



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Elizabeth Schulze

Date: 10/29/2024

Email address: obaka001@umn.edu

Model Code: 2024 IBC

Telephone number: 612-328-0162

Code or Rule Section: 202, 2902.1, 2902.2

Firm/Association affiliation, if any: University of MN and University of MN Office for Equity and Diversity

Topic of proposal: 202, 2902.1, 2902.2

Code or rule section to be changed: 202, 2902.1, 2902.2

Intended for Technical Advisory Group ("TAG"):

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.

- CHAPTER 2: DEFINITIONS: SECTION 202
UNIVERSAL – Inclusive for use by all
UNIVERSAL RESTROOM – A restroom that is inclusive for use by all
- [P] TABLE 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a, m (See Sections 2902.1.1 and 2902.2)
m. For existing buildings other than E and I occupancies, that meet or exceed the minimum fixture counts under the code to which they were built, may convert up to 1/3 of the plumbing fixtures for universal restroom use.
- [P] 2902.2 Separate facilities.
Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 25 or less.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or less.
4. For separate facility requirements in existing buildings see table 2902.1 footnote m

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.)
 - This proposed code change is needed because there is a growing voiced need to provide diverse options as related to restroom use at the University of MN and likely other venues. This proposal provides diversity and options for all user groups in existing buildings, and not only in new or future buildings. For example, with this proposed change, a father of a 3 yr old girl could potentially take his daughter into a universal restroom in an existing mercantile occupancy.
2. Why is the proposed code change a reasonable solution?
 - The current proposal would be technically infeasible for existing buildings. This proposal addresses the need for universal restrooms in existing buildings.
 - There is a lack of space in existing buildings to accomplish such complex design changes proposed
3. What other factors should the TAG consider?

- At this time, E and I occupancies present a very specific type of use and associated challenges such as security, HIPAA, etc, and thus have been excluded from the proposed change.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.
 - In existing buildings, due to lack of space and many times technical infeasibility, not providing code alternates or flexibility to design would increase the cost to add these universal restrooms. By providing this flexibility to design, no to minimal cost increases are anticipated.
 - It is more cost effective to convert existing restrooms than to build new in existing buildings.
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.
 - NA
3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
 - The Owner
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?
 - Owners, designers, code officials, the public
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.
 - The alternative compliance method is the other means to accomplish this. However, there will be no uniformity or consistency in the implementation of the alternate design.

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 will be no basis for design of an inclusive restroom leading to inconsistencies and non-uniformity from city to city, from owner to owner. Inconsistent application throughout the state.
 - The request for universal restrooms has grown and is growing and it needs to be addressed in the code.

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.
 - Potentially Title IX, the Minnesota Human Rights Act. There is no other cost effective way to comply with our legal obligation to ensure equitable access to restrooms under Title IX, the Minnesota Human Rights Act, and other non-discrimination laws.

***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: Steve Poor

Date: 6/20/2024

Email address: steve.poor@minneapolismn.gov

Model Code: Minnesota State Building Code

Telephone number: 612-364-4657

Code or Rule Section: Section 3103

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: Temporary structures

Code or rule section to be changed: Section 3103

Intended for Technical Advisory Group ("TAG"): June 27, 2024

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 in 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).

Section 3103

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.

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.

SECTION 3103 TEMPORARY STRUCTURES

General. The provisions of Sections through shall apply to structures erected for a period of less than ~~180~~ 210 days. Tents, umbrella structures and other membrane structures erected for a period of less than ~~180~~ 210 days shall comply with the International Fire Code. Those erected for a longer period of time shall comply with applicable sections of this code.

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

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 change will allow restaurants and other businesses that use temporary structures during Minnesota winters to ensure the temporary structure can be up throughout all months of inclement weather.

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

This change extends the current 180 day rule to add an extra month.

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 – it will not change inspection costs.

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.

No – this is a minor change to existing code.

Regulatory Analysis

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

Hospitality businesses

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.

***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: Greg Metz

Date: 5/30/2024

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 3114.1 Intermodal shipping containers

Code or rule section to be changed: MR 1305

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).
MBC 3114.1 General.

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

3114.1 General. The provisions of Section 3114 and other applicable sections of ~~this code~~ the Minnesota State Building Code shall apply to *intermodal shipping containers* that are repurposed for use as *buildings* or *structures*, or as a part of *buildings* or *structures*. Intermodal shipping containers used as buildings or parts of buildings shall meet all requirements for new construction.

Exceptions:

1. *Intermodal shipping containers* previously *approved* as existing *relocatable buildings* complying with Chapter 14 of the *International Existing Building Code*.
2. Stationary storage battery arrays located in *intermodal shipping containers* complying with Chapter 12 of the *International Fire Code*.
3. *Intermodal shipping containers* that are *listed* as equipment complying with the standard for equipment, such as air chillers, engine generators, modular *data centers*, and other similar equipment.
4. *Intermodal shipping containers* housing or supporting experimental equipment are exempt from the requirements of Section 3114, provided that they comply with all of the following:
 - 4.1. Such units shall be single stand-alone units supported at grade level and used only for occupancies as specified under *Risk Category I* in Table 1604.5.
 - 4.2. Such units are located a minimum of 8 feet (2438 mm) from adjacent *structures*, and are not connected to a fuel gas system or fuel gas utility.
 - 4.3. In *hurricane-prone regions* and *flood hazard areas*, such units are designed in accordance with the applicable provisions of Chapter 16.
5. Intermodal shipping containers previously approved as buildings or parts of buildings and not undergoing alteration or relocation.

Need and Reason

1. Why is the proposed code change needed?

There is a need for clarity that the items listed in Section 3114 are not the only requirements for using shipping containers for buildings. There are fire safety requirements, accessibility requirements, energy code requirements, ventilation requirements, and a host of other requirements found in other parts of the State Building Code.

Because the charging language requires shipping containers used for buildings to comply as for new construction for clarity, we need to add an exception that allows existing non-conforming conditions to remain where shipping containers are already used as buildings but are not themselves being altered or moved.
2. Why is the proposed code change a reasonable solution?

The language merely provides clarity and does not add to the requirements already strongly implied but not specifically stated.
3. What other considerations should the TAG consider?

Consider requiring special inspections for materials and welds since the containers are not new product, have likely been exposed to salt air and may be damaged or in various states of decay.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
No cost change. This is merely clarification.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Electrical inspectors, building owners and building tenants.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues? None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule? No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals? None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
Designer/owner confusion regarding the requirements for using shipping containers as buildings.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.
N/A

***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)

Author/requestor: Greg Metz

Date: 9/7/2022

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 3301.1 Scope.

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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.
IBC 3301.1 Scope.

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

3301.1 Scope. The provisions of this chapter shall govern safety during construction and the protection of adjacent public and private properties. Fire safety during construction shall also comply with the applicable provisions of Chapter 33 of the International Fire Code.

3301.2 Partial Occupancy. Where an existing building is intended to be partially occupied during construction, the following conditions shall be met:

1. The means of egress for occupied portions of the building shall comply with travel distance limits and number of exits required. Temporary means of egress may include temporary exterior fire escapes or exterior stairways constructed of any materials allowed by code.
2. For buildings equipped with an automatic sprinkler system and part or all of the system is required to be non-operational for a period of time, the travel distance limits and number of required exits shall be provided as for non-sprinkled buildings. Fire extinguishers shall be placed within 75 feet of travel distance from any occupied location within the building.
3. Spaces located beyond the allowable travel distance limits shall be cordoned off to not be occupied and shall be signed "Limits of safe occupancy, construction workers only beyond this point."
4. There shall be not less than a one-hour fire barrier separating the construction work area from occupied portions of the building.
5. Means of egress from occupied portions shall not pass through a construction work area.
6. Means of egress including temporary means of egress shall include exit discharge to the public way or safe dispersion area that can be maintained free and clear of ice and snow.

Renumber following code sections accordingly.

3301.3 ~~3301.2~~ Storage and Placement

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?
The code does not provide any guidance on safe partial occupancy of buildings undergoing renovation and construction.
2. Why is the proposed code change a reasonable solution?
It clarifies what is required for basic occupant safety and provides guidance for handling areas beyond the limits of safe occupancy. The requirements are consistent with current code, and are merely included to reduce construction costs by clarifying requirements in a less subjective manner while maintaining occupant safety during construction.
3. What other considerations should the TAG consider?
None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
No cost change.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, building owners.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.
5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
Wide variations in requirements for partial occupancy leading to inconsistency in requirements and elevated construction costs to mitigate the uncertainty.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

***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)

Author/requestor: Gregory Metz

Date: 7/18/2024

Email address: Greg.Metz@State.MN.US

Model Code: 2024 IBC

Telephone number: 651-284-5884

Code or Rule Section: 3314.1

Firm/Association affiliation, if any: DLI/CCLD

Topic of proposal: Fire Watch

Code or rule section to be changed: 3114.1 Fire Watch

Intended for Technical Advisory Group ("TAG"): MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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.

