

BEFORE THE DEPARTMENT OF LABOR AND INDUSTRY  
STATE OF MONTANA

In the matter of the amendment of	)	NOTICE OF AMENDMENT
ARM 24.301.109 definitions,	)	
24.301.131, 24.301.154, 24.301.161,	)	
24.301.171 through 24.301.173, and	)	
24.301.301 incorporation by	)	
reference, 24.301.138 and	)	
24.301.139 fees, 24.301.142 and	)	
24.301.146 modifications to the	)	
international building code,	)	
24.301.361 plumbing permits, and	)	
24.301.371 plumbing inspections	)	

TO: All Concerned Persons

1. On July 24, 2014, the Department of Labor and Industry (department) published MAR Notice No. 24-301-286 regarding the public hearing on the proposed amendment of the above-stated rules, at page 1549 of the 2014 Montana Administrative Register, Issue No. 14.

2. On August 14, 2014, a public hearing was held on the proposed amendment of the above-stated rules in Helena. Several comments were received by the August 22, 2014, deadline.

3. The department has thoroughly considered the comments received. A summary of the comments received and the board's responses are as follows:

All comments regarding ARM 24.301.161 INCORPORATION BY REFERENCE OF INTERNATIONAL ENERGY CONSERVATION CODE:

COMMENT 1: One commenter stated that Table R402.1.1 was incorrectly labeled in three separate areas.

RESPONSE 1: The department recognizes that the table published in the notice was the "current" rule table that will be modified in rule, but this did create confusion that it was not the table revised by the 2012 edition. The department is amending the rule accordingly to reflect the proper 2012 edition table with just the endorsed change under the wall cavity R-value made.

COMMENT 2: One commenter was not aware that section R402.2.2 was to be revised to higher square footage areas and did not think the Building Codes Council took action on this proposal.

RESPONSE 2: Subsection R402.2.2 was a proposal by the department to continue to require the reduction of area allowed to be restricted to R-30 ceiling insulation

when space was restricted. The 2012 edition allows up to 500 square feet or 20 percent of the total insulated ceiling area. The department proposed and succeeded last edition to reduce this area to 250 square feet or ten percent and the council endorsed the change. Therefore, the department is keeping this reduction in place.

COMMENT 3: Three commenters notified the department that section R402.4.1.2 of the 2012 edition of the IECC does not contain the language under subsection "viii – supply and return registers shall not be sealed."

RESPONSE 3: The department recognizes that the 2012 edition does not contain that language and is amending the rule to strike the provision.

COMMENT 4: Three commenters stated that section R403.2.3 regarding building cavities used as ducts should not be deleted as proposed, but should be retained with added language prohibiting use of building cavities as supply ducts.

RESPONSE 4: The department agrees that there is some confusion regarding the intent of the Building Codes Council with this section. Upon review of the comments, the department is amending the rule accordingly to include the suggested clarifying language.

COMMENT 5: Two commenters suggested a language change to clarify section R403.2 regarding verifying duct tightness.

RESPONSE 5: The department agrees and is amending the rule to incorporate the suggested language.

COMMENT 6: Two commenters suggested that the U-factor value endorsed by the Building Codes Council deviates from that published in the 2012 edition of the IECC and represents a reduction in conservation in residential buildings covered by that code.

RESPONSE 6: The U-factor issue commented on was debated by both the energy stakeholders here in the state and the building industry resulting in a compromise that was further endorsed by the Building Codes Advisory Council. The department believes this process has resulted in a reasonable U-factor that, although it does not match the corresponding prescriptive wall R-values found in the 2012 edition, is the result of consensus deliberation and represents a good balance done in a transparent manner.

COMMENT 7: One commenter suggested that the R-value endorsed by the Building Codes Council in Table R402.1.1 deviates from that published in the 2012 edition of the IECC, and represents a reduction in conservation in residential buildings covered by that code.

RESPONSE 7: The R-value issue commented on was debated by both the energy stakeholders here in the state and the building industry resulting in a compromise

that was further endorsed by the Building Codes Advisory Council. The department believes this process has resulted in a reasonable R-value that, although it does not match the prescriptive wall R-values found in the 2012 edition, is the result of consensus deliberation and represents a good balance done in a transparent manner.

