

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

| Autho | r/requestor: C. Scott Anderson | Date: 9/19/24 | | | |
|--|---|-------------------------|-------------|---------------|--|
| Email address: c.scott.anderson@minneapolismn.gov Model Cod | | Model Code: 2024 | 2024 IRC | | |
| Telephone number: 612-246-7303 Code or Rule S | | Code or Rule Secti | ion: R318 | 3.5.1 | |
| Firm/Association affiliation, if any: City of Minneapolis Topic of proposal: for protection and Mean | | _ | | | |
| Code | or rule section to be changed: R318.5.1 | | | | |
| Intend | ded for Technical Advisory Group ("TAG"): | | | | |
| Gene | ral Information | | Yes | <u>No</u> | |
| A. Is the proposed change unique to the State of Minnesota? B. Is the proposed change required due to climatic conditions of Minnesota? C. Will the proposed change encourage more uniform enforcement? D. Will the proposed change remedy a problem? E. Does the proposal delete a current Minnesota Rule, chapter amendment? F. Would this proposed change be appropriate through the ICC code development process? | | | | | |
| | osed Language The proposed code change is meant to: | | | | |
| | ⊠ change language contained the model code book? If s | so, list section(s). R3 | 18.5.1 | | |
| | 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 i part(s). | n Minnesota Rule? If | so, list R | ule | |
| | □ add new language that is not found in the model code □ R318.5.1 | book or in Minnesota | Rule. | | |

- 2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.
- 3. Provide *specific* language you would like to see changed. Indicate proposed new words with <u>underlining</u> and <u>strikethrough</u> words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

Add new section

R318.5.1 Landing, deck, balcony and stair construction at required egress door.

Exterior landings, decks, balconies, *stairs* and similar facilities shall be supported on footings protected from frost by one or more of the following methods:

- 1. Extending below the frost line in accordance with 1303.1600.
- 2. Erecting on solid rock.
- 3. Other approved methods of frost protection
- 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.)

This additional text clarifies the need for frost protection of the landing at the required egress door. Other doors

- 2. Why is the proposed code change a reasonable solution? It addresses a life safety issue unique to cold weather climates.
- 3. What other factors should the TAG consider? None

Cost/Benefit Analysis

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

This is an editorial change and should not impact the cost of construction.

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

NA

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

No

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

 Architects, Contractors, Developers, Building Owners, Contractors, Building Officials
- 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.

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?

Potential conflicts in code requirements and possible miss application of frost protection requirements.

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: Incomplete forms may be returned to the submitter with instruction to complete the form. Only completed forms can considered by the TAG.



Author/requestor: Nathan Weber

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Date: 11/14/2024

| Email | address: nweber@cityofdetroitlakes.com | Model Code: 2024 IR | RC | | |
|--|---|--------------------------|----------------|--------------|--|
| Telephone number: 218-846-7136 Code or Ru | | Code or Rule Section | ection: R319.5 | | |
| Firm/Association affiliation, if any: Topic of proposal: E Replacement Windo | | • • • | | | |
| Code | or rule section to be changed: R319.5 | | | | |
| Intend | ed for Technical Advisory Group ("TAG"): | | | | |
| Gener | al Information | | <u>Yes</u> | <u>No</u> | |
| A. Is the proposed change unique to the State of Minnesota? B. Is the proposed change required due to climatic conditions of Minnesota? C. Will the proposed change encourage more uniform enforcement? D. Will the proposed change remedy a problem? E. Does the proposal delete a current Minnesota Rule, chapter amendment? F. Would this proposed change be appropriate through the ICC code development process? | | | | | |
| | sed Language The proposed code change is meant to: | | | | |
| | x change language contained the model code book? If so, R319.5 | list section(s). | | | |
| | change language contained in an existing amendment in | Minnesota Rule? If so | , list Ru | ıle part(s). | |
| | X delete language contained in the model code book? If so, list section(s). R319.5 | | | | |
| | $\hfill \square$ delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s). NO | | | ule | |
| | add new language that is not found in the model code by | oook or in Minnesota F | Rule. | | |
| 2. | Is this proposed code change required by Minnesota Statu | ite? If so, please provi | de the d | citation. | |

- 3. Provide *specific* language you would like to see changed. Indicate proposed new words with <u>underlining</u> and <u>strikethrough</u> words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.
 - **R319.5** Replacement window for emergency escape and rescue openings. Replacement for emergency escape and rescue openings installed in buildings meeting the scope of this code shall be exempt from Sections 319.2 and 319.4.4, provided that the replacement window meets the following conditions:
 - 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window <u>as long as it does not reduce the clear</u> <u>opening width or height by more than 2"</u> or a style that provides for and equal or great window opening than the existing window.
 - 2. The replacement window is not part of a change of occupancy.
- 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

- 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.)
 Will prevent contractors/suppliers from significantly reducing emergency escape and rescue openings.
- 2. Why is the proposed code change a reasonable solution? Yes
- 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.
 - Potential cost increase
- 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. Maintains the same level of Life, Health and Safety the home currently has.
- 3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
 - Contractor will pass any potential costs to homeowner
- 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.

I do not believe it will

Regulatory Analysis

- 1. What parties or segments of industry are affected by this proposed code change? Building inspectors, Window replacement contractors
- 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

An individual opposed would like to see it left as is.

- 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?
 Potential loss of life because someone is unable to evacuate a building in an emergency
- 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.

MARVIN FEEDBACK

for R319.5

From: David McDonald (Warroad) <DavidMc@marvin.com>

Sent: Monday, February 3, 2025 4:37 PM

To: Spuckler, Amanda (DLI) <amanda.spuckler@state.mn.us>

Subject: (Marvin - Info for Replacement Window Tabled Code Change Proposal): MN Residential TAG

Good afternoon MN Residential TAG members.

I'm sorry but I had a busy last week of meetings and travel and wanted to send this to you ahead of the meeting. I thought I had until Wednesday this week but see it is scheduled for Tuesday. Based upon the information on the Tag website – I am planning to email this information to Amanda Spuckler with the hopes she can share this.

