

## CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: *Craig Oswell with Structural TAG*

Date: *3/31/25*

Email address: *craig.oswell@oswell.com*

Model Code: *IRC 2024*

Telephone number: *612-720-4639*

Code or Rule Section: *R403.1.6.1*

Firm/Association affiliation, if any: *Oswell Engineering*

Topic of proposal: *Sill plate  
alignment/overhang*

Code or rule section to be changed: *R403.1.6.1*

Intended for Technical Advisory Group ("TAG"): *Structural*

### General Information

**Yes**    **No**

- |  |                                     |                                     |
|--|-------------------------------------|-------------------------------------|
| A. Is the proposed change unique to the State of Minnesota?                            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| B. Is the proposed change required due to climatic conditions of Minnesota?            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| C. Will the proposed change encourage more uniform enforcement?                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| D. Will the proposed change remedy a problem?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| E. Does the proposal delete a current Minnesota Rule, chapter amendment?               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| F. Would this proposed change be appropriate through the ICC code development process? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

### Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.

2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.  
*No*

3. Provide *specific* language you would like to see changed. Indicate proposed new words with underlining and ~~striketrough~~ words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

**R406.1.6.1 Sill plate location on foundation.** Sill plates shall not overhang the edge of a foundation wall without having adequate blocking or support provided to prevent cross-grain bending.

Exception: Sill plates may overhang provided all of the following are met:

1. All anchor bolt tolerances are met.
2. All connection hardware tolerances are met.
3. The sill plate overhang is not directly loaded vertically, and.
4. The sill crushing pressure at all column or post bearings is verified as being 565 psi or less using only the sill area over the foundation wall itself adjusted as allowed by the NDS.

**R403.1.6.42 Foundation anchorage in Seismic Design Categories C, D<sub>0</sub>, D<sub>1</sub> and D<sub>2</sub>.**  
(Renumber)

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.  
*No*

### **Need and Reason**

1. Why is the proposed code change needed? Please provide a general explanation as well as a specific explanation for any changes to numerical values (heights, area, etc.)  
*Because of required foundation insulation requirement, builders often prefer to overhang the sill plate to simplify exterior siding installation and for aesthetics. No specific provisions in the model code provide parameters for the sill to overhang the foundation.*
2. Why is the proposed code change a reasonable solution?  
*Allows for sill to overhang foundation while maintaining an appropriate load path to the foundation.*
3. What other factors should the TAG consider?  
*NA*

### **Cost/Benefit Analysis**

1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.  
*No change*
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. If the benefit is quantifiable (for example energy savings), provide an estimate if possible.  
*No increase*
3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.  
*No increase*

4. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.  
*No*
  
5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.  
*No*

### **Regulatory Analysis**

1. What parties or segments of industry are affected by this proposed code change?  
*Homeowners, builders, designers, building officials.*
  
2. Can you think of other means or methods to achieve the purpose of the proposed code change? What might someone opposed to this code change suggest instead? Please explain what the alternatives are and why your proposed change is the preferred method or means to achieve the desired result.  
*No*
  
3. What are the probable costs or consequences of not adopting the code change, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?  
*None*
  
4. Are you aware of any federal or state regulation or requirement related to this proposed code change? If so, please list the federal or state regulation or requirement and your assessment of any differences between the proposed code change and the federal regulation or requirement.  
*No*

\*\*\*Note: The information you provide in this code change proposal form is considered Public Data and used by the TAG to consider your proposed modification to the code. Any code change proposal form submitted to DLI may be reviewed at public TAG meetings and used by department staff and the Office of Administrative Hearings to justify the need and reasonableness of any proposed rule draft subject to administrative review and is available to the public.

\*\*\*\*Note: Incomplete forms will be returned to the submitter with instruction to complete the form. Only completed forms will be accepted and considered by the TAG. The submitter may be asked to provide additional information in support of the proposed code change.

## CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

*Author/requestor:* Brian Karpen with TAG Direction

*Date:* 3/28/25 Rev 4/2/25

*Email address:* Brian.Karpen@state.mn.us

*Model Code:*

*Telephone number:* 651-284-5217

*Code or Rule Section:* MR 1303.1700

*Firm/Association affiliation, if any:* DLI - CCLD

*Topic of proposal:* Ground Snow Load

*Code or rule section to be changed:* MR 1303.1700

*Intended for Technical Advisory Group ("TAG"):* Structural

### General Information

**Yes    No**

- |  |                                     |                                     |
|--|-------------------------------------|-------------------------------------|
| A. Is the proposed change unique to the State of Minnesota?                            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| B. Is the proposed change required due to climatic conditions of Minnesota?            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| C. Will the proposed change encourage more uniform enforcement?                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| D. Will the proposed change remedy a problem?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| E. Does the proposal delete a current Minnesota Rule, chapter amendment?               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| F. Would this proposed change be appropriate through the ICC code development process? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Proposed Language

1. The proposed code change is meant to:

change language contained the model code book? If so, list section(s).

change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).  
1303.1700

delete language contained in the model code book? If so, list section(s).

