

Dear Senators PATRICK, Guthrie, Ward-Engelking, and
Representatives BARBIERI, Clow, Smith:

The Legislative Services Office, Research and Legislation, has received the enclosed rules of the
Division of Building Safety:
IDAPA 07.03.01 - Rules of Building Safety - Proposed Rule (Docket No. 07-0301-1801).

Pursuant to Section 67-454, Idaho Code, a meeting on the enclosed rules may be called by the
cochairmen or by two (2) or more members of the subcommittee giving oral or written notice to Research
and Legislation no later than fourteen (14) days after receipt of the rules' analysis from Legislative
Services. The final date to call a meeting on the enclosed rules is no later than 11/05/2018. If a meeting is
called, the subcommittee must hold the meeting within forty-two (42) days of receipt of the rules' analysis
from Legislative Services. The final date to hold a meeting on the enclosed rules is 12/05/2018.

The germane joint subcommittee may request a statement of economic impact with respect to a
proposed rule by notifying Research and Legislation. There is no time limit on requesting this statement,
and it may be requested whether or not a meeting on the proposed rule is called or after a meeting has
been held.

To notify Research and Legislation, call 334-4854, or send a written request to the address on the
memorandum attached below.



Eric Milstead
Director

Legislative Services Office

Idaho State Legislature

Serving Idaho's Citizen Legislature

MEMORANDUM

TO: Rules Review Subcommittee of the Senate Commerce & Human Resources Committee and the House Business Committee

FROM: Principal Legislative Drafting Attorney - Ryan Bush

DATE: October 16, 2018

SUBJECT: Division of Building Safety

IDAPA 07.03.01 - Rules of Building Safety - Proposed Rule (Docket No. 07-0301-1801)

Summary and Stated Reasons for the Rule

The Division of Building Safety submits notice of proposed rulemaking at IDAPA 07.03.01 - Rules of Building Safety. This proposed rule revises the incorporation by reference of the International Building Code by removing reference to a chapter of the code regarding energy efficiency and adding a table regarding piping volume and maximum piping length.

Negotiated Rulemaking / Fiscal Impact

The Division states that negotiated rulemaking was conducted and that notice was published in the April edition of the Idaho Administrative Bulletin. There is no fiscal impact associated with this rulemaking.

Statutory Authority

The proposed rule appears to be within the statutory authority granted to the Division in Sections 39-4107 and 39-4109, Idaho Code.

cc: Division of Building Safety
Patrick Grace

*** PLEASE NOTE ***

Per the Idaho Constitution, all administrative rules must be reviewed by the Legislature during the next legislative session. The Legislature has 3 options with this rulemaking docket: **1)** Approve the docket in its entirety; **2)** Reject the docket in its entirety; or **3)** Reject the docket in part.

IDAPA 07 – DIVISION OF BUILDING SAFETY

07.03.01 – RULES OF BUILDING SAFETY

DOCKET NO. 07-0301-1801

NOTICE OF RULEMAKING – PROPOSED RULE

AUTHORITY: In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking procedures. The action is authorized pursuant to Sections 39-4107 and 39-4109, Idaho Code.

PUBLIC HEARING SCHEDULE: Public hearing(s) concerning this rulemaking will be scheduled if requested in writing by twenty-five (25) persons, a political subdivision, or an agency, not later than October 17, 2018.

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made not later than five (5) days prior to the hearing, to the agency address below.

DESCRIPTIVE SUMMARY: The following is a nontechnical explanation of the substance and purpose of the proposed rulemaking:

Recent amendments to Sections 39-4109 and 39-4116, Idaho Code, remove part IV as it pertains to energy conservation from the adopted version of the International Residential Code (IRC). This rulemaking will implement those amendments by removing IDAPA 07.03.01.004.02.p. (Chapter 11 Energy Efficiency) from the adopted version of the IRC and references to Chapter 11 from the adopted version of the International Energy Conservation Code (IECC).

Table C404.5.1 of the adopted version of the IECC identifies maximum piping lengths for hot water piping from a hot water source to the termination of the fixture supply pipe. The maximum lengths for public lavatory faucets are unnecessarily short. The minimal energy savings that result from these short maximum piping lengths do not justify the difficulty and cost of creating design and construction solutions. This rulemaking will increase the maximum piping lengths for public lavatory faucets in table C404.5.1. The proposed maximum piping lengths take into consideration energy savings while reducing cost and providing for a more efficient installation.