Here is what I will focus my comments on from the 2024 IRC and most importantly, the requirements in Section R319.5 and the two additional requirements in R319.5 (1)

2024 IRC:

Replacement for emergency escape and rescue openings installed in buildings meeting the scope of this code shall be exempt from Sections R319.2 and R319.4.4, provided that the replacement window meets the following conditions: 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window. 2. The replacement window is not part of a change of occupancy. NINSIGHTS (2) Code Change Details Hearing Videos

If you meet the requirements in R319.5 (1), the applicant is exempt from the minimum dimension requirements in Section R319.2 and there should be no questions or additional points made about 'egress hardware', etc. Exempt if the replacement window meets –

- 'manufacturer's largest standard size window that will fit within the existing frame OR existing rough opening'
- 'shall be permitted to be on the same operating style as the existing window OR a stile that provides for an equal or greater window opening area than the existing window'

If so, then if the replacement window is determined to meet the 2 requirements above, that replacement window is exempt from EERO minimum dimension requirements:

R319.2 Emergency escape and rescue openings.

Emergency escape and rescue openings shall have minimum dimensions in accordance with Sections R319.2.1 through R319.2.4.

I don't think that one picture provided demonstrates a clear need for the existing Code to be changed and I think that after looking it closer, I felt like I had more questions, such as:

- What operator type was the existing window?
 - If it was a single hung/double hung or glider I am fairly confident that the casement replacement window has an equal to or greater window opening area that what previously existed.
- If the contractor/window installer was questioned about Code compliance, did they have an opportunity to prove that their replacement window had an 'equal to or greater window opening area that the existing window'?

However, if the code change proposer had more information may be this could be discussed further.

The Code also provides some leeway to the type of product designed and offered by the manufacturer (<u>manufacturer's largest standard size window</u>) which was chosen by the architect, builder, or homeowner. It is very possible that the example in the photographs allowed the consumer to go from a slider/glider product (perhaps dual pane), to a casement which is more efficient than the other operator types but also perhaps upgrade to tripane performance. If you zoom in on the photograph, that may be a tripane product but I'm not totally sure as it could be a reflection in the photograph.

If the product meets the following 2 requirements – you cannot even get into the questions of EERO, 'egress hardware', etc. since that replacement product would be exempt.

• manufacturer's largest standard size window that will fit within the existing frame OR existing rough opening'

'shall be permitted to be on the same operating style as the existing window OR a stile that provides for an equal or greater window opening area than the existing window'

Maybe some of these website will provide some additional information for consideration. I could not find that these cities or others have to go into greater detail for replacement windows, other than referencing the existing Code requirements.

City of Hutchinson: Microsoft Word - Residential Window Replacement Information.doc

City of Arden Hills: $\underline{\mathsf{Egress}\,\mathsf{Windows}\,|\,\mathsf{Arden}\,\mathsf{Hills},\mathsf{MN}\,\text{-}\,\mathsf{Official}\,\mathsf{Website}}$

City of Eagan: Handout Windows2023.pdf

I do think that the main issue regarding establishing the new requirement will result in requiring much more detailed replacement window handout, replacement window permit application information or require more inspections for replacement windows than what is typically needed. I'm not sure that most cities feel this way because I have had so few questions on this issue in my 10.5 years with Marvin.

I am opposed to the Code change as presented.

I hope to be on the call and perhaps can answer some additional questions, if needed.

Thanks

David McDonald | Code and Regulatory Affairs 218-242-4150 | marvin.com



From: Johnson, Michael < Michael AJohnson@AndersenCorp.com>

Sent: Tuesday, February 4, 2025 10:41 AM

To: Spuckler, Amanda (DLI) <amanda.spuckler@state.mn.us>

Subject: Andersen Windows Feedback - Residential TAG CCP to R319.5

Amanda,

Can you please forward this to the appropriate people on the Residential TAG? We ran out of time in the 1/22 meeting to discuss this CCP, so the topic was tabled. I thought it was being tabled until the next session (today – 2/4) and I was prepared to speak, but then they said they were waiting on written submissions/responses? Here is the proposed language change from Nathan Weber's CCP (underlined language is what's proposed to add):

R319.5 Replacement window for emergency escape and rescue openings. Replacement for emergency escape and rescue openings installed in buildings meeting the scope of this code shall be exempt from Sections 319.2 and 319.4.4, provided that the replacement window meets the following conditions:

- 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window <u>as long as it does not reduce the clear</u> <u>opening width or height by more than 2"</u> or a style that provides for and equal or great window opening than the existing window.
- The replacement window is not part of a change of occupancy.

Below are the key points I had planned on speaking to:

- Thanks for the opportunity to respond!
- While I appreciate the concern that led to the CCP, I think it's trying to implement a solution in search of a problem...and I also worry about creating additional hurdles for homeowners to replace existing windows with more efficient products.
- Some brief history:
 - Well over a decade ago, my predecessor Mark Mikkelson worked closely with folks to get the current language into MN code. The concept of a dimensional limit was raised at that time too. It was considered, debated, and ultimately not adopted in favor of the language already in the code.
 - It's also worth noting that this language was added to the IRC model code in the 2015 cycle, and has
 remained (unchanged) ever since. This means that at a national level there have been no concerns
 with this wording and no changes were made during the 2018 IRC code cycle, the 2021 code cycle,
 the 2024 code cycle, and (as far as I'm aware) there is no active move to amend the this section in

the current 2027 IRC code cycle.

- This is a clear indication that the current code language is working.
- Furthermore, the inclusion of a dimensional limit would only raise numerous questions and complications that would all need to be addressed in code.
- Lastly, I would argue that if the existing code language is followed under item #1, there shouldn't be situations where these openings are "significantly" reduced (as raised in the CCP).
- We recommend that the current language be retained and unamended.
- If there are desires to better communicate this language (or educate) code officials, that would be fine.

 Perhaps a white paper could be distributed. Another option might be to include a copy of this code language with permits associated with this kind of replacement work (if it isn't already). That way, contractors, installers, homeowners, and code officials should have a clear understanding of what's required for replacement fenestration in these openings.

I happy to respond to questions as well – just send them my way.

Thanks!