3314.1 Fire watch during construction. ~~A~~ When required by the fire code official, fire watch shall be provided during nonworking hours ~~for construction that exceeds 40 feet (12 192 mm) in height above the lowest adjacent grade at any point along the building perimeter~~, for new multi-story construction ~~with an aggregate area exceeding 50,000 square feet (4645 m²) per story or as required by the fire code official.~~

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.)

Model code mandates a fire watch under certain conditions for building size and when construction exceeds normal limits of firefighting capability from the ground. The model code imposes expensive staffing for fire watch when the service may not be necessary.

2. Why is the proposed code change a reasonable solution?
The proposed change gives the discretion to the fire official to require a fire watch or not.
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.
The change will decrease construction costs by not mandating fire watch for all buildings taller than three stories (40 feet) or 50,000 square feet.
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.
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?
Architects, engineers, developers, building owners, code officials, firefighters

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?
Added cost to buildings, especially multi-family housing with no ultimate benefit to the owner or occupants.

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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CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Carsten Jonas

Date: 7/3/2024

Email address: carstenmjonas@gmail.com

Model Code: IBC/IFC

Telephone number: 7813638193

Code or Rule Section: N/A

Firm/Association affiliation, if any: Self

Topic of proposal: Exit signs

Code or rule section to be changed: New section 1013.7

Intended for Technical Advisory Group ("TAG"): 1305/Fire Code Compatibility

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 type="checkbox"/> | <input checked="" 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.
1013.7 Pictograms. In lieu of or in addition to the word "EXIT", exit signs may include the pictogram for an emergency exit as standardized by the International Organization for Standardization in Standard 7010.
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.)
 For many years, a pictogram (symbol) to indicate an emergency exit has been internationally standardized (see attached PDF for an example). This symbol has been adopted in jurisdictions around the world, including other English-speaking ones such as Canada, Australia, New Zealand, and the United Kingdom.
 The pictogram makes exit signs readily understandable by anyone regardless of the language they speak. In addition, when it is used with a directional arrow (as the example in the attached PDF shows), this arrow is much larger compared to the arrow on textual exit signs.
 This enhances safety by making it easier for occupants to find the exit, especially if it's a building that they're not familiar with.
 It should be noted that the pictogram has been used in some buildings in Massachusetts and New York State. These installations were likely individual variances.
2. Why is the proposed code change a reasonable solution?
 This change will allow the pictogram on exit signs in all buildings. This change does not require it, so new and existing buildings that prefer to continue using textual exit signs will still be permitted to do so.
3. What other factors should the TAG consider?
 Eventually requiring the pictogram on exit signs in occupancies that are likely to attract international visitors (e.g. some Group A occupancies such as airport terminals, and Group R-1 occupancies such as hotels.)

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.
 No, the manufacturing costs and installation procedures for an exit sign that has the pictogram are identical to one that uses the word "EXIT".
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.

No, the inspection procedures for an exit sign that has the pictogram are identical to one that uses the word "EXIT".

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, there is no cost impact from this change.

Regulatory Analysis

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

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.

Another option could have been to wait for an IBC/IFC code change. However, earlier this year at the ICC Committee Action Hearings in Orlando, there was significant confusion over the applicability of the proposed change as the IBC/IFC change proposal (E78-24) appeared to only apply to externally illuminated exit signs, not internally illuminated ones. This state-level amendment proposal is designed to avoid this confusion by creating a new subsection that applies to both types of exit signs.

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?

The probable costs or consequences if this change were not adopted are:

People may be less easily able to recognize the direction of the emergency exit due to the small directional arrows on textual exit signs.

International visitors to Minnesota may be less likely to recognize emergency exits in buildings.

Conversely, Minnesotans who travel internationally may be less likely to recognize emergency exits in buildings they visit on their travels.

Building owners who, in the absence of this code change, wish to use the pictogram on the exit signs in their building will have to apply for a variance.

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.

A potential issue that may come up is a purported conflict between this code change and OSHA regulations. (In areas where MNOSHA does not have its own regulations, it enforces the federal OSHA regulations. There do not appear to be MNOSHA-specific regulations regarding exit signs, so the federal OSHA regulations are applicable and I'll use them for this analysis.)

Despite what initially appears to be a conflicting requirement in 29 CFR 1910.37(b), 29 CFR 1910.35 provides that compliance with applicable provisions of NFPA 101, 2009 edition, will be considered compliant with regards to applicable provisions of OSHA's means of egress requirements. Since its 2003 edition, NFPA 101 expressly allows the pictogram on exit signs, including in lieu of the word "EXIT", if allowed by the state/local jurisdiction, per sections 7.10.3.2 and A.7.10.3.2, the latter of which states: "Pictograms are permitted to be used in lieu of, or in addition to, signs with text."

Therefore, OSHA regulations do not preempt or otherwise conflict with this 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.

****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.

CCP24_110 example

Example of what the pictogram looks like (with a directional arrow):



Minnesota Department of Public Safety State Fire Marshal Division

24CCP_125

Fire Code Change Proposal Form

(Submit via email to: fire.code@state.mn.us)

***Please complete all sections. Incomplete forms may be returned for additional information.*

Author/requestor: [Forrest Williams, Supervisor \(SFM\)](#)

Date: [10/16/2024](#)

Email address: forrest.williams@state.mn.us

Telephone number: [651-769-7784](#)

Organization/Association/Agency, if any: [DPS – State Fire Marshal](#)

Code or rule section to be changed (include code or rule title and edition year): [2020 MSFC 7511.1010.1.9.4 & 2020 MBC 1305.1010.1.9.4](#)

Is the subject matter of the proposed change also regulated by the Minnesota Building Code?

YES: NO: UNKNOWN:

***If yes, a [building code change proposal](#) must also be completed and submitted to the Minnesota Department of Labor and Industry – Construction Codes and Licensing Division.*

General Information

Yes No

- 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?

Proposed Language

1. The proposed code change is meant to:



Minnesota Department of Public Safety State Fire Marshal Division

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).

2020 MSFC 7511.1010.1.9.4 & 2020 MBC 1305.1010.1.9.4

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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

Note: The purpose of this change proposal is to resolve a conflict between the state fire and building codes and Minnesota Rules for the security of large firearms dealers by adding item #12 below.

(2020 MSFC 7511.1010.1.9.4, as amended)

1010.1.9.4 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

1. Places of detention or restraint.

2. In buildings in occupancy Group A having an occupant load of 300 or less, in buildings in occupancy Groups B, F, M, and S and in places of religious worship, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side, provided:

2.1 The locking device is readily distinguishable as locked.

2.2 A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING



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Minnesota Department of Public Safety State Fire Marshal Division

IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

2.3 The use of the key-operated locking device is revocable by the fire code official for due cause.

3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface-mounted hardware.
4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of ten or less are permitted to be equipped with a night latch, dead bolt, or security chain, provided such devices are openable from the inside without the use of a key or tool.
5. Fire doors, after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.
6. Doors serving roofs not intended to be occupied shall be permitted to be locked preventing entry to the building from the roof.
7. Delayed egress locks, installed and maintained in conformance with Section 1010.1.9.8.
8. Controlled egress doors installed and maintained in conformance with Section 1010.1.9.7.
9. Electrically locked egress doors installed and maintained in conformance with Section 1010.1.9.9 or 1010.1.9.10.
10. In rooms, other than detention cells, where occupants are being restrained for safety or security reasons, special detention arrangements that comply with the requirements of Section 1010.1.11 are permitted.
11. Means of egress stairway doors, installed and maintained in conformance with Section 1010.1.9.12.

12. Retail spaces used exclusively for large firearms dealers shall be secured in accordance with Minnesota Rules 7504.0300. Means of egress doors from spaces allocated to dealing with firearms shall remain unlocked from the egress side whenever the space is occupied. There shall be no requirement for signs and this provision is subject to inspection during normal business hours by the code official or law enforcement as defined in Minnesota Rules 7504.0500.