FEE SUMMARY: The following is a specific description of the fee or charge imposed or increased: N/A

FISCAL IMPACT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year resulting from this rulemaking: N/A

NEGOTIATED RULEMAKING: Pursuant to Section 67-5220(1), Idaho Code, negotiated rulemaking was conducted. The Notice of Intent to Promulgate Rules - Negotiated Rulemaking was published in the April 4, 2018 Idaho Administrative Bulletin, [Vol. 18-4, pages 14-15](#).

INCORPORATION BY REFERENCE: Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the materials cited are being incorporated by reference into this rule:

This rulemaking will implement recent amendments to Sections 39-4109 and 39-4116, Idaho Code, by removing IDAPA 07.03.01.004.02.p. (Chapter 11 Energy Efficiency) from the adopted version of the IRC and references to Chapter 11 from the adopted version of the IECC. This rulemaking will also increase the maximum piping lengths for public lavatory faucets in table C404.5.1 of the adopted version of the IECC.

ASSISTANCE ON TECHNICAL QUESTIONS, SUBMISSION OF WRITTEN COMMENTS: For assistance on technical questions concerning the proposed rule, contact Jeff Egan, Building Program Manager, at (208) 481-1366.

Anyone may submit written comments regarding this proposed rulemaking. All written comments must be directed to the undersigned and must be delivered on or before October 24, 2018.

Dated this 28th day of August, 2018.

Ron Whitney, Deputy Administrator – Administration
Division of Building Safety
1090 E. Watertower St., Ste. 150
P. O. Box 83720
Meridian, ID 83642
Phone: (208) 332-7150
Fax: (877) 810-2840

THE FOLLOWING IS THE PROPOSED TEXT OF DOCKET NO. 07-0301-1801
(Only Those Sections With Amendments Are Shown.)

004. ADOPTION AND INCORPORATION BY REFERENCE.

Under the provisions of Section 39-4109, Idaho Code, the codes enumerated in this Section are hereby adopted and incorporated by reference into IDAPA 07.03.01, “Rules of Building Safety,” Division of Building Safety. Pursuant to Section 39-4109, Idaho Code, the effective date of any edition of the codes adopted in this Section, or any amendments identified thereto, shall be January 1 of the succeeding year following legislative approval of the rulemaking establishing the edition or amendment. Copies of these documents may be reviewed at the office of the Division of Building Safety. The referenced codes may be obtained from International Code Council, 5360 Workman Mill Road, Whittier, California 90601-2298 or the International Code Council at <http://www.iccsafe.org>. (3-20-14)

01. International Building Code. 2015 Edition with the following amendments: (3-29-17)

a. Delete section 305.2.3 and replace with the following: Twelve (12) or fewer children in a dwelling unit. A facility such as the above within a dwelling unit and having twelve (12) or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code. (3-20-14)

b. Delete section 308.6.4 and replace with the following: Persons receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having twelve (12) or fewer children receiving day care or having five (5) or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code. (3-20-14)

c. Delete section 310.5 and replace with the following: Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4, E or I, including: (3-29-17)

- i. Buildings that do not contain more than two (2) dwelling units; (3-20-14)
- ii. Boarding houses (nontransient) with sixteen (16) or fewer occupants; (3-20-14)
- iii. Boarding houses (transient) with ten (10) or fewer occupants; (3-20-14)
- iv. Care facilities that provide accommodations for five (5) or fewer persons receiving care; (3-20-14)
- v. Congregate living facilities (nontransient) with sixteen (16) or fewer occupants; (3-20-14)
- vi. Congregate living facilities (transient) with ten (10) or fewer occupants; or (3-20-14)
- vii. Dwelling units providing day care for twelve (12) or fewer children. (3-20-14)
- viii. Lodging houses with five (5) or fewer guest rooms. (3-29-17)

d. Delete section 310.5.1 and replace with the following: Care facilities within a dwelling. Care

facilities for twelve (12) or fewer children receiving day care or for five (5) or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the International Residential Code. (3-20-14)

