTE: g: When provided, in public toilet facilities, there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms. Diaper changing facilities shall meet the requirements of ASTM F2285-04 (2010) Standard Consumer Safety Performance Specifications for Diaper Changing Tables for Commercial Use."

(e) A new footnote h is added to the table as follows: "FOOTNOTE h: Non-residential

child care facilities shall comply with the additional sink requirements of Utah Administrative Code, R381-60-9, Hourly Child Care Centers, R381-70-9, Out of School Time Child Care Programs, and R381-100-9, Child Care Centers."

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

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

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

[~~(3)~~] (5) A new IPC, Section 413.5, is added as follows: "413.5 Public toilet rooms. All public toilet rooms shall be equipped with at least one floor drain."

[~~(4)~~] (6) A new IPC, Section 413.6, is added as follows: "Prohibition of motor vehicle waste disposal wells. New and existing motor vehicle waste disposal wells are prohibited. A motor vehicle waste disposal well associated with a single family residence is not subject to this prohibition."

[~~(5)~~] (7) IPC, Section 423.3, is deleted.

Section 21. Section **15A-3-306** is amended to read:

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

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

supply sufficient quantity of water to comply with the requirements of this chapter."

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

(3) In IPC, Table 604.4, the following changes are made in the column titled "MAXIMUM FLOW RATE OR QUANTITY":

(a) In the row titled "Lavatory, private" the text is deleted and replaced with "1.5 gpm at 60 psi".

(b) In the row titled "Shower head" the text is deleted and replaced with "2 gpm at 80 psi".

(c) In the row titled "Urinal" the text is deleted and replaced with "0.5 gallon per flushing cycle".

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

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

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

(7) A new IPC, Section 606.5.11, is added as follows: "606.5.11 [~~Prohibited installation. In no case shall a booster pump be allowed that will lower the pressure in the public main to less than the minimum water pressure specified in Utah Administrative Code R309-105-9."~~] Water pressure booster pumps connected to a public water main. A water pressure booster pump shall not be connected to a public water main unless allowed by Utah Administrative Code, Rule R309-540."

[~~(7)~~] (8) In IPC, Section 608.1, the words "and pollution" are added after the word "contamination."

[~~(8)~~] (9) In IPC, Section 608.1, the following subsections are added as follows:

"608.1.1 General Installation Criteria.

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

608.1.2 Specific Installation Criteria.

608.1.2.1 Reduced Pressure Principle Backflow Prevention Assembly.

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

a. The assembly shall not be installed in a pit or below grade where the relief port could be submerged in water or where fumes could be present at the relief port discharge.

b. The relief valve of the assembly shall not be directly connected to a waste disposal line, including a sanitary sewer, storm drain, or vent.

c. The assembly shall be installed in a horizontal position, unless the assembly is listed or approved for vertical installation in accordance with Section 303.4.

d. The bottom of each assembly shall be installed a minimum of 12 inches above the ground or the floor.

e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

608.1.2.2 Double Check Valve Backflow Prevention Assembly.

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

a. The assembly shall be installed in a horizontal position unless the assembly is listed or approved for vertical installation.

b. The bottom of the assembly shall be a minimum of 12 inches above the ground or the floor.

c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or

obstacle, and shall be readily accessible for testing, repair, and maintenance.

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

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

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

a. The assembly shall not be installed in an area that could be subject to backpressure or back drainage conditions.

b. The assembly shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.

c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

d. The assembly shall not be installed below ground or in a vault or pit.

e. The assembly shall be installed in a vertical position."

[~~(9)~~] (10) In IPC, Section 608.3, the word "and" before the word "contamination" is deleted and replaced with a comma and the words " or pollution" are added after the word "contamination" in the first sentence.

[~~(10)~~] (11) In IPC, Section 608.6, the words "with the potential to create a condition of either contamination or pollution or" are added after the word "substances."

[~~(11)~~] (12) In IPC, Section 608.7, the following sentence is added at the end of the paragraph: "Any connection between potable water piping and sewer-connected waste shall be protected by an air gap in accordance with Section 608.14.1."