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.
[2020 MBC 1305.1010.1.9.4](#)

Need and Reason



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Minnesota Department of Public Safety State Fire Marshal Division

1. Why is the proposed code change needed?

Currently, the state fire and building codes are in conflict with MN Rules for the securing of large firearms dealers. MN Rules 7504.0300 allows large firearms dealers options for securing perimeter doorways, including the use of a standard operational hardware lockset in addition to a deadbolt lock or the use of a metal security grate equipped with a padlock. Each of these options have the potential to be prohibited under the state fire and building codes depending on conditions. Further, ATF firearms licensing under 27 CFR Part 478 is contingent upon dealers conforming to MR 7504.0300.

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

This change is reasonable based on the following:

- These security measures will not inhibit occupant egress as such areas will only be secured from the egress side after-hours when the areas are not occupied.
- 2020 MSFC 1031.2.1 states that security devices affecting the means of egress shall be subject to approval of the fire code official. And the IFC commentary for Section 1010.1.9.2 states the following regarding security devices: "Security locks can be placed at any height. An example would be an unframed glass front door of a tenant space in a mall that has the lock near the floor level. The lock is only used when the store is not open for business. Such locks are not required for the normal operation of the door."

3. Is there additional data or information that should be considered?

n/a

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

No change in costs. This revision simply eliminates a current conflict in MN Rules by acknowledging the security requirements for large firearms dealers required under MR 7504.0300.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.

n/a

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

no

4. 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? 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



Minnesota Department of Public Safety State Fire Marshal Division

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
[Large firearms dealers and property owners, fire and building code officials, and design professionals,](#)
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
[none](#)
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
[no](#)
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
[no](#)
5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
[none](#)
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
[Without adopting this change, the conflict between the state fire and building codes and MN Rules for the securing of large firearms dealers will continue. The result being: some building and fire code officials will continue to not allow these security features while local law enforcement will mandate such features be present.](#)
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
[27 CFR Part 478. ATF firearms licensing is contingent upon dealers conforming to MR 7504.0300.](#)
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.
[ATF firearms licensing under 27 CFR Part 478 is contingent upon dealers conforming to MR 7504.0300.](#)



Minnesota Department of Public Safety State Fire Marshal Division

***Please complete all sections. Incomplete forms may be returned for additional information.*



Updated July 2022



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Jerry Norman

Date: 9/13/2024

Email address: gnorman@rochestermn.gov

Model Code: 2024 IBC

Telephone number: 507-328-2622

Code or Rule Section: Table 1006.3.4(1)

Firm/Association affiliation, if any: NA

Topic of proposal: sleeping units

Code or rule section to be changed: 2024 IBC

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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).
IBC Table 509.1

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

- 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.

TABLE 1006.3.4(1) – STORIES AND OCCUPIABLE ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS OR SLEEPING UNIT	MAXIMUM EXIT ACCESS TRAVEL DISTANCE
Basement, first, second or third story above grade plane and	R-2 ^{a, b, c}	4 dwelling <u>or sleeping</u> units	125 feet
Fourth story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 304.8 mm
 NP = Not Permitted
 NA = Not Applicable

a. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and protected with emergency escape and rescue openings in accordance with Section 1031.
 b. This table is used for group R-2 occupancies consisting of dwelling units or sleeping units. For other Group R-2 occupancies, use Table 1006.3.4 (2).
 c. This table is for occupiable roofs accessed through and serving individual dwelling units or sleeping units in Group R-2 occupancies. For other Group R-2 occupancies with occupiable roofs that are not accessed through and serving individual units use Table 1006.3.4(2).

- Is 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.)

The table identifies when a single means of egress is allowed from a story. The table allows up to 4 dwelling units per story for up to 3 stories above grade plane, but would not allow 4 sleeping units per story for up to 3 stories above grade plane and instead references the user to another code table (Table 1006.3.4(2)) which would not allow a single exit from the 3rd story above grade plane for a sleeping unit type group R-2 occupancy. By definition (ref. IBC Sec. 202) the difference between a sleeping unit and a dwelling unit is that a dwelling unit has provisions for sanitation AND cooking, where a sleeping unit has provisions for sanitation OR cooking but not both. Normally sleeping units have sanitation facilities only. So the question is “How does the addition of a cooking appliance make it SAFER and thereby allow the addition story?” Actual example that have been effected are small dormitory buildings and existing dwelling units turned into rooming houses.

- Why is the proposed code change a reasonable solution?

If the code has determined that 4 dwelling units with a single means of egress is safe for up to 3 stories above grade plane, then logically 4 sleeping units should also be permitted. Individual sleeping units are typically smaller in size than a dwelling unit, are provided with smoke alarms, and are separated from adjoining spaces with rated construction.

- What other factors should the TAG consider?

Cost/Benefit Analysis

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

Decrease cost as a second means of egress will no longer be required from these facilities.

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.

It will reduce enforcement cost as a second means of egress will not need to be confirmed during plan review or inspection.

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, engineers and contractors.

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.

It could be a separate provision in section 1006.3.4 instead of being in the table.

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?

Failure to adopt the code change will limit option for designers on small lots thereby reducing affordable housing options.

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.

Yes. The legislature has direct MN DLI to review the single exit building provisions, but most efforts have been focused on “dwelling unit” buildings not “sleeping unit” buildings.

***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: Jerry Norman

Date: 9/13/2024

Email address: gnorman@rochestermn.gov

Model Code: 2024 IBC

Telephone number: 507-328-2622

Code or Rule Section: Table 509.1

Firm/Association affiliation, if any: NA requirement

Topic of proposal: Radiation Damper

Code or rule section to be changed: 2024 IBC

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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).

X delete language contained in the model code book? If so, list section(s).
IBC Table 509.1

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.

TABLE 509.1 – INCIDENTAL USES

First 12 row unchanged

Group I-3 cells and ~~Group I-2 patient rooms~~ equipped with padded surfaces

Remaining 5 rows unchanged

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 addition of I-2 to this line of the table was new in the 2020 State Building Code. It requires a one-hour fire-resistance rating (fire barrier) around padded room in both group I-3 (detention) facilities and group I-2 (health care) facilities. These spaces are typically utilized to isolate patients that pose a risk of harming themselves. The problem is that requiring the room to be rated will also require rated opening protection (doors). Rated doors pose a suicide risk as there is not readily available anti-ligature rated hardware (hinges, closers, latch/lock sets). This was brought to my attention by one of the largest MN health care architectural firm BWBR and confirmed by one of the largest health care providers MAYO. This was also confirmed with the MN Department of Health Facility Provider Section. Most licensed health care providers participate in the federal Medicare/Medicaid program which reviews and inspects for compliance with NFPA 101 Chapter 18 or 19. NFPA 101 does not require a fire-resistance rated separation.

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

These spaces are protected against fire and fire spread because typically they are: (1) in fully NFPA 13 sprinkled buildings, (2) under direct visual supervision, (3) utilize approved foam padding regulated by both the building & fire code, and (4) in a building with a fire alarm system including smoke detectors. The requirement for a fire-resistive separation would not, in my opinion, offset the risk posed by the non-anti-ligature hardware.

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.

Decrease cost as noted there is not readily available fire protection hardware that provides anti-ligature features.

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.

It will reduce enforcement cost as the door/hardware will not need to be confirmed during plan review or inspection.

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, engineers and health care providers.

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, although I question the need in a group I-3 for virtually the same reason.

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?

Health care providers will either: (1) have to expend more money to obtain rated anti-ligature hardware, (2) go with traditional rated hardware and hope for the best, or (3) propose an alternate means and methods of construction for every instance to every AHJ.

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: Jerry Norman

Date: 9/13/2024

Email address: gnorman@rochestermn.gov

Model Code: 2024 IBC

Telephone number: 507-328-2622

Code or Rule Section: 717.6.2

Firm/Association affiliation, if any: NA requirement

Topic of proposal: Radiation Damper

Code or rule section to be changed: 717.6.2 ex #2

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

Proposed Language

1. The proposed code change is meant to:

change language contained in the model code book? If so, list section(s).
2024 IBC Sec. 717.6.2

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 ~~strike through~~ words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

717.6.2 Membrane penetrations. (unchanged)

1. (unchanged)

2. (unchanged)

Exceptions:

1. (unchanged)

2. Where exhaust duct or outside air duct penetrations are: (1) located within the cavity of a wall below the horizontal assembly, (2) are protected by an approved firestop system that is installed and tested in accordance with ASTM E 814 or UL 1479 and has an F rating and T rating equivalent to the required rating of the horizontal assembly being penetrated, (3) do not pass through another dwelling unit or tenant space, and (4) are not used as a dryer exhaust unless located in a building protected throughout by automatic sprinkler system in accordance with Section 903.3.1.1. ~~in accordance with Section 714.5.2 are located within the cavity of a wall and do not pass through another dwelling unit or tenant space.~~

3. (unchanged)

3. (unchanged)

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

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 primary purpose of the proposed amendment is to provide clear consistent requirements for a common design issue for the sake of consistent application. It recognizes what has been typically approved, despite not being technically correct, and provides additional protection against the greatest fire concern which is dryer exhaust duct fires.