e. Delete the last paragraph of section 2107.2.1 Lap Splices, and replace with the following: In regions of moment where the design tensile stresses in the reinforcement are greater than eighty percent (80%) of the allowable steel tension stress, FS, the lap length of splices shall be increased not less than fifty percent (50%) of the minimum required length, but need not be greater than 72 db. Other equivalent means of stress transfer to accomplish the same fifty percent (50%) increase shall be permitted. Where epoxy coated bars are used, lap length shall be increased by fifty percent (50%). (3-28-18)

f. Add footnote (f) in the header row of the table column labeled “Drinking Fountains” of Table 2902.1 Minimum Number of Required Plumbing Fixtures, and add footnote (f) under Table 2902.1 to state the following: Drinking fountains are not required for an occupant load of thirty (30) or fewer. (3-29-17)

g. Delete footnote (e) contained under Table 2902.1 Minimum Number of Required Plumbing Fixtures and replace with the following: For business occupancies, excluding restaurants, and mercantile occupancies with an occupant load of thirty (30) or fewer, service sinks shall not be required. (3-29-17)

02. International Residential Code. 2012 Edition with the following amendments: (3-20-14)

a. Delete exception No. 1 contained under IRC section R101.2 - Scope. (3-20-14)

b. Delete exception No. 2 contained under IRC section R101.2 - Scope, and replace with the following: Owner-occupied lodging houses with five (5) or fewer guestrooms shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-family Dwellings. (4-11-15)

c. Delete item No. 7 contained under the “Building” subsection of IRC section R105.2 - Work exempt from permit, and replace with the following: Prefabricated swimming pools that are not greater than four (4) feet (one thousand, two hundred nineteen (1219) mm) deep. (4-7-11)

d. Add the following item No. 11 at the end of the “Building” subsection of IRC section R105.2 - Work exempt from permit: Flag poles. (3-20-14)

e. Delete IRC section R109.1.3 and replace with the following: Floodplain inspections. For construction in areas prone to flooding as established by Table R301.2(1), upon placement of the lowest floor, including basement, the building official is authorized to require submission of documentation of the elevation of the lowest floor, including basement, required in section R322. (3-29-10)

f. IRC Table R302.1(1) Exterior Walls -- delete Table R302.1(1) and replace with the following:

TABLE R302.1(1)
EXTERIOR WALLS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	Fire-resistance rated	1 hour-tested in accordance with ASTM E 119 or UL263 with exposure from both sides	< 3 feet
	Not fire-resistance rated	0 hours	≥ 3 feet
Projections	Fire-resistance rated	1 hour on the underside	≥ 2 feet to < 3 feet
	Not fire-resistance rated	0 hours	≥ 3 feet

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Openings in Walls	Not allowed	N/A	< 3 feet
	25% maximum of wall area	0 hours	≥ 3 feet to < 5 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R302.4	< 3 feet
		None required	≥ 3 feet

For SI: 1 foot = 304.8 mm.
 N/A = Not Applicable

(4-11-15)

g. Delete the exception contained under IRC section R302.2 -- Townhouses, and replace with the following two (2) exceptions: (3-25-16)

i. When provided with an automatic fire sprinkler system per section R313.1, a common one (1)-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts, or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides, and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4. (3-25-16)

ii. Two (2) one (1)-hour fire-resistance-rated wall assemblies (as specified in Section R302.1) or a common two (2)-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 are permitted for townhouses. If two (2) one (1)-hour fire-resistance-rated walls are used, plumbing and electrical installations within the wall cavity shall conform to fire-resistance penetration requirements in accordance with section R302.4 through R302.4.2 for each of the two (2) one (1)-hour rated walls penetrated. The two (2)-hour fire-resistance-rated common wall shall not contain plumbing or mechanical equipment, ducts or vents within its wall cavity. The wall shall be rated for fire exposure from both sides, and shall extend to and be tight against the exterior walls and the underside of the roof sheathing. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4. (3-25-16)

h. Delete IRC section R303.4 and replace with the following: R303.4 Mechanical Ventilation. Dwelling units shall be provided with whole-house mechanical ventilation in accordance with Section M1507.3