MICHAEL JOHNSON

MANAGER CODE & REGULATORY AFFAIRS ANDERSEN CORPORATION





Author/requestor: Nick Erickson

Email address: nick@housingfirstmn.org

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Date: 1/28/2025

Model Code: IECC

| Telepi | hone number:612-210-8332 | Code or Rule Section | า: 1309 | | |
|---|---|------------------------------------|---------|-----------|--|
| Firm/Association affiliation, if any: Housing First MN Topic of proposal: C | | ommiss | sioning | | |
| Code or rule section to be changed: (1309) R325.8 | | | | | |
| Intend | led for Technical Advisory Group ("TAG"): IECC | | | | |
| Gene | al Information | | Yes | <u>No</u> | |
| B. C. D. E. | Is the proposed change unique to the State of Minnesota? Is the proposed change required due to climatic conditions Will the proposed change encourage more uniform enforce Will the proposed change remedy a problem? Does the proposal delete a current Minnesota Rule, chapte Would this proposed change be appropriate through the IC development process? | of Minnesota? ement? er amendment? | | | |
| | sed Language The proposed code change is meant to: | | | | |
| | ☐ change language contained the model code book? If so | o, 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). | | | | ule | |
| | $oxed{\boxtimes}$ add new language that is not found in the model code by | oook or in Minnesota F | ≀ule. | | |
| 2. | Is this proposed code change required by Minnesota Statu | ite? If so, please provi | de the | citation. | |

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

Installed heating, cooling and ventilation systems shall be performance-tested, in accordance with R.325.8. Documentation of results must be submitted to the building official prior to the issuance of the certificate of occupancy.

NOTE THIS REQUIRES THE ADOPTION OF THE CORRELATION CODE CHANGE SUBMITTED

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.

Possible connection to the administrative portions. But that will need to be determined by technical

staff.

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.)

Minnesota's home designs are becoming more complex, and homebuilders and their energy raters have reported that with the adoption of the 2024 IECC and beyond, performance path utilization will increase dramatically in MN. As Minnesota moves beyond the IECC standard through 2038, the performance path will be critical in achieving and consideration of affordability in the energy code.

With performance path adoption increasing, there will be less predictability in the home design and code officials will need to know that these homes are built in accordance with their design. Much of this work is already being done in conjunction with the energy rater during their work in the home.

This proposal not only

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

 This ensures that the system is installed and functioning as designed; the rater is most qualified to address this issue.
- 3. What other factors should the TAG consider?

 The amount of training and reinspections due to the proliferation of the performance path will place stress on the building officials and general contractors. This is the approach taken in several other markets and does function well. This language itself was inspired by Fort Collins.

Cost/Benefit Analysis

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

This would eliminate the need for one inspection trip, so this cost savings estimate would be dependent on cities adjusting their fees accordingly. As the rater is already onsite performing this work, it should not increase costs on this e

- 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.

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

 n/a

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

Cost decrease, see above point 1.

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? *Homebuilders, Raters, Code Officials.*
- 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?
 Confusion as the performance path proliferates. Delays in permitting and inspections due to the varying approaches taken. Confusion around possible re-inspections and change orders caused by misinterpretation of the performance path design.
- 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)

| Autho | r/requestor: C. Scott Anderson | Date: 02/24/25 | | | |
|--------------------------------|---|---|-----------|---------------|--|
| Email | address: c.scott.anderson@minneapolismn.gov | Model Code: 2024 | IRC | | |
| Telephone number: 612-246-7303 | | Code or Rule Section: R319.5, R309.7 and R319.7.1 | | | |
| Firm/A | Association affiliation, if any: City of Minneapolis | Topic of proposal: | ERO | | |
| Code | or rule section to be changed: R319.5, R319.6, R309.7 and | R319.7.1 | | | |
| Intend | led for Technical Advisory Group ("TAG"): | | | | |
| Gener | al Information | | Yes | <u>No</u> | |
| B. C. D. E. | Is the proposed change unique to the State of Minnesota? Is the proposed change required due to climatic conditions. Will the proposed change encourage more uniform enforce. Will the proposed change remedy a problem? Does the proposal delete a current Minnesota Rule, chapte Would this proposed change be appropriate through the IC development process? | of Minnesota? ement? er amendment? | | | |
| | esed Language The proposed code change is meant to: | | | | |
| | □ change language contained the model code book? If so R319.7.1 | o, list section(s). R319 | 9.5, R3(| 09.7 and | |
| | 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). R319.5, R309.7 and R319.7.1 | | | | |
| | delete language contained in an existing amendment in part(s). | n Minnesota Rule? If s | o, list R | ule | |
| | ☑ add new language that is not found in the model code to R319.5, R309.7 and R319.7.1 | oook or in Minnesota | Rule. | | |

- 2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.
- 3. Provide *specific* language you would like to see changed. Indicate proposed new words with <u>underlining</u> and <u>strikethrough</u> words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

R319.5 Replacement windows for emergency escape and rescue openings.

Replacement for *emergency escape and rescue openings* installed in *buildings* meeting the scope of this code shall be exempt from Sections R319.2 and R319.4.4, provided that the replacement window meets the following conditions:

- 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
- 2. The replacement window is not part of a change of occupancy, or an alteration to an existing space that requires and emergency escape and rescue opening.

R319.7 Alterations or repairs of existing basements spaces.

New sleeping rooms created in an existing basement Alterations of existing spaces required be provided with emergency escape and rescue openings by section R319.1 shall be provided with emergency escape and rescue openings in accordance with Section R319.1. R319.2. Other than new sleeping rooms, where existing basements undergo alterations or repairs, an emergency escape and rescue opening is not required.

Exception: An operable window complying with Section R319.7.1 shall be acceptable as an *emergency* escape and rescue opening.

Exceptions:

- 1. Existing basements or habitable attics that do not include a sleeping room.
- 2. Where the cost to install an emergency escape and rescue opening in accordance with R319.2 exceeds 20% of the value of the alteration an existing or replacement operable window complying with the following shall be acceptable:
 - 2.1 The window shall have a net clear opening of not less than 5.0 square feet
 - 2.2 The minimum clear opening height dimension shall be 22 inches.
 - 2.3 The minimum net clear opening width dimension shall be 20 inches.
 - 2.4 The minimum sill height shall be not less than 48 inches.

R319.7.1 Existing emergency escape and rescue openings.