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

It recognizes standard historical practices while at the same time addressing the major fire concern.

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.

It most likely will reduce cost in municipalities that enforced the strict letter of the code rather than standard construction practice.

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.

There will be increase cost if the designer was planning on an NFPA 13R sprinkler system, but needs to upgrade to an NFPA 13 system to meet the dryer duct provision of the amendment. However there are other ways to avoid that requirement that could and are currently being utilized such as running the ductwork through a non-rated soffit.

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

The owner.

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

When compared to the unamended language enforcement cost should be virtually the same.

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, mechanical engineers, building and mechanical contractors.

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.

An simplified amendment could be done that removes the language “in the cavity of a wall” and merely references section 714.5.2. This will require the user to have a higher level of code sophistication as 714.5.2 will then send you to yet another few sections to determine compliance. This amendment consolidated those requirements into one section.

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?

The biggest consequence is lack of uniform application.

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: Greg Metz

Date: 7/26/2022

Email address: greg.metz@state.mn.us

Model Code: IBC 2018

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 408.9 Windowless Buildings

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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.
MBC 408.9 Windowless Buildings

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

202 Definitions.

Smoke Compartment. A space within a building enclosed by smoke barriers on all sides, including top and bottom. Smoke compartments may also be bounded by exterior walls and roof/ceiling assemblies which are not required to be rated for the passage of smoke because the opposite side is not part of the building interior.

Windowless Smoke Compartment. A smoke compartment with an occupant load greater than 50 and without openable fenestrations or louvers in the occupied spaces which when opened, satisfy the requirements for natural ventilation with not less than 40% and not more than 50% of the openings located in the top 3 feet of the smoke compartment. Windows within 7 feet of the floor may be breakable in order to open them for ventilation purposes.

~~**408.9 Windowless buildings.** For the purposes of this section, a windowless building or portion of a windowless building is one with non-openable or readily breakable windows or with skylights or exterior doors provided in all resident areas of the exit access with an occupant load greater than 50. Windowless buildings shall be provided with an engineered smoke control system to provide a tenable environment for exiting from the smoke compartment in the area of fire origin in accordance with Section 909 for each windowless smoke compartment.~~

408.9 Windowless smoke compartment. Windowless smoke compartments shall be provided with an engineered smoke control system in accordance with Section 909 [or other approved method](#) to provide a tenable environment for exiting from the smoke compartment of fire origin to a separate smoke compartment.

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.
Yes, changes current Minnesota Rule 1305, Section 408.9.

Need and Reason

1. Why is the proposed code change needed?
There are currently no parameters around how much opening is required in a windowless building or where those openings need to occur to make the building or smoke compartment non-windowless. The section as written includes a definition which belongs in the definitions section.
2. Why is the proposed code change a reasonable solution?
The proposed uses natural ventilation requirements already included in the code as the basis for providing enough opening. The openings are divided into openings high in the space and low in the space similar to attic ventilation requirements found in Section 1202.2.1 to leverage stack-effect in order to purge smoke much like an attic uses stack effect to purge heat from the attic.
3. What other considerations should the TAG consider?
If mechanical ventilation can be used in lieu of a smoke control system per section 909.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
No cost change. The opening requirements to avoid the windowless smoke compartment definition were previously ambiguous.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, law enforcement officials and law enforcement building operators.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.
5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
Continued confusion over when a smoke compartment meets the criteria of a “windowless building”.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

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



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: C. Scott Anderson

Date: 10/24/24

Email address: c.scott.anderson@minneapolismn.gov

Model Code: 2024 IBC

Telephone number: 612-246-7303

Code or Rule Section: 601

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: Table 601

Code or rule section to be changed: Table 601

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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.
Table 601

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.

**TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)**

BUILDING ELEMENT	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
	A	B	A	B	A	B	A	B	C	HT	A	B
Primary structural frame ^f (see Section 202)	3 ^{a, b}	2 ^{a, b, c}	1 ^{b, c}	0 ^c	1 ^{b, c}	0	3 ^a	2 ^a	2 ^a	HT	1 ^{b, c}	0
Bearing walls												
Exterior ^{e, f}	3	2	1	0	<u>2</u> <u>1</u>	<u>2</u> <u>1</u>	3	2	2	2	1	0
Interior	3 ^a	2 ^a	1	0	1	0	3	2	2	1/HT ^g	1	0
Nonbearing walls and partitions Exterior ^{e, f}	See Table 705.5				<u>1</u>	<u>1</u>	See Table 705.5					
Nonbearing walls and partitions Interior ^d	0	0	0	0	0	0	0	0	0	See Section 2304.11.2	0	0
Floor construction and associated secondary structural members (see Section 202)	2	2	1	0	1	0	2	2	2	HT	1	0
Roof construction and associated secondary structural members (see Section 202)	1 1/2 ^b	1 ^{b, c}	1 ^{b, c}	0 ^c	1 ^{b, c}	0	1 1/2	1	1	HT	1 ^{b, c}	0

For SI: 1 foot = 304.8 mm.

- a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
- b. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decking where every part of the roof construction is 20 feet or more above any floor or mezzanine immediately below. Fire-retardant-treated *wood* members shall be allowed to be used for such unprotected members.
- c. In all occupancies, heavy timber complying with Section 2304.11 shall be allowed for roof construction, including primary structural frame members, where a 1-hour or less fire-resistance rating is required.
- d. Not less than the fire-resistance rating required by other sections of this code.
- e. Not less than the fire-resistance rating based on fire separation distance (see Table 705.5).
- f. Not less than the fire-resistance rating as referenced in Section 704.9.
- g. Heavy timber bearing walls supporting more than two floors or more than a floor and a roof shall have a fire-resistance rating of not less than 1 hour.

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 way Type III construction is built today is significantly different from the way it was constructed 50 years ago. Today's type III construction is much more similar to type V and we need to update the code to address how things are currently being constructed. Under the current code requirements, designers, builders and code officials spend a significant amount of time energy and money complying with the letter of the code, but for no realized safety. The traditional type III construction that had an entire enclosing exterior wall of masonry is no longer the norm. Today's Type III construction has a smattering of disjointed and isolated 2-hr rated light frame construction walls. These checkerboard installations, will protect that specific piece of wall do not provide any substantive protection of the building nor does it prevent fire spread to adjoining structures. This proposal simply does away with the 2-hr rating requirement and instead imposes a universal 1-hr requirement for exterior walls, bearing and non-bearing. While this is a lower rating it is applied consistently and is also consistent with the original intent of type III construction.
2. Why is the proposed code change a reasonable solution?
It addresses the current construction practices and reduces cost without substantial reductions in fire and life safety
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.
Change is substantial and will result in a decrease in construction cost.
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 cost increase
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.
Yes, Decrease in efforts and detailing for compliance with complex and difficult 2-hr rated assemblies
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?
Continued expenditure of time, effort and costs to comply with outdated code 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.
This change is being proposed to the ICC in April 2025.

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

Minnesota Department of Public Safety State Fire Marshal Division

24CCP_132

Fire Code Change Proposal Form

(Submit via email to: fire.code@state.mn.us)

***Please complete all sections. Incomplete forms may be returned for additional information.*

Author/requestor: [Forrest Williams, Supervisor \(SFM\)](#)

Date: [10/25/2024](#)

Email address: forrest.williams@state.mn.us

Telephone number: [651-769-7784](#)

Organization/Association/Agency, if any: [DPS – State Fire Marshal](#)

Code or rule section to be changed (include code or rule title and edition year): [2024 IFC/IBC Section 915.2, carbon monoxide detection – locations](#)

Is the subject matter of the proposed change also regulated by the Minnesota Building Code?