Exception: Where the air infiltration rate of a dwelling unit is equal to 5 air changes per hour or greater when tested with a blower door at a pressure of 0.2 inch w.c. (50 pa) in accordance with Section N1102.4.1.2. (4-11-15)

i. Delete the exception contained under IRC section R313.1 -- Townhouse automatic fire sprinkler systems, and replace with the following: Exception: Automatic residential fire sprinkler systems shall not be required in townhouses where either two (2) one (1)-hour fire-resistance-rated walls or a common two (2)-hour fire-resistance rated wall, as specified in exception 2 of section R302.2 is installed between dwelling units or when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed. (3-25-16)

j. Delete IRC section R313.2. (3-29-10)

k. Add the following to IRC section R315.3 - Where required in existing dwellings: Exceptions: 1. Work involving the exterior surfaces of dwellings, such as, but not limited to, replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck or electrical permits, are exempt from the requirements of this section; and 2. Installation, alteration or repairs of noncombustion plumbing or mechanical systems are exempt from the requirements of this section. (3-20-14)

- l.** Delete IRC section R322.1.10. (3-29-10)
- m.** Delete IRC section R322.2.2 subparagraph 2.2, and replace with the following: The total net area of all openings shall be at least one (1) square inch (645 mm²) for each square foot (0.093 m²) of enclosed area, or the opening shall be designed and the construction documents shall include a statement that the design and installation of the openings will provide for equalization of hydrostatic flood forces on exterior walls by allowing the automatic entry and exit of floodwaters. (3-20-14)
- n.** Delete IRC section R501.3 and its exceptions. (3-20-14)
- o.** Delete IRC section R602.10 and replace with the following: Wall bracing. Buildings shall be braced in accordance with this section or, when applicable section R602.12, or the most current edition of APA System Report SR-102 as an alternate method. Where a building, or portion thereof, does not comply with one (1) or more of the bracing requirements in this section, those portions shall be designated and constructed in accordance with section R301.1. (3-20-14)
- p.** *Chapter 11 [RE] Energy Efficiency—The following sections and tables of chapter 11 shall be amended in accordance with the requirements contained below in Subsection 004.04 of these rules which correspond to the appropriate section:* (3-20-14)
- i.** *Table N1102.1.1 (Table R402.1.1)—Insulation and Fenestration Requirements by Component;* (3-20-14)
- ii.** *Table N1102.1.3 (Table R402.1.3)—Equivalent U-Factors;* (3-20-14)
- iii.** *Table N1102.2.6 (Table R402.2.6)—Steel Frame Ceiling, Wall and Floor Insulation (R Value);* (3-20-14)
- iv.** *Section N1102.4.1 (R402.4.1) Building Thermal Envelope;* (3-20-14)
- v.** *Section N1102.4.1.1 (R402.4.1.1)—Insulation;* (3-20-14)
- vi.** *Table N1102.4.1.1 (Table R402.4.1.1)—Air Barrier and Insulation Installation;* (3-20-14)
- vii.** *Section N1102.4.1.2 (R402.4.1.2) Testing Option;* (3-20-14)
- viii.** *Add Section N1102.4.1.3 (R402.4.1.3)—Visual Inspection Option;* (3-20-14)
- ix.** *Add Section N1102.6 (R402.6)—Residential Log Home Thermal Envelope;* (3-20-14)
- x.** *Add Table N1102.6 (Table R402.6)—Log Home Prescriptive Thermal Envelope Requirements by Component; and* (3-20-14)
- xi.** *Section N1104.1 (R404.1)—Lighting Equipment.* (3-20-14)
- q.** Add an Appendix R, titled Tiny Homes to include the following provisions: (3-28-18)
- i.** Section AR101 Scope. This appendix shall be applicable to tiny houses used as single dwelling units. Tiny houses shall comply with this code except as otherwise stated in this appendix. (3-28-18)
- ii.** Section AR102 Definitions. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions. (3-28-18)
- (1) Tiny House. A dwelling that is four hundred (400) square feet (thirty-seven (37) m) or less in floor area excluding lofts. (3-28-18)
- (2) Escape and Rescue Roof Access Window. A skylight or roof window designed and installed to