**COMMENT 8:** One commenter suggested that the reduction in air exchange values allowed when blower door testing is performed deviates from benchmarks found in the 2012 edition of the IECC and represents a reduction in conservation in residential buildings covered by that code.

**RESPONSE 8:** The air tightness requirement commented on was debated by both the energy stakeholders here in the state and the building industry resulting in a compromise that was further endorsed by the Building Codes Advisory Council. The department believes this process has resulted in a reasonable air changes per hour rate that will work here in Montana. During adoption of the 2009 code, this same consensus process resulted in tightening of the ACH from 7 to 4 and that rate has become an industry benchmark that none of the stakeholders thought was worth changing again and was endorsed by the council.

4. The department has amended ARM 24.301.109, 24.301.131, 24.301.138, 24.301.139, 24.301.142, 24.301.146, 24.301.154, 24.301.171, 24.301.172, 24.301.173, 24.301.301, 24.301.361, and 24.301.371 exactly as proposed.

5. The department has amended ARM 24.301.161 with the following changes, stricken matter interlined, new matter underlined:

**24.301.161 INCORPORATION BY REFERENCE OF INTERNATIONAL ENERGY CONSERVATION CODE** (1) through (1)(c) remain as proposed.

(d) Table R402.1.1, INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT, is amending requirements for climate zone "6" as shown below in the table:

~~"k." Fenestration U-Factor is 0.33 after January 1, 2010."~~

Climate Zone	Fenestration U-Factor(b)	Skylight(b) U-Factor	Glazed Penetration SHGC(b,d)	Ceiling R-Value	Wood Framed Wall R-Value
6	<del>0.35(k)</del> <del>0.33(l)</del> <u>0.32</u>	<del>0.60</del> <u>0.55</u>	NR	49	<del>21 or 13+5(h)</del> <u>21 or 13+10(h)</u>

Mass Wall R-Value(i)	Floor R-Value	Basement(c) Wall R-Value	Slab(b) R-Value & Depth	Crawl Space Wall(c) R-Value
<del>15/19</del> <u>15/20</u>	30(g)	15/19	10, 4 ft	<del>10/19</del> <u>15/19</u>

(e) through (g) remain as proposed.

(h) Subsection R402.4.1.2, Testing, is deleted and replaced with the following: The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding four air changes per hour in Climate Zone 6. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope. The requirements of testing found in subsection R402.4.1.2 will not be mandatory until one year following the final adoption of this rule. Buildings or dwelling units issued a building permit by a code official prior to this testing becoming required shall not be required to perform testing under subsection R402.4.1.2. During testing:

"(i) exterior windows and doors, fireplace and stove doors shall be closed, but not sealed;

"(ii) dampers shall be closed, but not sealed, including exhaust, intake, makeup air, back draft and flue dampers;

"(iii) interior doors shall be open;

"(iv) exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;

"(v) heating and cooling system(s) shall be turned off;

"(vi) "B" or "L" vents, combustion air vents, and dryer vents shall be sealed;

and

"(vii) HVAC ducts shall not be sealed; ~~and~~

~~"(viii) supply and return registers shall not be sealed."~~

(i) Subsection R403.2.2, Sealing (Mandatory). Delete the existing ~~exception under 1. and 2. found beneath, "duct tightness shall be verified by either of the following:"~~ and replace with the existing 1. with the following:

"Postconstruction test: Leakage to the outside of a condition space or total leakage shall be less than or equal to four cfm per 100 square feet of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. across the entire system, including the manufacturer's air handler enclosure. All register boot shall be taped or otherwise sealed during the test."

Exception: The duct tightness testing is not required for ducts and air handlers located entirely within the building thermal envelope.

(j) Subsection R403.2.3, Building Cavities, is deleted in its entirety; and replaced with: "Building framing cavities shall not be used as supply ducts."

(k) through (3) remain as proposed.

/s/ DARCEE L. MOE

Darcee L. Moe  
Rule Reviewer

/s/ PAM BUCY

Pam Bucy, Commissioner  
DEPARTMENT OF LABOR AND INDUSTRY

Certified to the Secretary of State October 27, 2014