Where a change of occupancy would require an emergency escape and rescue opening in accordance with Section R319.1, operable windows serving as the emergency escape and rescue opening shall comply with the following:

- 1.—An existing operable window shall provide a minimum net clear opening of 4 square feet (0.38 m²) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm).
- 2.—A replacement window where such window complies with both of the following:
 - 2.1. The replacement window meets the size requirements in Item 1.
 - 2.2. The replacement window is the manufacturer's largest standard-size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

 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 current code language only addresses new sleeping rooms in existing basements. Because EERO's were not required in Minnesota until 1972 the current language allows for existing unsafe conditions to be continued when there are reasonable options for correcting them.

R319.5 This section has been renamed slightly but has been the general section that addresses requirements for replacement windows. The new title is slightly misleading as prior to 1972 Mn did not have a universal requirement for EEROs in residential construction. Two modifications to this section are proposed.

First the exemption from R310.4.4 is deleted. This exemption was added in 2021 and I have been unable to locate any justification or reason as to why allowing exemption from this section is appropriate. R319.4.4 governs the use of bars, grilles, covers, screens and similar devices placed over EEROs.

Second an additional qualification is added to condition 2 addressing remodeling's that are not a change in occupancy. This additional qualification addresses projects that are more extensive than a window replacement project. It also qualifies that the EERO requirements would only apply if the remodeling affects a space that requires an EERO. A kitchen remodeling that also includes general window replacement in other rooms for example would not trigger the EERO requirements.

R319.7 This entire section is revised. The Model code language only addresses new sleeping rooms in existing basements. New sleeping rooms can be created in any location within an existing residential structure. If they are not in a basement are they therefore exempt from the EERO requirements? This change addresses alterations in general separately from additions.

First The section now addresses any space that is altered and is a space that requires and EERO must meet the EERO requirements regardless of the location of the space.

Second the text relating to basements without sleeping rooms is deleted as it is actually an exception and not a charging requirement. Further it is a space that requires an EERO so it should be addressed.

Third The model code exception is deleted. R319.7.1 is also deleted in its entirety see below for explanation.

Fourth Exception 1 addresses remodeling's to existing basements or habitable attics that do not include a sleeping room. While these are both spaces that require an EERO remodeling an existing space does not alter the current life safety hazards so imposing an additional requirement is unwarranted.

Fifth Exception 2 sets a limit on the cost of installing a fully compliant EERO as not more than 20% of the value of the work. This is intended to ensure that the cost of installing an EERO is not overly burdensome to the project. The size limitations noted are consistent with the historic requirements of EEROs so an EERO that meet the code requirements post 1972 and prior to the current requirements would be considered acceptable. The basic concept here is that if the homeowner is planning on a renovation of a space that requires an EERO and has a budget for that work of \$17,000 it is not unreasonable to address a critical life safety issue if the cost of that work is under \$3,400.

This issue only comes into play if the remodeling affects a space that requires and EERO. A project that is siding and window replacement would not trigger this requirements. A kitchen or bathroom remodeling would not trigger this requirement unless that also included the reconfiguration of a space that requires an EERO.

R319.7.1. This entire section is deleted.

First, the title is misleading. This section does not address existing EERO's. condition 1 introduces a new, third set of requirements for EERO's that are substantially reduced from current requirements. Condition 2 addresses replacement windows.

Second, the concept of change in occupancy is not really common in residential construction. The 2024 code definition for change in occupancy does not require a change in occupancy classification as is commonly understood. Rather it applies anytime a change in the application of the code provisions occur.

Third, even if the change in occupancy is a concept that can be evenly applied the reduction in the size requirements for the EERO are not logical. If an existing window does not meet the minimum requirements noted in this section then the opening must be enlarged to meet them. If the opening must be enlarged then why is it not reasonable to enlarge it to the current code requirement. While some size requirement is better than none, there is no real justification as to why the current code requirement should not be applied.

Fourth, this entire section comes from the IEBC which does not apply to residential structures in Mn

- 2. Why is the proposed code change a reasonable solution?
 It addresses the opportunities for correcting unsafe conditions while taking into consideration the cost of the construction on the project budgets. It also removes a new and confusing third set of requirements for EEROs.
- 3. What other factors should the TAG consider?

 The potential conflict between local statues requiring licensing and truth in sale reporting to identify sleeping rooms. The way the current code is constructed a space would be considered a sleeping or bed room under the building code but could not be licensed as such.

Cost/Benefit Analysis

- 1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.
 - This change would not impact projects which are solely window replacement and would only marginally increase the cost of remodeling projects. The increased cost is limited to 20% of the value of the total project.
- 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.
 The increased cost will improve public safety by providing code compliant EEROs were none
 previously existed.
- 3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
 - Home owners would bear the cost.
- 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?

 Architects, Contractors, Developers, Building Owners, Contractors, 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?
 There are a couple of conflicts in the existing code language as well as conflicts between language defining sleeping or bedrooms in many municipal ordinances.
- 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: Incomplete forms may be returned to the submitter with instruction to complete the form. Only completed forms can considered by the TAG.



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

| Autrioi | requestor: C. Scott Anderson | Date: 02/24/25 | | |
|----------------------|---|-------------------------|--------------|---------------|
| Email | address: c.scott.anderson@minneapolismn.gov | Model Code: 2024 | IRC | |
| Teleph | none number: 612-246-7303 | Code or Rule Section | on: R319 | 9.6 |
| Firm/A | ssociation affiliation, if any: City of Minneapolis | Topic of proposal: | EERO ad | ditions |
| Code | or rule section to be changed: R319.6 | | | |
| Intend | ed for Technical Advisory Group ("TAG"): | | | |
| Gener | al Information | | Yes | <u>No</u> |
| B. C. D. E. | Is the proposed change unique to the State of Minnesota? Is the proposed change required due to climatic conditions Will the proposed change encourage more uniform enforce Will the proposed change remedy a problem? Does the proposal delete a current Minnesota Rule, chapte Would this proposed change be appropriate through the IC development process? | ement? er amendment? | | |
| | sed Language The proposed code change is meant to: | | | |
| | ☐ change language contained the model code book? If so | o, list section(s). | | |
| | change language contained in an existing amendment | in Minnesota Rule? If | f so, list l | Rule part(s). |
| | □ delete language contained in the model code book? If so, list section(s). □ R319.6 | | | |
| | delete language contained in an existing amendment in part(s). | Minnesota Rule? If | so, list R | ule |
| | add new language that is not found in the model code by | oook or in Minnesota | Rule. | |
| 2. | Is this proposed code change required by Minnesota Statu | ite? If so, please prov | /ide the o | citation. |

No

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

R319.6 Dwelling additions.