[~~(12)~~] (13) IPC, Section 608.8, is deleted and replaced with the following: " 608.8 Stop and Waste Valves installed below grade. Combination stop-and-waste valves shall be permitted to be installed underground or below grade. Freeze proof yard hydrants that drain

the riser into the ground are considered to be stop-and-waste valves and shall be permitted. A stop-and-waste valve shall be installed in accordance with a manufacturer's recommended installation instructions."

[~~(13)~~] (14) IPC, Section 608.14.3, is deleted and replaced with the following: " 608.14.3 Backflow preventer with intermediate atmospheric vent. Backflow preventers with intermediate atmospheric vents shall conform to ASSE 1012 or CSA CAN/CSA-B64.3. These devices shall be permitted to be installed on residential boilers, without chemical treatment, where subject to continuous pressure conditions, and humidifiers in accordance with Section 608.17.10. The relief opening shall discharge by air gap and shall be prevented from being submerged."

[~~(14)~~] (15) IPC, Section 608.14.4, is deleted.

[~~(15)~~] (16) IPC, Section 608.16.3, is deleted and replaced with the following: " 608.16.3 Protection by a backflow preventer with intermediate atmospheric vent. Connections to residential boilers only, without chemical treatment, and humidifiers shall be protected by a backflow preventer with an intermediate atmospheric vent."

[~~(16)~~] (17) IPC, Section 608.16.4, is deleted and replaced with the following: " 608.16.4 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type or pressure-type vacuum breakers. Vacuum breakers shall not be installed under exhaust hoods or similar locations that will contain toxic fumes or vapors. Fill valves shall be set in accordance with Section [~~425.3.1~~] 415.3.1. Atmospheric Vacuum Breakers - The critical level of the atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above the flood level rim of the fixture or device. Pipe-applied vacuum breakers shall be installed at the highest point, but not less than 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served. No valves shall be installed downstream of the atmospheric vacuum breaker. The atmospheric vacuum breaker shall not be installed where it may be subjected to continuous pressure for more than 12 consecutive hours at any time. Pressure Vacuum Breaker - The critical level of the pressure vacuum breaker shall be set a

minimum of 12 inches (304 mm) above the flood level of the fixture [~~or~~] device and above all downstream piping and the highest point of use."

[~~(17)~~] (18) In IPC, Section 608.16.4.2, the following is added after the first sentence: "Add-on-backflow prevention devices shall be non-removable. In climates where freezing temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow preventer shall be used."

[~~(18)~~] (19) In IPC, Section 608.17.1.2, the words "or ASSE 1024" are deleted.

[~~(19)~~] (20) IPC, Section 608.17.2, is deleted and replaced as follows: " 608.17.2 Connections to boilers. The potable supply to a boiler shall be protected by an air gap or a reduced pressure principle backflow preventer, complying with ASSE 1013, CSA B64.4 or AWWA C511.

Exception: The potable supply to a residential boiler without chemical treatment may be equipped with a backflow preventer with an intermediate atmospheric vent complying with ASSE 1012, ASSE 1081.1, or CSA CAN/CSA-B64.3."

[~~(20)~~] (21) In IPC, Section 608.17.4.1, a new exception is added as follows: "Exception: All class 1 and 2 systems containing chemical additives consisting of strictly glycerine (C.P. or U.S.P. 96.5 percent grade) or propylene glycol shall be protected against backflow with a double check valve assembly or double check valve detector assembly. Such systems shall include written certification of the chemical additives at the time of original installation and service or maintenance."

[~~(21)~~] (22) IPC, Section 608.17.7, is deleted and replaced with the following: " 608.17.7 Chemical dispensers. Where chemical dispensers connect to the water distribution system, the water supply system shall be protected against backflow in accordance with Section 608.14.1, Section 608.14.2, Section 608.14.5, Section 608.14.6 or Section 608.14.8. Installation shall be in accordance with Section 608.1.2. Chemical dispensers shall connect to a separate dedicated water supply line, and not [~~a sink faucet~~] downstream of an atmospheric vacuum breaker."