- satisfy the emergency escape and rescue opening requirements in Section R310. (3-28-18)
- (3) Landing Platform. A landing provided as the top step of a stairway accessing a loft. (3-28-18)
- (4) Loft. A floor level located more than thirty (30) inches (762 mm) above the main floor and open to it on at least one (1) side with a ceiling height of less than six (6) feet eight (8) inches (2032 mm), used as a living or sleeping space. (3-28-18)
- (iii) Section AR103 Minimum Ceiling Height. Habitable space and hallways in tiny houses shall have a ceiling height of not less than six (6) feet eight (8) inches (2032 mm). Bathrooms, toilet rooms, and kitchens shall have a ceiling height of not less than six (6) feet four (4) inches (1930 mm). Obstructions shall not extend below these minimum ceiling heights including beams, girders, ducts, lighting and other obstructions. Exception: Ceiling heights in lofts are permitted to be less than six (6) feet eight (8) inches (2032 mm) (3-28-18)
- iv. Section AR104 Lofts. (3-28-18)
- (1) AR104.1 Minimum loft area and dimensions. Lofts used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections AR104.1.1 through AR104.1.3. (3-28-18)
- (a) AR104.1.1 Minimum area. Lofts shall have a floor area of not less than thirty-five (35) square feet (3.25 m). (3-28-18)
- (b) AR104.1.2 Minimum dimensions. Lofts shall be not less than five (5) feet (1524 mm) in any horizontal dimension. (3-28-18)
- (c) AR104.1.3 Height effect on loft area. Portions of a loft with a sloping ceiling measuring less than three (3) feet (914 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. Exception: Under gable roofs with a minimum slope of 6:12, portions of a loft with a sloping ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. (3-28-18)
- (2) AR104.2 Loft Access. The access to and primary egress from lofts shall be any type described in Sections AR104.3 through AR104.6. (3-28-18)
- (3) AR104.3. Stairways. Stairways accessing lofts shall comply with this code or with Sections AR104.3.1 through AR104.3.5. (3-28-18)
- (a) AR104.3.1 Width. Stairways accessing a loft shall not be less than seventeen (17) inches (432 mm) in clear width at or above the handrail. The minimum width below the handrail shall be not less than twenty (20) inches (508 mm). (3-28-18)
- (b) AR104.3.2 Headroom. The headroom in stairways accessing a loft shall be not less than six (6) feet two (2) inches (1880 mm), as measured vertically, from a sloped line connecting the tread or landing platform nosings in the middle of their width. Exception: The headroom for a landing platform, where stairways access lofts, shall be not less than four (4) feet six (6) inches (1372 mm). (3-28-18)
- (c) AR104.3.3 Treads and Risers. Risers for stairs accessing a loft shall be not less than seven (7) inches (178 mm) and not more than twelve (12) inches (305 mm) in height. Tread depth and riser height shall be calculated in accordance with one of the following formulas: (3-28-18)
- (i) The tread depth shall be twenty (20) inches (508 mm) minus 4/3 of the riser height, or (3-28-18)
- (ii) The riser height shall be fifteen (15) inches (381 mm) minus 3/4 of the tread depth. (3-28-18)
- (d) AR104.3.4 Landing Platforms. The top tread and riser of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than six (6) feet two (2) inches (1880 mm) where the stairway meets the loft. The landing platform shall be eighteen (18) inches to twenty-two (22) inches (457

to 559 mm) in depth measured from the nosing of the landing platform to the edge of the loft, and sixteen (16) to eighteen (18) inches (406 to 457 mm) in height measured from the landing platform to the loft floor. (3-28-18)

(e) AR104.3.5 Stairway Handrails. Handrails shall comply with Section R311.7.8. (3-28-18)

(f) AR104.3.6 Stairway Guards. Guards at open sides of stairways shall comply with Section R312.1. (3-28-18)

(4) AR104.4 Ladders. Ladders accessing lofts shall comply with Sections AR104.4.1 and AR104.4.2. (3-28-18)

(a) AR104.4.1 Ladder Size and Capacity. Ladders accessing lofts shall have a rung width of not less than twelve (12) inches (305 mm) and ten (10) inches (254 mm) to fourteen (14) inches (356 mm) spacing between rungs. Ladders shall be capable of supporting a two hundred (200) pound (75 kg) load on any rung. Rung spacing shall be uniform within 3/8-inch (9.5 mm). (3-28-18)

(b) AR104.4.2 Ladder Incline. Ladders shall be installed at seventy (70) to eighty (80) degrees from horizontal. (3-28-18)

(5) AR104.5 Alternating Tread Devices. Alternating tread devices accessing lofts, and handrails of alternating tread devices shall comply with sections 1011.14.1 and 1011.14.2 of the International Building Code, excluding the exception. The clear width at and below the handrails shall be not less than twenty (20) inches (508 mm). (3-28-18)

