

ADVISORY COMMITTEE COMMENT FORM FOR PROPOSED CODE CHANGES

(This form must be submitted electronically)

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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).

IECC Section R403.2.1 is amended to read as follows:

R403.2.1 Insulation (Prescriptive). All exhaust, supply, and return air ducts and plenums shall be insulated according to Table R403.2.1. Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

Exception: ~~Ducts or portions thereof located completely inside the *building thermal envelope*.~~

**TABLE R403.2.1
 MINIMUM REQUIRED DUCT AND PLENUM INSULATION FOR DWELLING UNITS
 (see notes for explanations)**

<u>Duct Type/Location</u>	<u>Requirements</u>
<u>Exterior of building</u>	<u>R-8, V and W</u>
<u>Attics, garages and ventilated crawl spaces</u>	<u>R-8 and V</u>
<u>Outdoor air intakes within conditioned spaces</u>	<u>R-6 and V</u>
<u>Exhaust ducts in attics, garages and ventilated crawl spaces</u>	<u>R-6 and V</u>
<u>Exhaust ducts within conditioned spaces</u>	<u>R-3.5 and V</u>
<u>Within cement slab or within ground</u>	<u>R-3.5 and V</u>
<u>Within conditioned spaces and in basements with insulated walls</u>	<u>None required</u>

Notes:

Insulation is only required in the conditioned space for a distance of 3 feet (914 mm) from the exterior or unconditioned space.

V = Vapor retarder required in accordance with IMC Section 604.11. When a vapor retarder is required, duct insulation required by this section shall be installed without respect to other building envelope insulation.

W = Approved weatherproof barrier.

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).

This proposed amendment incorporates language from the current Minnesota Mechanical Code, along with provisions from the 2012 IECC and ASHRAE Standard 90.1-2010. Several changes were made to the current requirements to clarify insulation values for duct locations that were not specifically identified in the past, and some of the R-values were changed slightly to be consistent with the latest edition of the 2012 IECC and ASHRAE Standard 90.1-2010. These changes are necessary so that the insulation values are appropriate for the installed locations and result in energy efficient and durable systems that are not likely to deteriorate due to the formation of condensation on the interior or exterior of the ducts or plenums. These requirements are reasonable because they are very similar to the duct insulation and vapor retarder requirements that have been in effect since the first mechanical code was adopted statewide in Minnesota in 1972.

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).

Since it has nearly the same result as language in the current mechanical code, there are no cost implications.

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).

Section R403.2.1

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).

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?

None.

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.