[~~(22)~~] (23) IPC, Section 608.17.8, is deleted and replaced with the following: " 608.17.8 Portable cleaning equipment. Where the portable cleaning equipment connects to the water distribution system, the water supply system shall be protected against backflow in accordance with Section 608.14.1 or Section 608.14.2."

[~~(23)~~] (24) A new IPC, Section 608.17.11, is added as follows: " 608.17.11 Automatic and coin operated car washes. The water supply to an automatic or coin operated car wash shall be protected in accordance with [~~Section 608.14.1 or~~] Section 608.14.2."

[~~(24)~~] (25) IPC, Section 608.18, is deleted and replaced with the following: " 608.18 Protection of individual water supplies. See Section 602.3 for requirements."

Section 22. Section **15A-3-309** is amended to read:

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

(1) In IPC, Section [~~903.1~~] 903.1.1, when the number of inches is to be specified, "12 inches (304.8mm)" is inserted.

(2) In IPC, a new Section [~~903.6, the following sentence is added at the end of the paragraph: "~~] 903.7 is added as follows: "903.7 Extension through a wall. Vents extending through the wall shall terminate not less than 12 inches from the wall with an elbow pointing downward."

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

Section 23. Section **15A-3-310** is amended to read:

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

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

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

Section 24. Section **15A-3-313** is amended to read:

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

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

"1301.4.1 Recording.

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

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

"1301.5 Potable water connections.

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

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

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

" 1301.9.4 Makeup water.

Where an uninterrupted supply is required for the intended application, potable or reclaimed water shall be provided as a source of makeup water for the storage tank. The makeup water supply shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 608. A full-open valve located on the makeup water supply line to the storage tank shall be provided. Inlets to the storage tank shall be controlled by fill valves or other automatic supply valves installed to

prevent the tank from overflowing and to prevent the water level from dropping below a predetermined point. Where makeup water is provided, the water level shall not be permitted to drop below the source water inlet or the intake of any attached pump."

[~~(4)~~] (5) IPC, Section 1302.12.4, is deleted and replaced with the following:

"1302.12.4 Inspection and testing of backflow prevention assemblies.

Testing of a backflow preventer shall be conducted in accordance with Sections 312.10.1, 312.10.2, and 312.10.3."

[~~(5)~~] (6) IPC, Section 1303.15.6, is deleted and replaced with the following:

"1303.15.6 Inspection and testing of backflow prevention assemblies.

Testing of a backflow prevention assembly shall be conducted in accordance with Sections 312.10.1, 312.10.2, and 312.10.3."

[~~(6)~~] (7) IPC, Section 1304.4.2, is deleted and replaced with the following:

"1304.4.2 Inspection and testing of backflow prevention assemblies.

Testing of a backflow preventer or backwater valve shall be conducted in accordance with Sections 312.10.1, 312.10.2, and 312.10.3."

Section 25. Section **15A-3-315** is amended to read:

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

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

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

"Standard reference number	Title	Referenced in code section number

USC-FCCCHR 10th Edition 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 608.1~~] Section 312.10.2"

Section 26. Section **15A-3-402** is amended to read:

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

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

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

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

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

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

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

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

4. The requirements of this note apply to:

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

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

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

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

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

Exception: Section 502.20 applies to a manicure station in:

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

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

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

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

(4) In IMC, Section 918.1, the following words are added after "1995": "or UL/CSA 60335-2-40."

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

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

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

[~~(8) In IMC, Chapter 15, the standard for ASHRAE, is amended by changing the:~~]

[~~(a) standard reference number "15-2016" to "15-2019"; and~~]

[~~(b) standard reference number "34-2016" to "34-2019";~~]

[~~(9)~~] (8) In IMC, Chapter 15 is amended by adding the following referenced standard

to CSA:

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

[~~(10)~~] (9) In IMC, Chapter 15 is amended by adding the following referenced standard to UL:

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

Section 27. Section **15A-3-601** is amended to read:

15A-3-601. General provisions.

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

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

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

(3) In NEC, Section 210.8(A)(5), the word "Basements" is deleted and replaced with

"Unfinished portions or areas of the basement not intended as habitable rooms."

(4) In NEC, Section 210.8(F), is deleted.