(6) AR104.6. Ships Ladders. Ships ladders accessing lofts, and treads and handrails of ships ladders shall comply with sections 1011.15.1 and 1011.15.2 of the International Building Code. The clear width at and below handrails shall be not less than twenty (20) inches (508 mm). (3-28-18)

(7) AR104.7 Loft Guards. Loft guards shall be located along the open side of lofts. Loft guards shall not be less than thirty-six (36) inches (914 mm) in height or one (1)-half of the clear height to the ceiling, whichever is less. (3-28-18)

v. SECTION AR105. Emergency Escape and Rescue Openings. Tiny houses shall meet the requirements of Section R310 for emergency escape and rescue openings. Exception: Escape and rescue roof access windows in lofts used as sleeping rooms shall be deemed to meet three (3) requirements of Section R310 where installed such that the bottom of the opening is not more than forty-four (44) inches (1118 mm) above the loft floor, provided the escape and rescue roof access window complies with the minimum opening area requirements of Section R310. (3-28-18)

03. International Existing Building Code. 2015 Edition. (3-29-17)

04. International Energy Conservation Code. 2015 Edition with the following amendments: (3-29-17)

a. Delete the Residential Provisions of the 2015 International Energy Conservation Code (IECC) set forth in chapters 1 [RE] through 6 [RE], including Appendix RA (pages R-1 through R-57), and replace with the Residential Provisions of the 2012 IECC set forth therein in chapters 1 [RE] through 5 [RE] (pages R-1 through R-47) and as such provisions may be further amended herein these rules. (3-29-17)

b. Add the following as new subsection C101.5.3: Industrial, electronic, and manufacturing equipment. Buildings or portions thereof that are heated or cooled exclusively to maintain the required operating temperature of industrial, electronic, or manufacturing equipment shall be exempt from the provisions of this code. Such buildings or portions thereof shall be separated from connected conditioned space by building thermal envelope assemblies complying with this code. (3-25-16)

c. Add the following exception No. (10) under section C403.3 Economizers (Prescriptive): Unusual outdoor air contaminate conditions – Systems where special outside air filtration and treatment for the reduction and

treatment of unusual outdoor contaminants, makes an air economizer infeasible.

(3-29-17)

d. Delete Table C404.5.1 and replace with the following:

TABLE C404.5.1			
PIPING VOLUME AND MAXIMUM PIPING LENGTHS			
<u>NOMINAL PIPE SIZE (inches)</u>	<u>VOLUME (liquid ounces per foot length)</u>	<u>MAXIMUM PIPING LENGTH (feet)</u>	
		<u>Public lavatory faucets</u>	<u>Other fixtures and appliances</u>
<u>1/4</u>	<u>0.33</u>	<u>31</u>	<u>50</u>
<u>5/16</u>	<u>0.5</u>	<u>N/A - non-standard size</u>	<u>50</u>
<u>3/8</u>	<u>0.75</u>	<u>17</u>	<u>50</u>
<u>1/2</u>	<u>1.5</u>	<u>10</u>	<u>43</u>
<u>5/8</u>	<u>2</u>	<u>7</u>	<u>32</u>
<u>3/4</u>	<u>3</u>	<u>5</u>	<u>21</u>
<u>7/8</u>	<u>4</u>	<u>N/A - non-standard size</u>	<u>16</u>
<u>1</u>	<u>5</u>	<u>3</u>	<u>13</u>
<u>1 1/4</u>	<u>8</u>	<u>2</u>	<u>8</u>
<u>1 1/2</u>	<u>11</u>	<u>1</u>	<u>6</u>
<u>2 or larger</u>	<u>18</u>	<u>1</u>	<u>4</u>

For SI: 1 inch = 25.4 mm; 1 foot = 304.8 mm; 1 liquid ounce = 0.030 L; 1 gallon = 128 ounces.