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

add new language that is not found in the model code book or in Minnesota Rule.

2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.  
No

3. Provide *specific* language you would like to see changed. Indicate proposed new words with underlining and ~~strikethrough~~ words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

### **1303.1700 GROUND SNOW LOAD.**

The ground snow load,  $P_g$  ( $ASD$ ), to be used in determining the snow loads for buildings and other structures regulated by Minnesota Rules, chapter 1309, shall ~~be as follows~~ comply with that chapter or the following:

A. 60 pounds per square foot in the following counties: Aitkin, Becker, Beltrami, Carlton, Cass, Clearwater, Big Stone, Brown, Cook, Crow Wing, Hubbard, Itasca, Kanabec, Kittson, Koochiching, Cottonwood, Jackson, Lac Qui Prairie, Lake, Lake of the Woods, Mahnomon, Marshall, Mille Lacs, Morrison, Norman, Otter Tail, Pennington, Pine, Polk, Red Lake, Roseau, Lincoln, Lyon, Martin, Murry, Nobles, Pipestone, Redwood, Rock, St. Louis, Todd, Traverse, Watonwan, and Wadena Yellow Medicine;

B. 40 pounds per square foot in the following counties: Dodge, Fillmore, Goodhue, Houston, Kittson Marshall, Mower, Norman, Olmsted, Pennington, Polk, Red Lake, Roseau, Winona, and Wabasha; and

~~C. The ground snow load,  $P_g$ , to be used in determining the design snow loads for buildings and other structures shall be 50 pounds per square foot in all other counties.~~

The ground snow load,  $P_g$ , to be used in determining the design snow loads for all other buildings and structures shall be determined in accordance with the American Society of Civil Engineers/Structural Engineering Institute Standard 7 Minimum Design Loads and Associated Criteria for Buildings and Other Structures as required by Minnesota Rules, chapter 1305.

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.  
No

### **Need and Reason**

1. Why is the proposed code change needed? Please provide a general explanation as well as a specific explanation for any changes to numerical values (heights, area, etc.)

The model code and referenced standards have updated how ground snow load is determined and applied. Further climatic research has been done to update the base values of ground snow load in the referenced standard. How that basic value is interpreted to then applied as snow load to buildings and other structures has also been modified. This change brings the Minnesota rules more in line with current climatic science and universal application of snow load applied to buildings and other structures.

Providing ground snow load by county in Minnesota Rules for buildings in the scope of rule chapter 1309 (the residential building code) provides a clear concise standard for builders and code officials. Placement of the ground snow provisions has historically been in rule chapter 1303. Placement in 1303 avoids problems with staggered rule chapter adoption.

2. Why is the proposed code change a reasonable solution?

This change more closely aligns the Minnesota Code with the model code and current climatic science in regard to snow loading on buildings and other structures.

3. What other factors should the TAG consider?

### **Cost/Benefit Analysis**

1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.

Cost changes should be negligible across the State. One region of the State may see increased costs due to the need of additional structure in new construction due to an increase in snow load to be considered. Other regions may be able to reduce structural costs due to the decrease in snow load to be considered.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. If the benefit is quantifiable (for example energy savings), provide an estimate if possible.

Any increased cost is justified as it will be directly applied to the structure of the building in order to ensure the structural stability of the building due to increasing snow loads due to changing climatic conditions.

3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.

Any increase in cost will be borne by property owners.

4. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.

No

5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.

### **Regulatory Analysis**

1. What parties or segments of industry are affected by this proposed code change?

Primarily designers and engineers will need to be aware of the change in snow load requirements so that it can be incorporated into proposed designs. Code officials will need to be aware of the change to properly regulate building permit issuance.

2. Can you think of other means or methods to achieve the purpose of the proposed code change? What might someone opposed to this code change suggest instead? Please explain what the alternatives are and why your proposed change is the preferred method or means to achieve the desired result.

No.

The alternative suggestion would be to leave the Code and Minnesota Rules as is. This would leave Minnesota behind the rest of the country and not up to date with the current climatic science in this area.

3. What are the probable costs or consequences of not adopting the code change, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
  
4. Are you aware of any federal or state regulation or requirement related to this proposed code change? If so, please list the federal or state regulation or requirement and your assessment of any differences between the proposed code change and the federal regulation or requirement.

No

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