Where dwelling unit additions contain sleeping rooms, an emergency escape and rescue opening shall be provided in each new sleeping room. Where dwelling unit additions have basements, an emergency escape and rescue opening shall be provided in the new basement.

Exceptions:

- 1. An emergency escape and rescue opening is not required in a new basement that contains a sleeping room with an emergency escape and rescue opening.
- 2. An emergency escape and rescue opening is not required in a new basement where there is an emergency escape and rescue opening in an existing basement that is accessed from the new basement.
- 3. An operable window complying with Section R319.7.1 shall be acceptable as an emergency escape and rescue opening.
- 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.)
 - **319.6** Delete exception 3 which was added in the 2021 code. This exception makes now logical sense as additions are new construction and there is no logical justification for not requiring an addition to meet new construction standards.
- 2. Why is the proposed code change a reasonable solution?

 New construction should always conform to the requirements for new construction
- 3. What other factors should the TAG consider?

 Accepting the model code language introduces a new EERO size for some projects that would not be acceptable on others.

Cost/Benefit Analysis

- Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.
 - This change will not change the cost of construction as it makes no change in existing code requirements.
- 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.
 NA

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

NA

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?

 Architects, Contractors, Developers, Building Owners, Contractors, Building Officials
- 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?
 Accepting the model code language introduces a new EERO size for some projects that would not be acceptable on others.
- 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: Incomplete forms may be returned to the submitter with instruction to complete the form. Only completed forms can considered by the TAG.



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

| Authoi | r/requestor: Lisa Hartwig | | Date: 02/23/2025 | | |
|---|--|------------|-------------------------------|-------------|--------------|
| Email | address: lisa.hartwig@minneapolismn.gov | | Model Code: 2024 IRC | | |
| Telephone number: 612-283-8578 Code or Rule Section: R302 Fire-Residue | | | sistant C | onstruction | |
| Firm/Association affiliation, if any: City of Minneapolis Topic of proposal: Garage/D | | | /Dwelling | Separation | |
| Code | or rule section to be changed: Table R302.6 | 6 Dwelling | g-Garage Separation | | |
| Intend | ed for Technical Advisory Group ("TAG"): R | Residentia | al Building Code TAG | | |
| Gener | al Information | | | Yes | <u>No</u> |
| B. C. D. E. | A. Is the proposed change unique to the State of Minnesota? B. Is the proposed change required due to climatic conditions of Minnesota? C. Will the proposed change encourage more uniform enforcement? D. Will the proposed change remedy a problem? E. Does the proposal delete a current Minnesota Rule, chapter amendment? F. Would this proposed change be appropriate through the ICC code development process? | | | | |
| | sed Language The proposed code change is meant to: | | | | |
| | □ change language contained the model Section R302.6 and Table R302.6 | code boo | ok? If so, list section(s). | | |
| | □ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s). Incorporate 2024 IRC terms, remove portions of MN amendment now located in the body of the cod and make corrections within existing MN amendment. | | | | |
| | delete language contained in the mode | el code bo | ook? If so, list section(s). | | |
| | delete language contained in an existing | ng amend | ment in Minnesota Rule? If | so, list R | ule part(s). |
| | add new language that is not found in t | the mode | I code book or in Minnesota | Rule. | |
| 2. | Is this proposed code change required by No | Minneso | ta Statute? If so, please pro | vide the | citation. |

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

Amend 2024 model code section R302.6 and Table R302.6 to 1) maintain existing MN amendments that have not been added to the model code and 2) make corrections to and reformat existing MN amendments - as follows:

R302.6 Dwelling unit garage fire separation.

The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. Attachment of gypsum board shall comply with Table R702.3.5. The wall separation provisions of Table R302.6 shall not apply to garage walls that are perpendicular to the adjacent dwelling unit wall.

| TABLE R302.6 DWELLING UNIT GARAGE SEPARATION | | | | |
|---|--|--|--|--|
| SEPARATION MATERIAL | | | | |
| From the dwelling unit and attics Vertical separation between the garage and the residence attic shall extend to the roof sheathing or rafter blocking. | Not less than 1/2-inch gypsum board or equivalent applied to the garage side | | | |
| From portions of the dwelling unit above the garage | Not less than 5/8-inch Type X gypsum board or equivalent applied to the garage side | | | |
| Structure supporting garage ceiling or floor/ceiling assemblies used for separation required by this section. Supporting structure includes but is not limited to walls, columns, beams, girders, and trusses. | Not less than 1/2-inch gypsum board or equivalent applied to the garage side | | | |
| Garages located less than 3 feet from a dwelling unit on the same lot This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall. | Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area | | | |

Explanation of proposed changes:

- It the original amendment, MN replaced "dwelling" with "residence". "Residence" is not a defined term (model codes or MN) and doesn't provide value above and beyond the model code language which was revised in the 2024 IRC from "dwelling" to "dwelling unit".
- The MN language regarding perpendicular walls is now addressed in the body of the code (in R302.6) and is therefore no longer required in the table.
- The MN footnote "a" regarding attachment per Table 702.3.5 is no longer required because that language is now addressed in the body of the code in R302.6 and is therefore no longer required in the table.
- The model code has made a correction, replacing "habitable rooms" with "portions of the dwelling unit" this ensure that portions of a dwelling unit that are non-habitable spaces (bathrooms, hallways, kitchens, etc.) are subject to the garage-dwelling fire separation requirements.
- Relocated MN amended language from the "material" column to the "separation" column as the text describes the conditions (where/how) of the separation. This cleans up the "material" column by uniformly identifying 1) the material and 2) the location of the material.
- Removed the last sentence from Section R302.6 and relocated it to within the table in the row that addresses detached garages located within 3 feet of a dwelling on the same lot. This was MN amended language that was in the table then was added to Section R302.6 in the 2024 IRC however the language is a little awkward in the body of the code since it applies only to detached garages (vs. both attached and detached garages/all of Table R302.6 separation provisions).