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d.e. Delete the values contained in Table R402.1.1 (Table N1102.1.1) for climate zone “5 and Marine 4” and climate zone “6” and replace with the following:

TABLE R402.1.1 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT										
Climate Zone	Fenestration U-Factor	Skylight U-factor	Glazed Fenestration SHGC	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value	Slab R-Value	Crawlspace Wall R-Value
5 and Marine 4	0.35	0.60	NR	38	20 or 13+5 ^h	13/17	30 ^g	10/13	10, 2 ft	10/13
6	0.35	0.60	NR	49	20 or 13+5 ^h	15/19	30 ^g	15/19	10, 4 ft	10/13

(3-20-14)()

ef. Add the following footnote to the title of Table R402.1.1 - Insulation and Fenestration Requirements by Component: ^k For residential log home building thermal envelope construction requirements see section R402.6. (3-25-16)

fg. Delete the values contained in Table R402.1.3 (~~Table NH02.1.3~~) for climate zone “5 and Marine 4” and climate zone “6” and replace with the following:

TABLE R402.1.3 EQUIVALENT U-FACTORS								
Climate Zone	Fenestration U-factor	Skylight U-factor	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value	Crawlspace Wall R-Value
5 and Marine 4	0.35	0.60	0.030	0.057	0.082	0.033	0.059	0.065
6	0.35	0.60	0.026	0.057	0.060	0.033	0.050	0.065

(3-20-14)()

gh. Delete Table R402.2.6 (~~Table NH02.2.6~~) and replace with the following:

TABLE R402.2.6 STEEL-FRAME CEILING, WALL AND FLOOR INSULATION (R-VALUE)	
Wood Frame R-value Requirement	Cold-formed Steel Equivalent R-value ^a
Steel Truss Ceilings^b	
R-30	R-38 or R-30 + 3 or R-26 + 5
R-38	R-49 or R-38 + 3
R-49	R-38 + 5
a. Cavity insulation R-value is listed first, followed by continuous insulation R-value.	
b. Insulation exceeding the height of the framing shall cover the framing.	

TABLE R402.2.6	
STEEL-FRAME CEILING, WALL AND FLOOR INSULATION	
(R-VALUE)	
Wood Frame R-value Requirement	Cold-formed Steel Equivalent R-value^a
Steel Joist Ceilings^b	
R-30	R-38 in 2 x 4 or 2 x 6 or 2 x 8 R-49 in any framing
R-38	R-49 in 2 x 4 or 2 x 6 or 2 x 8 or 2 x 10
Steel-Framed Wall	
R-13	R-13 + 5 or R-15 + 4 or R-21 + 3 or R-0 + 10
R-19	R-13 + 9 or R-19 + 8 or R-25 + 7
R-21	R-13 + 10 or R-19 + 9 or R-25 + 8
Steel Joist Floor	
R-13	R-19 in 2 x 6 R-19 + 6 in 2 x 8 or 2 x 10
R-19	R-19 + 6 in 2 x 6 R-19 + 12 in 2 x 8 or 2 x 10
a. Cavity insulation R-value is listed first, followed by continuous insulation R-value. b. Insulation exceeding the height of the framing shall cover the framing.	

(3-25-16)()

hi. Delete section R402.4.1 (~~NI102.4.1~~) and replace with the following: Building thermal envelope. The building thermal envelope shall comply with sections R402.1.1 and either section R402.4.1.2 or R402.4.1.3. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. (3-25-16)()

ij. Delete section R402.4.1.1 (~~NI102.4.1.1~~) and replace with the following: Installation. The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer’s instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. (3-25-16)()

jk. Delete the criteria requirement for the “Fireplace” component of Table R402.4.1.1 (~~Table NI102.4.1.1~~)– Air Barrier and Insulation Installation, and replace with the following: An air barrier shall be installed on fireplace walls. (3-20-14)()

kl. Delete section R402.4.1.2 (~~NI102.4.1.2~~) and replace with the following: Testing option, Building envelope tightness and insulation installation shall be considered acceptable when tested air leakage is less than seven (7) air changes per hour (ACH) when tested with a blower door at a pressure of 33.5 psf (50 Pa). Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation and combustion appliances. During testing: (3-25-16)()

- i. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed; (3-20-14)
- ii. Dampers shall be closed, but not sealed, including exhaust, intake, makeup air, backdraft and flue dampers; (3-20-14)
- iii. Interior doors shall be open; (3-20-14)

- iv. Exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed; (3-20-14)
- v. Heating and cooling system(s) shall be turned off; (3-20-14)
- vi. HVAC ducts shall not be sealed; and (3-20-14)
- vii. Supply and return registers shall not be sealed. (3-20-14)