YES: NO: UNKNOWN:

***If yes, a [building code change proposal](#) must also be completed and submitted to the Minnesota Department of Labor and Industry – Construction Codes and Licensing Division.*

General Information

Yes No

- 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?

Proposed Language

1. The proposed code change is meant to:



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

915.2 Locations.

Carbon monoxide detection shall be installed in the locations specified in Sections 915.2.1 through 915.2.3. In addition to the locations specified in Sections 915.2.1 through 915.2.3, every guest room in a hotel or lodging house as defined in Minnesota Statutes, Chapter 299F.50, must have an approved and operational carbon monoxide alarm installed in each room lawfully used for sleeping purposes.

915.2.1 Dwelling units.

Carbon monoxide detection shall be installed in dwelling units outside of each separate sleeping area ~~in the immediate vicinity~~ within 10 feet ~~of the~~ bedrooms. Where a *CO source* is located within a bedroom or its attached bathroom, carbon monoxide detection shall be installed within the bedroom.

915.2.2 Sleeping units.

Carbon monoxide detection shall be installed in sleeping units.

Exception: Carbon monoxide detection shall be allowed to be installed outside of each separate sleeping area ~~in the immediate vicinity~~ within 10 feet of the sleeping unit where



Minnesota Department of Public Safety State Fire Marshal Division

the sleeping unit or its attached bathroom does not contain a CO source and is not served by a CO-producing forced-air furnace.

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.
[2024 IBC, Section 915.2](#)

Need and Reason

1. Why is the proposed code change needed?

These changes are necessary so that IFC/IBC Section 915.2 properly coordinates with the state's Carbon Monoxide Alarm Statute, M.S. 299F.50-51.

First, language is added to Section 915.2 to coordinate with the carbon monoxide location requirements in M.S. 299F.51 specific to hotel and lodging house guestrooms.

A revision is also made to Section 915.2.1. This section requires CO detection in dwelling units to be located outside of each separate sleeping area in the immediate vicinity of bedrooms. However, M.S. 299F.51 mandates that such detection be located within 10 feet of bedrooms. This proposal removes the phrase, 'in the immediate vicinity' of bedrooms and replaces it with the more specific location provision from the statute, 'within 10 feet' of bedrooms. This resolves a conflict between Section 915.2.1 and [M.S. 299F.51](#) and prevents the situation where a newly constructed dwelling unit in conformance with Section 915.2.1 could be nonconforming with the state's CO alarm statute.

A further revision is made to the exception in Section 915.2.2. This section requires carbon monoxide detection within sleeping units. However, the exception allows CO detection to instead be located outside of a sleeping unit, in the immediate vicinity of the sleeping unit, provided the sleeping unit or its attached bathroom does not contain a CO source and is not served by a CO-producing forced-air furnace. The phrase 'in the immediate vicinity' of bedrooms is replaced with 'within 10 feet' of bedrooms to reflect the same change made to Section 915.2.1. Thus, an ambiguous location requirement is replaced with one that's more specific.

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

It's reasonable to coordinate the CO detection requirements in the state fire and building codes with the state's CO alarm statute in order to eliminate application and enforcement errors.

3. Is there additional data or information that should be considered?

no

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.



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No change in costs.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
no
4. 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? 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?
Fire and building code officials, design professionals, construction contractors, and property owners.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
none
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
no
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
no
5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
none
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
By not coordinating the state fire and building code provisions for carbon monoxide detection with the state's CO alarm statute, the potential for non-conformance and costly construction errors will be greatly increased.



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Minnesota Department of Public Safety State Fire Marshal Division

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
no
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.
n/a

***Please complete all sections. Incomplete forms may be returned for additional information.*



Updated July 2022



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Date: 7/28/2022 updated 7/15/2024

Revised 10/1/24

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 423.5.1 Storm Shelter Required Occupant Capacity

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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.
IBC 423.5.1 Required Occupant Capacity

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

423.5.1 Design occupant capacity. The required design occupant capacity of the storm shelter shall include all of the buildings on the site and shall be the total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.

Exceptions:

1. Where approved by the building official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than that determined by occupant load calculation, shall be permitted to be used in the determination of the required design occupant capacity for the storm shelter.
 2. Where a new building is being added on an existing Group E site, and where the new building is not of sufficient size to accommodate the required design occupant capacity of the *storm shelter* for all of the buildings on site, the ~~storm shelter shall accommodate not less than the required occupant capacity for the new building~~ addition shall be constructed as a storm shelter.
 3. Where approved by the *building official*, the required design occupant capacity of the shelter shall be permitted to be reduced by the design occupant capacity of any existing *storm shelters* on the site.
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?
The model code lacks clear scoping for new buildings on existing school sites. The intent of the code is to provide storm sheltering for all site occupants. This will never happen if new construction only has to accommodate the occupant load of the new work. There is confusion when the new building is not large enough to construct a storm shelter for the entire site.
2. Why is the proposed code change a reasonable solution?
The intent of the code is to provide storm sheltering for the entire site. The new building will not be required to be made larger merely to accommodate storm sheltering, but it shall maximize the storm sheltering within the new program spaces provided. The language is changed to use the term addition to make it predominantly clear that the entire new addition shall be constructed as a storm shelter to maximize sheltering for the site, but not require the new addition to be constructed any larger than planned.
3. What other considerations should the TAG consider?
None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

The proposed change will not increase construction costs. DLI/CCLD has first jurisdiction over schools and has interpreted that new construction which cannot provide storm sheltering for the entire site must be constructed completely as storm shelter to its greatest capacity within the program requirements for primary use.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, public and private schools in the southern half of the state.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
Continued confusion and frustration over storm shelter capacity requirements resulting in compromised budgets for public school projects.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

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



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Date: 7/29/2022

Revised 10/1/24

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 714.4 Fire-resistance-rated walls

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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.
MBC 714.4 Fire-resistance-rated walls

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

714.4 Fire-resistance-rated walls. Penetrations into or through walls required to be rated by Table 601, fire walls, fire barriers, smoke barrier walls, and fire partitions shall comply with Sections 714.4.1 through 714.4.3. Penetrations in smoke barrier walls shall also comply with Section 714.5.4.

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?
Walls required to be rated by Table 601 are for the same purpose as fire barriers but are not specifically called out in this section as requiring protection.
2. Why is the proposed code change a reasonable solution?
Because the fire barrier function is similar, it is reasonable that the protection requirements for penetrations would also be similar.
3. What other considerations should the TAG consider?
Opening requirements are different, duct and air transfer openings are different.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
The proposed would cause no change to construction costs.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, building owners.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?

No

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

None.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

Exterior walls in close proximity to property lines where the wall is required to be fire-resistance rated will have breaches at penetrations that can compromise the integrity of the wall.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

No

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

***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)

Author/requestor: Greg Metz

Date: 7/26/2022

Revised: 8/14/2024

Revised 10/1/24

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 310.2 Residential Group R-1

Code or rule section to be changed: MR 1305

Intended for Technical Advisory Group ("TAG"): IBC and IBC/IFC Coordination

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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).
IBC Section 310.1 Residential Group R-1

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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

310.2 Residential Group R-1. R-1 Residential occupancies containing dwelling units or sleeping units where occupants are primarily transient in nature and capable of self-preservation, including: Examples include:

Boarding houses (transient) with more than 10 occupants.
Congregate living facilities (transient) with more than 10 occupants
Hotels (transient)
Lodging houses with more than five *guestrooms*
Motels (transient)

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?

Rephrasing the language to “Examples include” is needed to emphasize that the list is not exhaustive but serves as examples of similar type.

Changes clarify that transient housing used for medical or custodial care cannot be classified as R-1 and must be classified as another occupancy group.

R-1 Occupancies are for facilities intended primarily for transient use and is the ONLY classification listed as such in charging language. Adding language regarding self-preservation capabilities of occupants for any transient living facility with sleeping accommodations clarifies that this is the correct classification for transient types of housing, while other facilities providing care would not be classified as R-1

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

People requiring custodial care or medical care also require a higher level of safety afforded by other more appropriate occupancy classifications.

The code change clarifies the requirement without materially changing the requirement.

3. What other considerations should the TAG consider?

None.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

There should be no cost change because the rewording clarifies the condition required for reclassification rather than introducing a material change.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.

N/A

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, schools, places of worship, daycare facilities.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
The proposed change is the lowest impact option with the potential to produce desired results.
5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals? None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
Hotels adjacent to major medical centers will continue to be used as de-facto extensions of the medical facility without the necessary safeguards to protect vulnerable care recipients.

