

ADVISORY COMMITTEE COMMENT FORM FOR PROPOSED CODE CHANGES

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1323, CE-52

Proposed Code Change - Language

IECC section C401.1.3 is amended by adding a new sections to read:

C401.3.5 Greenhouse structures. Greenhouse structures that require heating for cold weather protection are regulated by this section. A greenhouse structure is a structure that is used for plant growth.

C401.3.5.1 Envelope requirements for greenhouse structures.

C401.3.5.1.1 Foundation walls; slab-on-grade floors. Foundation walls and slab-on-grade floors must comply with the requirements of ASHRAE Standard 90.1, Section 5.

C401.3.5.1.2 Transparent and translucent components. Transparent and translucent components are exempt from the requirements of Section 5 provided that they are either single-pane glass, twin wall polycarbonate, two-ply polyethylene or equivalent.

C401.3.5.1.3 Coverings. Greenhouse structures must have either an exterior anti-infrared covering or internal thermal blanket that reduces nighttime radiation in compliance with this section.

C401.3.5.1.3.1 Anti-infrared covering. The anti-infrared covering must be not less than 4-mil thick polyethylene greenhouse covering film that retards nighttime heat radiation from greenhouse structures and has a minimum energy saving rating of 20 percent.

C401.3.5.1.3.2 Thermal blanket. The thermal blanket must be not less than 4-mil thick internally installed material used in greenhouse structures that provides both plant shading and retards nighttime radiation in greenhouse structures and has a minimum energy saving rating of 20 percent.

C401.3.5.1.3.3 Energy saving rating. The energy saving rating shall be determined by comparing the heating energy required by similar greenhouse structures having similar plant contents; either adjusted for weather or co-located during the same heating season. A greenhouse structure covered with an anti-infrared polyethylene covering is compared to a similar structure covered with a polyethylene covering not having anti-infrared characteristics. A greenhouse structure having an internally installed thermal blanket material is compared to a similar structure not having a thermal blanket installed.

C401.3.5.2 Heating requirements for greenhouse structures. Mechanical components of greenhouse structures must comply with the ASHRAE Standard 90.1, Section 6. In addition, unit heating systems must be power vented or direct vented.

C401.3.6 Inflated structures Inflated structures that require heating for cold weather protection are regulated by this section.

C401.3.6.1 Minimum insulation. The structure membrane must have a minimum insulation value of R-12.

Exception: Inflated structures that are designed to deflate during the summer months.

C401.3.6.2 Air pressure controls. Air pressure controls for inflated structures must have the capability for manual and automated control with respect to outdoor wind speed.

Proposed Code Change – Need and Reason

This proposal simply moves the requirement of current Minnesota Rule Part 1323.0690 **almost** verbatim.

Proposed Code Change – Cost/Benefit Analysis

The proposal will retain existing rule, therefore there will be no increase/decrease to costs or benefits.

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).
Adding to IECC new sections C401.3.5 and C401.3.6.

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.

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.

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.
7. No.
8. Are you aware of any federal requirement or regulation related to this proposed code change? If so, please list the regulation or requirement.
No.