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

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

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

(1) On or above, but not more than 500 mm (20 inches) above a countertop or work surface.

(2) In a countertop using receptacle assemblies listed for use in countertops.

(3) In a work surface using receptacle outlet assemblies listed for use in work surfaces or listed for use in countertops.

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

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

(6) NEC, Section 210.12, is deleted.

[~~(5)~~] (7) NEC, Section 210.65, is deleted.

[~~(6)~~] (8) In NEC, Section 230.67, is deleted.

[~~(7)~~] (9) In NEC, Section 314.27(C), is deleted and replaced with the following: "314.27(C) Boxes at Ceiling-Suspended (Paddle) Fan Outlets. Outlet boxes or outlet box systems used as the sole support of a ceiling-suspended (paddle) fan shall be listed, shall be marked by their manufacturer as suitable for this purpose, and shall not support ceiling-suspended (paddle) fans that weigh more than 32 kg (70 lb). For outlet boxes or outlet box systems designed to support ceiling-suspended (paddle) fans that weigh more than 16 kg (35 lb), the required marking shall include the maximum weight to be supported."

[~~(8)~~] (10) In NEC, Section 406.9(C), is deleted and replaced with the following: "406.9(C) Bathtub and Shower Space. Receptacles shall not be installed within or directly over a bathtub or shower stall."

Section 28. 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) In IECC, Section C403.11.2.3, the words "by the designer" are deleted.~~]

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

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

(4) In IECC, Section R401.2, a new number 4 is added as follows:

"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."

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

[~~(7)~~] (8) In IECC, Section 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."

[~~(8)~~] (9) In IECC, Section R402.4.1.2, the following changes are made:

(a) In the first sentence:

(i) "The building or dwelling unit" is deleted and replaced with "A single-family dwelling";

(ii) after January 1, 2019, replace the word "five" with "3.5"; and

(iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate 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: "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."

[~~(9)~~] (10) In IECC, Section R403.3.3[~~:~~], the exception for duct air leakage testing is deleted and replaced with the following:

[~~(a) the exception for duct air leakage testing is deleted; and~~]

[~~(b) the exception for duct air leakage is replaced:~~]

[~~(i)~~] (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.";

[~~(ii)~~] (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

[~~(iii)~~] (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."

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

[~~(11)~~] (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.

[~~(12)~~] (13) In IECC, Section R403.3.5, the words "or plenums" are deleted.

[~~(13)~~] (14) In IECC, Section R403.5.3, Subsection 5 is deleted and Subsections 6 and 7 are renumbered.

[~~(14)~~] (15) IECC, Section R403.6.1, is deleted and replaced with the following: "R403.6.1 Whole-house mechanical ventilation system fan efficacy. Fans used to provide whole-house mechanical ventilation shall meet the efficacy requirements of Table R403.6.1.

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

[~~(15)~~] (16) In IECC, Section R403.6.1, the table is deleted and replaced with the following:

"TABLE R403.6.1

MECHANICAL VENTILATION SYSTEM FAN EFFICACY

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

[~~(16)~~] (17) In IECC, Section [~~R406.4~~] R406.5, the table is deleted and replaced with the following:

"TABLE [~~R406.4~~] R406.5

MAXIMUM ENERGY RATING INDEX

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

(18) 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."

Section 29. 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 Section 202, the following definition is added: "BUILDING OFFICIAL. See Code Official."

(2) 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) 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) In Section 301.3, the exception is deleted.

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

(6) 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) 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) 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) 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) (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 [~~4~~] 5 as follows:

"[~~4~~] 5. Where the design occupant load increase is less than 25 occupants and the occupancy category does not change."

(11) In Section 1012.7.3, exception 2 is deleted.

Section 30. Section **15A-3-1001** is amended to read:

15A-3-1001. General provisions.

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

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

(3) In ISPSC, Section 320.1, the following changes are made:

(a) the words "or storm" are deleted;

(b) the words "onsite waste water" are added before the word "disposal"; and

(c) the words "or shall be disposed of by other means approved by the state or local authority" are deleted.

Section 31. **Effective date.**

This bill takes effect on July 1, 2023.

2814