Smaller transient use facilities will continue to be mis-classified as R-3 rather than R-1
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement. No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

***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)

Author/requestor: Greg Metz

Date: 8/11/2022, revised 07/24/2024,
revised 10/1/24

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 903.2.6 Group I

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- 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?

Proposed Language

1. The proposed code change is meant to:

change language contained the model code book? If so, list section(s).
IBC 903.2.6 Group I

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

IBC 903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
2. An automatic sprinkler system is not required where Group I-4 day care facilities that are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door, and the means of egress shall not include interior stairs and exterior stairs within 50 feet of the exterior exit door.
3. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the level of exit discharge, and all floors below the level of exit discharge other than areas classified as an open parking garage.

TAG originally did not support the limit to stairs in the entire means of egress to the public way, CCP was updated to clarify a safe distance away from a building when traveling with children prior to encountering stairs.

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?
Level of exit discharge is defined as a story where exits end and exit discharge begins. Requiring the day care to be located on the level of exit discharge does not guarantee that exit doors from care providing spaces discharge to grade where a walk-out basement condition exists. The intent of the section is that there is free and uninhibited egress from care providing spaces. If the means of egress is from the underground side of a walk-out basement condition, there may be stairs to negotiate with day care children, slowing egress.
2. Why is the proposed code change a reasonable solution?
It meets the intent of the code section by ensuring uninhibited means of egress from day care providing spaces. It will have no effect on most facilities.
3. What other considerations should the TAG consider?
 - MBC 308.5.1.3 Group E Child Day Care.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
No cost change.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.

No

4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, building owners.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
Day care could be provided in spaces below ground or significantly above ground where the building is not required to be sprinkled and the intended expedient means of egress is inhibited by stairs.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

***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)

Author/requestor: Greg Metz

Date: 8/15/2022

Incorporated CCP 98 from Forrest Williams

Revised 5/15/2024

Revised 6/6/2024

45.2 Revised 9/20/24 after TAG mtg

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

~~IBC 1010.1.9.7~~ 1010.2.13 Controlled Egress Doors

Code or rule section to be changed: MR 1305, MR 7511.1010, Subpart 1d, Section 1010.1.9.7 and MR 1305.1010, Section 1010.1.9.7

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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).
MR 7511.1010, Subpart 1d, Section 1010.1.9.7 and MR 1305.1010, Section 1010.1.9.7

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.
~~IBC 1010.1.9.7~~ **1010.2.13** Controlled Egress doors in Groups I-1, I-2, R-3, and R-4

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

Black text – current MN amendment
Blue text – new IBC language, accepted by TAG
Red text – proposed changes
Purple text – proposed changed from CCP98 incorporation, supported by TAG
Green text – notes

~~1010.1.9.7~~ **1010.2.13** **Controlled egress doors in Groups E, I-1, I-2, R-3, and R-4 occupancies.** Controlled egress door locking systems, including electromechanical locking systems and electromagnetic locking systems, shall be permitted in Group E Setting 4 Special Education Facilities, and Group I-1 Condition 2, I-2, R-3, and R-4 Condition 2 occupancies when a person's clinical needs require their containment. Controlled egress doors shall be permitted in these occupancies when the building is equipped throughout with an approved *automatic sprinkler system* in accordance with Section 903.3.1.1 and an *approved smoke detection system installed in corridors and areas open to corridors*. In Groups R-3 and R-4, smoke detection shall also be installed in common areas other than sleeping units and kitchens installed in accordance with Section 907. Electric locking systems and controlled egress doors shall comply with the requirements in Items 1 through 11 below. The use of Section 1010.2.13 may be revoked by the fire code official or building official for due cause.

1010.2.13 **Controlled egress doors in Groups E I-1 and I-2, R-3 and R-4 occupancies.** Controlled egress electrical locking systems, where egress is controlled by authorized personnel shall be permitted on doors in the means of egress in Group E Setting 4 Special Education Facilities as designated by the Minnesota Department of Education, and Group I-1 I-2, R-3 and R-4 Condition 2 occupancies where the clinical needs of *persons* receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the *building* is equipped throughout with an *automatic sprinkler system* in accordance with **Section 903.3.1.1** or an *approved automatic smoke detection system installed in corridors and areas open to corridors*. In Groups R-3 and R-4, smoke detection shall also be installed in common areas other than sleeping units and kitchens installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following: The use of Section 1010.2.13 may be revoked by the fire code official or building official for due cause.

TAG agreed to revert back to IBC language while incorporating the addition of R-3 and R-4 occupancy classifications. IBC has picked up the term controlled egress and removed heat detection from previous language, now matching the MN amendments intent.

- ~~1. The egress control locks shall unlock upon actuation of either the *automatic sprinkler system* or the *automatic smoke detection system* within the means of egress served by the locked area.~~
 1. The door's electric locks shall unlock on actuation of the *automatic sprinkler system* or *automatic smoke detection system* allowing immediate free egress.
TAG repealed item 1 to revert back to IBC language.
- ~~2. The egress control locks shall unlock upon loss of power controlling the lock or lock mechanism.~~

2. The door's electric locks shall unlock on loss of power to the electrical locking system or to the electric lock mechanism allowing immediate free egress.
TAG repealed item 2 to revert back to IBC language.
- ~~3. The egress control locking system shall have the capability of being unlocked by a signal or switch from the fire command center, a nursing station or other approved location. The signal or switch shall directly break power to the lock.~~
3. The electrical locking system shall be installed to have the capability of unlocking the electric locks by a switch located at the *fire command center*, a nursing station or other *approved* location. The switch shall directly break power to the electric lock.
TAG repealed item 3 to revert back to IBC language.
4. A *building* occupant shall not be required to pass through more than one door equipped with a controlled egress lock before entering an *exit*.
5. The procedures for the operations of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Minnesota Rules, Chapter 7511, the *Minnesota State Fire Code*.
- ~~5. The procedures for unlocking the doors shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the *International Fire Code*.~~
TAG agreed to retain amendment.
6. All ~~clinical~~ staff shall have the keys, codes, or other means necessary to operate the controlled egress locking devices or systems.
6. All clinical staff shall have the keys, codes or other means necessary to operate the controlled egress electrical locking systems.
Slight difference between 'egress locking devices or systems' vs. 'egress electrical locking systems.'
7. Emergency lighting shall be provided at both sides of a door equipped with a controlled egress locking device.
- ~~7. Emergency lighting shall be provided at the door.~~
TAG agreed to retain amendment.
8. ~~Twenty-four-hour resident or patient supervision is provided within the secured area. On-site supervision within the secured area is provided whenever the secured area is occupied by a care recipient, person where their clinical needs require containment.~~
MN specific item. TAG agreed to change term a person with clinical needs from care recipient.
- ~~9. The controlled egress locking devices are designed to fail in the open position.~~
MN specific item. TAG agreed to repeal amendment.
10. Floor levels within the building or portion of the building with controlled egress locking devices shall be divided into at least two compartments by smoke barriers meeting the requirements of Section 709.
MN specific item. TAG agreed to retain amendment and associated exception 3.
11. The electromechanical or electromagnetic locking device shall be *listed* in accordance with either UL 294 or UL 1034.
TAG agreed to accept IBC language.
12. In Group E Occupancies, application is limited to setting 4 special education facilities for exterior doors and associated vestibule doors at the main entrance only.

Exceptions:

1. Items 1 through 4 shall not apply to doors in Group I-2 and Group R-4 occupancies where ~~to~~ areas are occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.
 2. Items 1 through 4 shall not apply to doors to areas where a listed egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 hospital.
 3. Item 10 shall not apply to exiting Group R-3 or R-4 Condition 1 occupancies where all of the following conditions apply:
 - (i) The construction of smoke barrier compartmentation is not practical;
 - (ii) Existing sleeping rooms are provided with smoke-tight construction;
 - (iii) Existing sleeping rooms have an emergency escape and rescue opening complying with Section ~~1030~~ 1031.
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?

To allow use of these provisions in Setting 4 special education schools where Minnesota's climate puts these students who are prone to elope, at risk of hypothermia or heat related illnesses if they should happen to compulsively leave the facility unprepared for extreme temperatures.