See last page for comparison of 2018 IRC, MN amendments creating the 2020 MN code, 2024 IRC, and proposed MN amendments to the 2024 IRC.

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.

The change will better align the MN amended language with the model code definitions; there should not be impacts to other code sections (for example, the gypsum board attachment table and dwelling-garage opening protection section referenced in R302.6 have remained the same from 2018-2021-2024).

Need and Reason

- 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 proposed changes will maintain the clarifications made by the MN amended language while incorporating updated model code definitions.
- 2. Why is the proposed code change a reasonable solution? While some of the MN amended language has now been incorporated into the model code, there remains value in keeping the other portions of the amendment – so revising the table to make corrections, update terminology, and carry over MN language is a reasonable way to maintain uniform enforcement in Minnesota while adhering to the intent of the model code.
- 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.
 - There will be no increase or decrease the changes are editorial in nature and the technical requirements are unchanged.
- 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.
- 3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.

n/a

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

n/a

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? None these changes are editorial in nature.
- 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.

- 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

****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.

^{***}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.

2018 IRC

R302.6 Dwelling-garage fire separation.

The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. Attachment of gypsum board shall comply with Table R702.3.5. The wall separation provisions of Table R302.6 shall not apply to garage walls that are perpendicular to the adjacent dwelling unit

| TABLE R302.6DWELLING-GARAGE SEPARATION | | | | |
|---|--|--|--|--|
| SEPARATION MATERIAL | | | | |
| From the residence and attics | Not less than 1/2-inch gypsum board or equivalent applied to the garage side | | | |
| From habitable rooms above the garage | Not less than 5/8-inch Type X gypsum board or equivalent | | | |
| Structure(s) supporting floor/ceiling assemblies used for separation required by this section | Not less than 1/2-inch gypsum board or equivalent | | | |
| Garages located less than 3 feet from a dwelling unit on the same lot | Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area | | | |
| For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. | | | | |

2020 MN

R302.6 Dwelling-garage fire separation.

The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5.

| TABLE R302.6aDWELLING-GARAGE SEPARATION | |
|--|--|
| SEPARATION | MATERIAL |
| From the residence and attics | Not less than 1/2-inch gypsum board or equivalent applied to the |
| | garage side. Vertical separation between the garage and the residence attic shall extend |
| | to the roof sheathing or rafter blocking. |
| From all habitable rooms above the garage | Not less than 5/8-inch Type X gypsum board or equivalent. |
| Structur e(s) al members supporting floor/ceiling assemblies or | Not less than 1/2-inch gypsum board or equivalent applied to the garage side of |
| garage ceiling used for separation required by this section | structural members supporting the floor/ceiling assemblies or garage ceiling. Structural |
| | members include, but are not limited to: walls, columns, beams, girders, and trusses. |
| Garages located less than 3 feet from a dwelling unit on the same | Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior |
| lot | walls that are within this area. This provision does not apply to garage walls that are |
| | perpendicular to the adjacent dwelling unit wall. |

a.Attachment of gypsum board shall comply with Table R702.3.5

2024 IRC

R302.6 Dwelling unit garage fire separation.

The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. Attachment of gypsum board shall comply with Table R702.3.5. The wall separation provisions of Table R302.6 shall not apply to garage walls that are perpendicular to the adjacent dwelling unit

| TABLE R302.6DWELLING UNIT GARAGE SEPARATION | | | | |
|--|--|--|--|--|
| SEPARATION | MATERIAL | | | |
| From the dwelling unit and attics | Not less than 1/2-inch gypsum board or equivalent applied to the garage side | | | |
| From portions of the dwelling unit above the garage | Not less than 5/8-inch Type X gypsum board or equivalent | | | |
| Structure supporting floor/ceiling assemblies used for separation required by this section | Not less than 1/2-inch gypsum board or equivalent | | | |
| Garages located less than 3 feet from a dwelling unit on the same lot | Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area | | | |
| For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. | | | | |

PROPOSED MN AMENDMENT TO 2024 IRC

R302.6 Dwelling unit garage fire separation.

The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. Attachment of gypsum board shall comply with Table R702.3.5.

| TABLE R302.6 DWELLING UNIT GARAGE SEPARATION | | | | |
|--|--|--|--|--|
| SEPARATION | MATERIAL | | | |
| From the dwelling unit and attics | Not less than 1/2-inch gypsum board or equivalent applied to the garage side | | | |
| Vertical separation between the garage and the residence attic shall | | | | |
| extend to the roof sheathing or rafter blocking. | | | | |
| From portions of the dwelling unit above the garage | Not less than 5/8-inch Type X gypsum board or equivalent applied to the garage side | | | |
| Structure supporting garage ceiling or floor/ceiling assemblies used | Not less than 1/2-inch gypsum board or equivalent applied to the garage side | | | |
| for separation required by this section | | | | |
| Supporting structure includes but is not limited to walls, columns, | | | | |
| beams, girders, and trusses. | | | | |
| Garages located less than 3 feet from a dwelling unit on the same | Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior | | | |
| lot | walls that are within this area | | | |
| This provision does not apply to garage walls that are perpendicular | | | | |
| to the adjacent dwelling unit wall. | | | | |
| For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. | | | | |



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

| Authoi | r/requestor: Lisa Hartwig | Date: 02/23/2025 | | | |
|---|--|---------------------------------|------------------|----------------|--|
| Email address: lisa.hartwig@minneapolismn.gov Model Cod | | Model Code: 2024 IRC | | | |
| Telephone number: 612-283-8578 Code or | | Code or Rule Section: 24 IR | IRC Section R307 | | |
| Firm/Association affiliation, if any: City of Minneapolis Topic of proposal: Storm Sh | | | elters | | |
| Code | or rule section to be changed: Delete existing MN ar | mendment 1309.0323 Section | R323 | Storm Shelters | |
| Intend | ed for Technical Advisory Group ("TAG"): Residentia | al Building Code TAG | | | |
| Gener | al Information | | Yes | No | |
| B. C. D. E. | A. Is the proposed change unique to the State of Minnesota? B. Is the proposed change required due to climatic conditions of Minnesota? C. Will the proposed change encourage more uniform enforcement? D. Will the proposed change remedy a problem? E. Does the proposal delete a current Minnesota Rule, chapter amendment? F. Would this proposed change be appropriate through the ICC code development process? | | | | |
| | sed Language The proposed code change is meant to: | | | | |
| | change language contained the model code boo | ok? 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). □ Delete current MN amendment to 1309.0323 Section R323 Storm Shelters (2013 Revisor Number R-04144) | | | | |
| | add new language that is not found in the mode | el code book or in Minnesota F | Rule. | | |
| 2. | Is this proposed code change required by Minneso | ta Statute? If so, please provi | de the | citation. | |

- 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.
 N/A this proposal is to accept the model code provisions for storm shelters (R202 defined term "storm shelter" & Section R307 Storm Shelters) and delete the existing MN amendment.
- 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.