~~iv.~~ Add the following as section R402.4.1.3 (~~NI102.4.1.3~~): Visual inspection option, Building envelope tightness and insulation installation shall be considered acceptable when the items listed in Table R402.4.1.1, applicable to the method of construction, are field verified. Where required by code official an approved party independent from the installer of the insulation shall inspect the air barrier and insulation. (~~3-25-16~~)()

~~ii.~~ Add the following section: R402.6 (~~NI102.6~~) Residential Log Home Thermal Envelope. Residential log home construction shall comply with sections R401 (General), R402.4 (Air Leakage), R402.5 (Maximum Fenestration U-Factor and SHGC), R403.1 (Controls), R403.2.2 (Sealing), R403.2.3 (Building Cavities), sections R403.3 through R403.9 (referred to as the mandatory provisions), Section R404 (Electrical Power and Lighting Systems), and either i., ii., or iii. as follows: (~~3-25-16~~)()

- i. Sections R402.2 through R402.3, R403.2.1, R404.1 and Table R402.6; (3-25-16)
- ii. Section R405 Simulated Performance Alternative (Performance); or (3-25-16)
- iii. REScheck (U.S. Department of Energy Building Codes Program). (4-7-11)

~~0.~~ Add Table R402.6 (~~Table NI102.6~~) Log Home Prescriptive Thermal Envelope Requirements By Component to be used only in accordance with item i. of section R402.6 above to appear as follows:

TABLE R402.6
LOG HOME PRESCRIPTIVE THERMAL ENVELOPE REQUIREMENTS BY COMPONENT

For SI: 1 foot = 304.8 mm.

Climate Zone	Fenestration U-factor ^a	Skylight U-factor	Glazed Fenestration SHGC	Ceiling R-value	Min. Average Log Size In Inches	Floor R-value	Basement Wall R-value ^d	Slab R-value & Depth ^b	Crawl Space Wall R-value ^d
5, 6 - High efficiency equipment path ^c	0.32	0.60	NR	49	5	30	15/19	10, 4 ft.	10/13
5	0.32	0.60	NR	49	8	30	10/13	10, 2 ft.	10/13
6	0.30	0.60	NR	49	8	30	15/19	10, 4 ft.	10/13

- a. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- b. R-5 shall be added to the required slab edge R-values for heated slabs.
- c. 90% AFUE natural gas or propane, 84% AFUE oil, or 15 SEER heat pump heating equipment (zonal electric resistance heating equipment such as electric base board electric resistance heating equipment as the sole source for heating is considered compliant with the high efficiency equipment path).
- d. "15/19" means R-15 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulated sheathing on the interior or exterior of the home. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

~~(3-25-16)~~()

op. Delete section R404.1 ~~(NH04.1)~~ and replace with the following: Lighting equipment (Mandatory). A minimum of fifty percent (50%) of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or a minimum of fifty percent (50%) of the permanently installed lighting fixtures shall contain only high efficacy lamps. ~~(3-20-14)~~()

05. References to Other Codes. Where any provisions of the codes that are adopted in this Section make reference to other construction and safety-related model codes or standards which have not been adopted by the involved authority having jurisdiction, to the extent possible, such reference should be construed as pertaining to the equivalent code or standard that has been duly adopted by such jurisdiction. (3-29-10)

INCORPORATION BY REFERENCE SYNOPSIS

In compliance with Section 67-5223(4), Idaho Code, the following is a synopsis of the differences between the materials previously incorporated by reference in this rule that are currently of full force and effect and newly revised or amended versions of these same materials that are being proposed for incorporation by reference under this rulemaking.

The following agency of the state of Idaho has prepared this synopsis as part of the proposed rulemaking for the chapter cited here under the docket number specified:

**DIVISION OF BUILDING SAFETY
IDAPA 07.03.01 – Rules of Building Safety
Proposed Rulemaking - Docket No. 07-0301-1801**

This rulemaking will implement recent amendments to Idaho Code sections 39-4109 and 39-4116 by removing IDAPA 07.03.01.004.02.p. (Chapter 11 Energy Efficiency) from the adopted version of the International Residential Code and references to Chapter 11 from the adopted version of the International Energy Conservation Code (IECC). This rulemaking will also increase the maximum piping lengths for public lavatory faucets in table C404.5.1 of the adopted version of the IECC.