To limit the application to occupancy groups that allow care for persons incapable of self-preservation who, because of psychiatric conditions may compulsively elope; and not inhibit the free movement of care recipients who understand the risk of elopement. Group 1-1 care recipients are either fully capable of self-preservation or require limited assistance, those individuals are understanding of the risk of elopement additional locking is not required nor permitted in accordance with MN licensing, therefor it is reasonable to remove Group I-1 from the occupancy classifications.

To include a clause which authorizes a building official or fire official to demand the locking provisions to be changed when facilities are mis-using the provisions.

The current language requires a smoke detection system installed in accordance with Section 907. However, this reference isn't clear as Section 907 it too general in nature, covering the fire alarm system requirements for numerous occupancy classifications. The current language also doesn't state in what areas smoke detection is specifically required. The ambiguous nature of the language can cause confusion, resulting in inconsistent design, enforcement, and application of these provisions.

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

The proposed changes clarify the application to locations where persons must be inhibited from elopement for their own safety because they are incapable of making those safe decisions for themselves.

It's reasonable to provide clarification to current rule language in order to better demonstrate the intent and application.

3. What other considerations should the TAG consider?

None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
This proposal should on average be cost neutral, though it may even reduce costs in jurisdictions where this provision was interpreted to require smoke detection in all areas (i.e., full coverage).
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, building owners.

Building code officials, fire code officials, design professionals, fire alarm contractors, property owners and operators.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.
5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
Continued confusion over application of these provisions, and application of these locking provisions in occupancies where people are fully capable of self-preservation.

Because the current language doesn't state in what areas smoke detection is required, the absence of a rule change will continue to enable inconsistent application among various jurisdictions throughout the state. This rule change intends to provide clarity regarding exactly where smoke detection is required, resulting in uniform application and enforcement.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

No

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

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

Minnesota Department of Public Safety State Fire Marshal Division

24CCP_96.2

Fire Code Change Proposal Form

(Submit via email to: fire.code@state.mn.us)

***Please complete all sections. Incomplete forms may be returned for additional information.*

Author/requestor: [Forrest Williams, Supervisor \(SFM\)](#)

Date: [5-14-2024](#) REVISED [9-25-2024](#)

Email address: forrest.williams@state.mn.us

Telephone number: [651-769-7784](#)

Organization/Association/Agency, if any: [DPS – State Fire Marshal](#)

Code or rule section to be changed (include code or rule title and edition year): [MR 7511.1010, Subpart 2, Section 1010.1.9.8.1](#) and [MR 1305.1010, Section 1010.1.9.8.1](#)

Is the subject matter of the proposed change also regulated by the Minnesota Building Code?

YES: NO: UNKNOWN:

***If yes, a [building code change proposal](#) must also be completed and submitted to the Minnesota Department of Labor and Industry – Construction Codes and Licensing Division.*

General Information

Yes No

- 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?

Proposed Language

1. The proposed code change is meant to:

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



Minnesota Department of Public Safety State Fire Marshal Division

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

MR 7511.1010, Subpart 2, Section 1010.1.9.8.1 and MR 1305.1010, Section 1010.1.9.8.1

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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

Black text – current MN amendment

Blue text – new IBC language, accepted by TAG

Red text – proposed changes

~~1010.1.9.8.1~~ **1010.2.12.1 Delayed egress locking system.** The delayed egress electrical locking system shall be installed and operated in accordance with all of the following:

1. The delay of the delayed egress electrical locking system shall deactivate upon actuation of the *automatic sprinkler system* or *automatic fire detection system*, allowing immediate free egress.
2. The delay of the delayed egress electrical locking system shall deactivate upon loss of power to the electrical locking system or electrical lock, allowing immediate free egress.
3. The delay of the delayed egress locking electrical system shall have the capability of being deactivated at the *fire command center* and other *approved* locations.



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- ~~4. An attempt to egress shall initiate an irreversible process that shall allow egress in not more than 15 seconds when a physical effort to exit of not more than 15 pounds (67 N) is applied to the egress side door hardware for not more than one second. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics have been deactivated an approved location, relocking the delay electronics shall be by manual means only.~~

Exception to Item 4: Where approved, a delay of not more than 30 seconds is permitted on a delayed egress door.

4. An attempt to egress shall initiate an irreversible process that shall allow such egress in not more than 15 seconds when a physical effort to exit is applied to the egress side of the door hardware for not more than 3 seconds. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay has been deactivated, rearming the delay electronics shall be by manual means only.

Exception: Where approved, a delay of not more than 30 seconds is permitted on a delayed egress door.

5. The egress path from any point shall not pass through more than one delayed egress locking system.

Exceptions to Item 5:

1. In Group I-1, Condition 2, Group I-2 or I-3 occupancies, the egress path from any point in the building shall pass through not more than two delayed egress locking systems provided that the combined delay does not exceed 30 seconds.

2. In Group I-1, Condition 1 or Group I-4 occupancies, the egress path from any point in the building shall pass through not more than two delayed egress locking systems provided the combined delay does not

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exceed 30 seconds and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

6. A sign shall be provided on the door and shall be located above and within 12 inches (305 mm) of the door exit hardware.

Exception to Item 6: Where approved, in Group I occupancies, the installation of a sign is not required where care recipients who because of clinical needs require restraint or containment as part of the function of the treatment area. **This exception is moved to below item 6.3 in MBC.**

6.1. For doors that swing in the direction of egress, the sign shall read "PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS."

6.2. For doors that swing in the opposite direction of egress, the sign shall read, "PULL UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30]



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SECONDS."

6.3. The sign shall comply with the visual character requirements in ICC A117.1.

7. Emergency lighting shall be provided on the egress side of the door.

8. The delayed egress locking system units electromechanical or electromagnetic locking device shall be listed in accordance with either UL 294 or UL 1034.

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.
MR 1305.1010, Section 1010.1.9.8.1

Need and Reason

1. Why is the proposed code change needed?

This proposal revises a current state amendment by incorporating updated language from the 2024 IBC/IFC. Amended item 4 is replaced with item 4 from the model code (2024 IBC/IFC). The new language clarifies that once the delayed egress door is released following the 15-second delay, the system can only be rearmed/relocked through manual intervention.

~~This change clarifies that once the door is released/unlocked following a request to exit signal, the delayed egress system cannot automatically reset and relock the door. Instead, the door must remain unlocked until reset manually.~~ The change is necessary because, without the clarification, the reader could misinterpret the existing provision for manual relocking as only applying to when the door has been released from an approved location separate from the door. The consequence of this interpretation would be to allow a delayed egress door to automatically relock after an occupant has initiated the request to exit process and passed through the doorway. This would require the next person or group of occupants, and any subsequent persons after that, to also experience an egress delay, which can pose a fire- and life-safety hazard during emergency situations by significantly increasing evacuation times and causing occupants to bottleneck at an egress doorway. This is not the intent of this section, as explained in the IFC code commentary.

From the IFC commentary, Section 1010.1.9.8.4, item 4:

At the end of the delay, the door's locking system is required to allow the door to be opened by the occupant operating the egress door hardware (i.e., pushing on the panic bar), allowing egress. The unlocking cycle is irreversible; once it is started, it does not stop. Once the door is openable from the egress side at the end of the delay, it remains openable, allowing immediate egress until someone comes to the door and manually rearms the delay. The first user to the door may face a delay, but after that, other users would be able to exit immediately.

In addition, the new language in item 4 requires the system to begin the irreversible unlocking process when pressure is applied to the door for 3 seconds. This is an increase



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from the 1-second threshold required by earlier editions of the model code. This change brings the state building and fire codes in conformance with the 2024 IBC/IFC. Further, item 8 is replaced with updated item 8 language from the model code to include the UL 1034 listing option.

2. Why is the proposed code change a reasonable solution?
These changes are reasonable because revising the current state amendment with updated language from the 2024 IBC/IFC provides better clarification as to the intent and application of this section. Further, updating the door release initiation process from 1-second to 3-seconds brings the MBC and MSFC into alignment with the national model codes. Finally, updating item 8 allows for an additional listing option for delayed egress systems, consistent with the model code.
3. Is there additional data or information that should be considered?
No

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
The change to item 4 is cost neutral – clarification only.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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?
Building and fire code officials, design professionals, construction industry, and property owners and operators.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None



Minnesota Department of Public Safety State Fire Marshal Division

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
No
5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
The consequence of not adopting this change would be the potential for the misinterpretation and misapplication of the provisions in item 4, which could allow for the improper installation of a delayed egress door that automatically relocks after an occupant has initiated the request to exit process and passed through the doorway. This would require the next person or group of occupants, and any subsequent persons after that, to also experience an egress delay, which can pose a fire- and life-safety hazard during emergency situations by significantly increasing evacuation times and causing occupants to bottleneck at an egress doorway. This is not the intent of this section, as explained in the IFC code commentary (see Need and Reason section above). Further, by not adopting these changes, the state building code and fire code will remain in conflict with the national model code provisions for delayed egress.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.
N/A

***Please complete all sections. Incomplete forms may be returned for additional information.*



Updated July 2022



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Date: ~~7/29/2022~~ Revised 08/26/2024

Revised 10/1/24

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 706.2 Fire Walls- Structural Stability

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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.
MBC 706.2 Structural Stability

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

706.2 Structural stability. *Fire walls* shall be designed and constructed to allow collapse of the structure on either side without reduction of the fire-resistance rating in Table 706.4 ~~collapse of the wall~~ under fire conditions.