 N/A

Need and Reason

- 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.)
 Minnesota residents deserve to have storm shelters built to the minimum requirements of the national model codes and standards which have been tested to provide adequate safety to protect occupants from serious injury.
 - The model residential building code in use throughout the United States (International Residential Code) has contained provisions for storm shelters starting in the 2009 IRC and in each model code since then (2012, 2015, 2018, 2021, and 2024).
 - Primarily designed for life safety considerations, storm shelters protect occupants from serious injury due to high wind and flying debris (like 2x4s or other construction or natural material debris), offering added protection from the destructive forces of high winds, hurricanes, and tornadoes.
 - The IRC does not mandate that storm shelters be provided in areas where high winds are
 probable, but when they are provided, such shelters must be constructed in accordance
 with ICC 500, the Standard for the Design and Construction of Storm Shelters.
 - The ICC 500 standard includes special requirements for structural design, including wind loads that are higher than the wind loads required by Section 301.2.1 for all structures, providing requirements for the design and construction of shelters to protect people from the violent winds of hurricanes and tornadoes. The outer shell of above-ground shelters may be concrete, steel, composite or other materials that have been tested to the prescribed tests.
 - MN did not adopt the 2009 model codes. When MN next adopted the model residential code (the 2012 IRC effective January 2015), the 2012 IRC storm shelter section (unchanged from the 2009 IRC) was deleted by MN amendment (2013 Revisor Number R-04144) and the amendment was retained when MN next adopted the 2018 IRC in 2020.
 - Per 2024 Minnesota Statute 326B.106, the code must conform insofar as practicable to model building codes generally accepted and in use throughout the United States.
 Amendments are made to the model code for the following reasons:
 - 1) conditions unique to Minnesota such as climate,
 - 2) to encourage more uniform enforcement,
 - 3) to remedy an existing problem, or
 - 4) to delete an existing Minnesota amendment because the topic is adequately addressed by the ICC code language.

The reason statement in the sonar does not align with any of these reasons.

2. Why is the proposed code change a reasonable solution? Conventional prescriptive residential construction is not intended to provide this level of protection to occupants during tornadoes and high wind events. If a homeowner or a developer wishes to construct a storm shelter to protect occupants from extreme wind events such as a tornado, they should be able to

storm shelter to protect occupants from extreme wind events such as a tornado, they should be able to rely on the MN state building codes to enforce and regulate the construction of storm shelters to ensure that they will meet the tested, approved construction requirements and life safety elements afforded by the national code.

Therefore, it is reasonable for Minnesota to delete the existing amendment and adopt the model code requirements for storm shelters – which have been relocated to Section 307 in the 2024 IRC.

3. What other factors should the TAG consider?

Other upper midwest states with similar residential construction – where basements or crawl spaces are typical (but not required) and that experience high wind events, including tornadoes, have adopted the model code section for storm shelters without any amendment (changes or deletion):

- ND: currently adopts the 2021 IRC including Section R323 Storm Shelters without amendment
- SD: currently adopts the 2021 IRC including Section R323 Storm Shelters without amendment
- NE: currently adopts the 2018 IRC including Section R323 Storm Shelters without amendment
- IA: currently adopts the 2015 IRC including Section R323 Storm Shelters without amendment
- WI: (does not adopt the IRC)
- MI: currently adopts the 2015 IRC including Section R323 Storm Shelters without amendment
- IL: currently adopts the 2021 IRC including Section R323 Storm Shelters without amendment

As model codes and legislative bodies search for alternative solutions to address housing affordability and availability, new ways of living are being codified – for example, the introduction of tiny homes in the 2018 IRC and the introduction of accessory dwelling units in the 2024 IRC.

• Throughout the state and country, there is interest in tiny home cluster developments and communities of smaller dwellings located within the same lot. Due to their smaller size, tiny homes and ADUs typically will not have basements or suitable interior spaces without openings for occupants to seek shelter during a tornado. One-level homes built on slab foundations are becoming more in demand, both for people looking for reduced construction costs and being able to age in place. The storm shelter provisions will allow occupants of homes without basements to have a safe place to shelter during a tornado.

Cost/Benefit Analysis

- 1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.
 - Storm shelters are not required, so there will not be a baseline increase in costs for construction throughout Minnesota. If someone chooses to construct a storm shelter, they will have considered the cost/benefit analysis for their situation.
- 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.
- 3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
- 4. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.

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?
- 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 IRC requirements/ICC 500 standard provides requirements for the design and construction of shelters to protect people from the violent winds of hurricanes and tornadoes special requirements for structural design, including wind loads that are considerably higher than the wind loads required by Section 301.2.1 for all structures.
- 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?

 Homeowners and residents should be able to trust that structures meant to protect them in an extreme storm will meet the minimum, tested standards that has been developed at the national level.
- 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.

