

ADVISORY COMMITTEE COMMENT FORM FOR PROPOSED CODE CHANGES

(This form must be submitted electronically)

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IECC RE-16

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Proposed Code Change - Language

Please provide your proposed code change in strikeout/underline format. Provide the *specific* language you would like to see changed, with new words underlined and words to be deleted should be ~~stricken~~. Also, state whether the language contained in your proposal is from a code book or from an amendment currently found in Minnesota Rule. (You may provide the language (electronically) on a separate, attached sheet).

Table R402.1.1 Insulation and fenestration requirements by component.

CLIMATE ZONE	FENESTRATION U-FACTOR ^b	SKYLIGHT ^o U-FACTOR	GLAZED FENESTRATION SHGC ^{o,c}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ^e	FLOOR R-VALUE	BASEMENT WALL R-VALUE ^c	SLAB R-VALUE & DEPTH ^d	CRAWL SPACE ^c WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or 13+5 ^h	8/13	19	5/13 ^f	0	5/13
4 except Marine	0.35	0.55	0.40	49	20 or 13+5 ^h	8/13	19	10/13	10, 2 ft	10/13
5 and Marine 4	0.32	0.55	NR	49	20 or 13+5 ^h	13/17	30 ^g	15/19	10, 2 ft	15/19
6	0.32	0.55	NR	49	<u>21</u> or 20+5 or 13+10 ^h	15/20	30 ^g	15/49	10, 3.5 ft	15/49
7 and 8	0.32	0.55	NR	49	<u>21</u> or 20+5 or 13+10 ^h	19/21	38 ^g	15/49	10, 5 ft	15/49

For SI: 1 foot = 304.8 mm.

- a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in climate Zones 1-3 where the SHGC for such skylights does not exceed 0.30.
- c. "15/19" means R-15 continuous insulation 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 insulation on the interior or exterior of the home. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zones 1 through 3 for heated slabs.
- e. There are no SHGC requirements in the Marine Zone.
- f. Basement wall insulation is not required in warm-humid locations as defined by Figure 301.1 and Table 301.1. **All basement or crawl space insulation shall only be continuous.**
- g. Or insulation sufficient to fill the framing cavity, R-19 minimum.
- h. First value is cavity insulation, second is continuous insulation or insulated siding, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation or

insulated siding. If structural sheathing covers 40 percent or less of the exterior, continuous insulation R -value shall be permitted to be reduced by no more than R -3 in the locations where structural sheathing is used – to maintain a consistent total sheathing thickness.

i. The second R -value applies when more than half the insulation is on the interior of the mass wall.

j. When using log type construction for thermal mass walls the following shall apply:

(1) A minimum of a 7-inch diameter log shall be used; and

(2) The u -value of fenestration products shall be 0.29 overall on average or better.

Proposed Code Change – Need and Reason

Please provide a thorough explanation of the need for this change and why this proposed code change is a reasonable change. During the rulemaking process, the Agency must defend the need and reasonableness of all its proposed changes. The Agency must submit evidence that it has considered all aspects of the proposal. (You may provide the need and reason (electronically) on a separate attached sheet). **The proposed code change simply disallows the use of batts installed within stud walls as insulation. Over the years, it has become clear that this type of basement insulation installation has a high probability of resulting in significant moisture loads in basement walls resulting in mold and other major health issue. This change does not affect any industry as batt insulation is still allowed only it must be draped. Adopting this change will result in less moisture problems in Minnesota basements without compromising energy efficiency.**

Proposed Code Change – Cost/Benefit Analysis

Please consider whether this proposed code change will increase/decrease costs or indicate that it will not have any cost implications and explain how it will not. If there is an increased cost, will this cost be offset somehow by a life safety or other benefit? If so, please explain. Are there any cost increases/decreases to enforce or comply with this proposed code change? If so, please explain. (You may provide the cost/benefit analysis (electronically) on a separate, attached sheet). **No cost/benefit analysis is required as the basic requirement of R-15 continuous insulation is unchanged.**

Other Factors to Consider Related to Proposed Code Change

1. Is this proposed code change meant to:

change language contained in a published code book? If so, list section(s).

Table R402.1.1

change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

delete language contained in a published code book? If so, list section(s). **Table**

R402.1.1

delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

neither; this language will be new language, not found in the code book or in Minnesota Rule.

2. Is this proposed code change required by a Minnesota Statute or new legislation? If so, please provide the citation to the Statute or legislation. **NO**
3. Will this proposed code change impact other sections of a published code book or of an amendment in Minnesota Rule? If so, please list the affected sections or rule parts. **NO**
4. Will this proposed code change impact other parts of the Minnesota State Building Code? If so, please list the affected parts of the Minnesota State Building Code. **NO**
5. Who are the parties affected or segments of industry affected by this proposed code change? **All parties involved in constructing a home.**
6. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result. **NO**
7. Are you aware of any federal requirement or regulation related to this proposed code change? If so, please list the regulation or requirement. **NO**