Exception:

1. In Seismic Design Categories D through F, where double *fire walls* are used in accordance with NFPA 221, floor and roof sheathing not exceeding 3/4 inch (19mm) thickness shall be permitted to be continuous through the wall assemblies of light frame construction.
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?

There are options within the code to allow for either an independent fire wall or construction of a double fire wall. Each contributing wall member of the double fire wall is required to completely satisfy the fire-resistance rating requirement for the fire wall. The structural stability requirement applies to both conditions, so that when a fire event occurs the protection of the fire wall remains. This change reiterates that the fire resistance rating required by 706.4 can not be reduced under fire conditions. For example, in a double fire wall condition, one side of the double fire wall may collapse, but the remaining wall would still be required to meet the fire resistance rating for the fire wall. The collapse of the building on either side of an independent fire wall or double fire wall should not be reduced below the fire resistance rating from Table 706.4. protecting the integrity of the fire wall.

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

With the allowable use of NFPA 221 and double fire walls, this ensures regardless of the design of the fire wall, the required fire resistance rating will remain in place during the fire event. This will bring consistency in application for the fire resistance rating and structural stability requirements.

3. What other considerations should the TAG consider?

Associated proposals to 706.1.2 and 706.4.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
The proposal simply reiterates the fire resistance rating requirements and will not increase cost.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, building owners.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
non-uniform application of a code requirements
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

***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)

Author/requestor: Greg Metz

Date: ~~7/29/2022~~ Revised 08/26/2024

Revised 10/1/24

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 706.8 Fire Walls- Openings

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

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.
MBC 706.8 Fire Walls- Openings

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

706.8 Openings. Each opening through a fire wall shall be protected in accordance with Section 716 and shall not exceed 156 square feet (15 m²). The aggregate width of openings at any floor level shall not exceed 25 percent of the length of the wall.

Exceptions:

1. Openings are not permitted in party walls constructed in accordance with Section 706.1.1.
 2. Openings shall not be limited to 156 square feet (15 m²) where both buildings are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
 3. Openings in a double fire wall condition may be protected in one contributing wall where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1
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?

Double fire walls are constructed in close proximity to one another and are not conducive to means of egress when doors are required to be installed in each contributing membrane.

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

Each contributing wall member of the double fire wall is required to completely satisfy the fire-resistance rating requirement for the fire wall. Even if the contributing membrane with the opening protection should fail, the remaining wall component provides a high level of protection because the number and size of openings allowed in firewalls is also regulated. By including sprinkler provisions, this exception can only be used in fully sprinklered buildings.

3. What other considerations should the TAG consider?

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
The proposed codifies current policy widely disseminated across the state and therefore will not increase construction costs.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No

4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, building owners.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
Continued occasional mis-interpretation of opening protection requirements in double fire walls and additional expense of detailing and installing protection systems in very close proximity. Means of egress potential code violations when egressing through a double fire wall.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

***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)

Author/requestor: Greg Metz

Date: ~~7/29/2022~~ Revised 08/26/2024

Email address: greg.metz@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 706.11 Fire Walls- Ducts & Air Transfer Openings

Code or rule section to be changed: MR 1305

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 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 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).

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.
MBC 706.11 Fire Walls- Ducts and Air Transfer Openings

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

706.11 Ducts and air transfer openings. Ducts and air transfer openings shall not penetrate fire walls.

Exception: Penetrations by ducts and air transfer openings of fire walls that are not on a lot line shall be allowed provided that the penetrations comply with Section 717. The size and aggregate width of all openings shall be included with and shall not exceed the limitations of 706.8. Penetrations through one of the walls of a double fire wall condition shall not be required to be protected per Section 717.

Recommend withdraw. Each wall to be protected with fire dampers, as these are concealed building elements. (follows 221)

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?

Double fire walls are constructed in close proximity to one another and are not conducive to installation of back-to-back fire dampers or fire/smoke dampers which the model code requires in each contributing wall member of a double fire wall.

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

Each contributing member of the double fire wall is required to completely satisfy the fire-resistance rating requirement. Even if the contributing membrane with the duct and air transfer opening protection should fail, the remaining wall component provides a high level of protection because the number and size of openings allowed in firewalls is also regulated. The language as written ensures that at least one wall must be completely protected, rather than some protection in one wall and some protection in the other.

3. What other considerations should the TAG consider?

Similar conditions for duct and air transfer openings in Section 706.8.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
The proposed codifies current policy widely disseminated across the state and therefore will not increase construction costs.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No

4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, building owners.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
Continued occasional mis-interpretation of opening protection requirements in double fire walls and additional expense of detailing and installing additional protection systems like fire dampers and fire/smoke dampers in very close proximity.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

***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)

Author/requestor: Ryan Rehn, Britt McAdamis

Date: 10/1/2024

Email address: ryan.rehn@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5810

Code or Rule Section: 706.1.2, 706.4

Firm/Association affiliation, if any: DLI/CCLD

IBC 706.1.2 Fire Walls

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota? Yes No
- B. Is the proposed change required due to climatic conditions of Minnesota? Yes No
- C. Will the proposed change encourage more uniform enforcement? Yes No
- D. Will the proposed change remedy a problem? Yes No
- E. Does the proposal delete a current Minnesota Rule, chapter amendment? Yes No
- F. Would this proposed change be appropriate through the ICC code development process? Yes No

Proposed Language

1. The proposed code change is meant to:

change language contained the model code book? If so, list section(s).
IBC 706.1.2, 706.4

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 ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

706.1.2 Deemed to comply. *Fire walls* designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section, subject to the limitations of ~~Section 102.4~~ Minnesota Rule Part 1300.0030. The required fire-resistance rating shall be determined by Section 706.4.

706.4 Fire-resistance rating. *Fire walls* and each wall of a double fire wall shall have a *fire-resistance rating* of not less than that required by Table 706.4.

TABLE 706.4 FIRE WALL AND EACH WALL OF A DOUBLE FIRE WALL FIRE-RESISTANCE RATING

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?

Constructing a double fire wall is a much less expensive option than a single structurally independent fire wall, and the option of a double fire wall is often the preferred choice by the designer, especially when utilizing an existing exterior wall when creating an addition. Adding the language for the required fire resistance rating to apply the same to both independent fire walls and each wall of a double fire wall condition ensures the required fire resistance rating for the fire wall will be achieved and enforced consistently.

The proposal also directs compliance to Minnesota Rule 1300.0030.

From public comment on FS29-21 regarding the new IBC Section 706.1.2: There are provisions in NFPA 221 that are less stringent than IBC or where NFPA 221 does not address a requirement in IBC. This public comment points the user back to IBC Section 102.4 to set the IBC provisions as the minimum requirements for fire wall construction. ...NFPA 221 does not include a requirement for a specific fire resistance. It depends on the building code to set the fire resistance requirement. FS29-21 makes NFPA 221 deemed to comply with Section 706 which includes the fire resistance. The code change committee approved this change as modified. With the additional modification of Section 706.4 referenced directly to establish the necessary fire resistance.

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

This change ensures that the same fire resistance protection will be provided when utilizing a double fire wall as would be an independent fire wall. In a fire condition of a double fire wall, collapse of one side of the building may take one side of the double fire wall down. This ensures that the required fire resistance would still be in place in the second standing fire wall, leaving the required rating in place in a fire condition.

3. What other considerations should the TAG consider?

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
The proposed adds clarification to provide for double fire walls, which are significantly less expensive to building than independent fire walls.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. 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? 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, Engineers, Construction Contractors, Building Officials and Inspectors, Fire Officials, building owners.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
non-uniform application of a double fire wall application.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

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