***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)

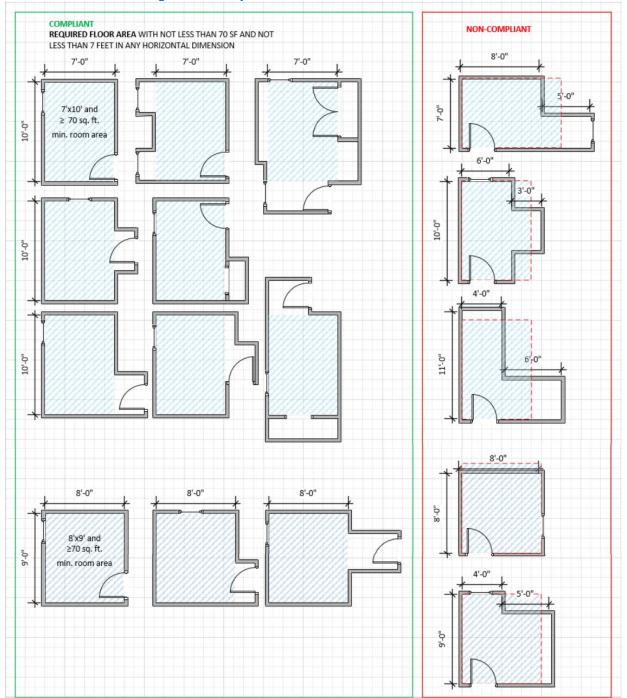
| Email Teleph Firm/A Code | address: <u>lisa.hartwig@minneapolismn.gov</u> none number: 612-283-8578 | | | Areas |
|-----------------------------------|--|--|-----------|------------------|
| A. B. C. D. | al Information Is the proposed change unique to the State of Minne Is the proposed change required due to climatic cond Will the proposed change encourage more uniform e Will the proposed change remedy a problem? Does the proposal delete a current Minnesota Rule, Would this proposed change be appropriate through development process? | ditions of Minnesota? enforcement? chapter amendment? | Yes | No ⊠ □ □ □ □ |
| | The proposed code change is meant to: ☐ change language contained the model code book Section R312 Minimum Room Areas ☐ change language contained in an existing amend ☐ delete language contained in the model code boo ☐ delete language contained in an existing amendm ☐ add new language that is not found in the model of | ment in Minnesota Rule? If sk? If so, list section(s). nent in Minnesota Rule? If so | o, list R | |
| 2. | Is this proposed code change required by Minnesota N/A | Statute? If so, please provi | de the d | citation. |
| 3. | Provide <i>specific</i> language you would like to see char underlining and strikethrough words proposed for desubpart that contains your proposed changes. R312.2 Minimum dimensions. The required floor area of habitable rooms shall be no dimension. Exception: Kitchens. | letion. Include the entire coo | le (sub) | section or rule |
| 4. | Will this proposed code change impact other sections. Minnesota Rule? If so, please list the affected section. No, the proposed change is a clarification of the exist Areas section is not amended by MN. | ns or rule parts. | | |

Need and Reason

- 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.)
 I have seen misinterpretation of the code requirements (habitable rooms having less than 7' dimensions to meet the 70 SF minimum room area) in new construction and remodels - especially finishing an unfinished attic for sleeping rooms.
- 2. Why is the proposed code change a reasonable solution?

 While the code requirements seem simple (for example, so long as a room is at least 7'x10' or 8'x9' –

 both the minimum dimensional requirements and the minimum area requirements are met), current design trends especially in bedrooms often feature areas with less than 7 feet, such as near the door or in rooms with dormers. This change would clarify that the minimum required floor area must have dimensions of 7 feet or greater in any horizontal dimension.



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.

There would be no increase or decrease as this doesn't change the requirements.

- 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.

 n/a
- 3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
- 4. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
 - In theory there could be decreases in enforcement or compliance costs with the clarification of the revised language, plan review timelines and/or the number of inspections could be reduced, reducing construction delays.
- 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, n/a

Regulatory Analysis

- 1. What parties or segments of industry are affected by this proposed code change? None, this is a clarification of the code requirements rather than a technical change.
- 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.

 n/a
- 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

***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.

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Author/requestor: Chris Rosival

Email address: chris.rosival@state.mn.us

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Date: 12/26/2024

Model Code: 2024 IRC

| Telephone number: 651-284-5510 | | Code or Rule Section: R302.3.1 | | | | | |
|---|---|--------------------------------|-----------|--|--|--|--|
| Firm/Association affiliation, if any: DLI | | | | | | | |
| Code or rule section to be changed: 2024 IRC Section R302.3 | | | | | | | |
| Intended for Technical Advisory Group ("TAG"): | | | | | | | |
| General Information | | <u>Yes</u> | <u>No</u> | | | | |
| B. C. D. E. | Is the proposed change unique to the State of Minnesota? Is the proposed change required due to climatic conditions Will the proposed change encourage more uniform enforce Will the proposed change remedy a problem? Does the proposal delete a current Minnesota Rule, chapte Would this proposed change be appropriate through the IC development process? | ement? er amendment? | | | | | |
| | sed Language The proposed code change is meant to: Change language contained the model code book? If so | | | | | | |
| | ☐ 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). | | | | | | |
| 2. | □ add new language that is not found in the model code book or in Minnesota Rule. R302.3.1 Is this proposed code change required by Minnesota Statute? If so, please provide the citation. | | | | | | |

- 3. Provide *specific* language you would like to see changed. Indicate proposed new words with <u>underlining</u> and <u>strikethrough</u> words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.
 - **R302.3.1 Dwelling unit separation.** The two dwelling units shall be separated by fire-resistance rated assemblies that are vertical, horizontal, or a combination thereof. A forced air *duct system* shall not penetrate the walls, floors or ceilings separating two-family *dwelling units*.
- 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.

Need and Reason

- 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.)
 M1602.2 has language that does not allow forced air ducts systems to be shared in two-family dwellings.
 - [MP] DUCT SYSTEM. A continuous passageway for the transmission of air that, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling equipment and appliances. For the definition applicable in Chapter 11, see Section N1101.6
 - [RB] DWELLING UNIT. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. For the definition applicable in Chapter 11, see Section N1101.6. For the definition applicable in Chapter 24, see Section G2403.
 - M1602.2 Return air openings. Return air openings for heating, ventilation and air-conditioning systems shall comply with all of the following:
 - 10. Return air from one dwelling unit shall not be discharged into another dwelling unit.
- 2. Why is the proposed code change a reasonable solution?
 This will keep ducts from penetrating separation walls in two-family dwellings
- 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.
 - 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.
- 3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.

- Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. none
- 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? IRC builders, contractors and installers
- 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.
- 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.

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