

# Minnesota Department of Public Safety State Fire Marshal Division

24CCP\_125.1

## Fire Code Change Proposal Form

(Submit via email to: [fire.code@state.mn.us](mailto: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](#) Revised: [11/18/2024](#)

Email address: [forrest.williams@state.mn.us](mailto:forrest.williams@state.mn.us)

Telephone number: [651-769-7784](tel: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.*

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### 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).

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



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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. Areas of retail spaces used for large firearm dealers, as defined in MN Rule 7504.0100, shall be separated from other areas and secured in accordance with MN Rule 7504.0300. Means of egress doors from such 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 governmental 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: 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: 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?                            | <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 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.  
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.

#### Original Proposal

**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~~ new building 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.

#### Revised Proposal – based on TAG discussion

**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:

4. 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.
5. 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.
6. 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?
- 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).
- 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?                            | <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 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).  
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.

#### Original Proposal

**310.2 Residential Group R-1.** R-1 Residential occupancies containing dwelling units or sleeping units where occupants are primarily transient in nature. ~~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)

Any transient living facility with sleeping accommodations that does not provide medical care or custodial care

#### Revised Proposal – based on TAG discussion

**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.

Original Proposal

**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 stairs.
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.

Revised Proposal – based on TAG discussion

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

**Exceptions:**

4. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
5. 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.
6. 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.

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

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### 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 ~~4030~~ 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, therefore 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 be 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 3006.2 Hoistway Opening Protection Required

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 3006.2 Hoistway Opening Protection Required

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.

**2024 IBC 3006.2 Elevator hoistway door protection required.** Elevator hoistway doors shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three stories, and is required to be enclosed within a *shaft enclosure* in accordance with Section 712.1.1 and any of the following conditions apply:

- ~~1. The building is not protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.~~
  - ~~2. The building contains a Group I-1, Condition 2 occupancy.~~
  - ~~3. The building contains a Group I-2 occupancy.~~
  - ~~4. The building contains a Group I-3 occupancy.~~
  - ~~5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 mm) in height. The height of the hoistway shall be measured from the lowest floor to the highest floor of the floors served by the hoistway.~~
  - ~~6. The elevator hoistway door is located in the wall of a corridor required to be fire resistance rated in accordance with Section 1020.1~~
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.  
Should be considered with changes to Section 3006.3 Hoistway opening protection.

### **Need and Reason**

1. Why is the proposed code change needed?  
Elevator lobbies are intended to protect floors from smoke migrating through the elevator shaft since elevator doors that limit the passage of smoke are not widely available.  
  
Elevator lobbies are an opportunity to mitigate stack effect building pressurization and air migration through buildings via elevator shafts. Doors and roll down smoke curtains do not mitigate air movement in non-emergency conditions because they are always open. The condition allows free migration of air through the shaft under normal conditions contributing to stack effect building pressurization, air infiltration, energy loss, and lower indoor air quality
2. Why is the proposed code change a reasonable solution?  
The proposed change provides for a low technology, highly effective means to provide significant energy savings benefit, improve indoor air quality, and enhance passive fire safety.
3. What other considerations should the TAG consider?
  - Building compartmentalization in Minnesota Rules Chapter 1323 to mitigate stack-effect air flow in buildings four stories and taller in height.
  - Consider allowing electrically operated automatic sliding doors for elevator lobbies when not part of the means of egress path.

### **Cost/Benefit Analysis**

1. Will the proposed code change increase or decrease costs? Please explain.  
Minor cost change for sprinkled buildings four stories and taller in height. Cost increase will include the cost of a fire resistance rated pair of doors with closers for each story. Cost of a fire resistance rated door pair is approximately \$1,800.



2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.  
The increase in cost will be offset by additional passive fire safety, improved indoor air quality due to a reduction in uncontrolled air infiltration due to stack effect, and improved energy efficiency due to mitigation of stack effect building pressurization.
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 air infiltration and exfiltration due to stack-effect, energy loss, increased energy costs, perpetuated poor air quality.
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

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 3006.3 Hoistway Opening Protection

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 3006.3 Hoistway Opening Protection

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.

**2024 IBC 3006.3 Elevator hoistway door protection.** Where Section 3006.2 requires protection of the elevator hoistway doors, the protection shall be provided by one of the following:

1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway doors from each floor with ~~fire partitions in accordance with Section 708~~ smoke barriers in accordance with Section 709. In addition, doors protecting openings in the ~~fire partitions~~ smoke barriers shall comply with Section 716.2.2.1 as required for smoke barrier walls. Penetrations of the ~~fire partitions~~ smoke barriers by ducts and air transfer openings shall be protected as required for corridors in accordance with ~~Section 717.5.4.1~~ Section 717.5.5.
2. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway doors from each floor by smoke partitions in accordance with Section 710. In addition, doors protecting openings in the smoke partitions shall comply with /Sections 710.5.2.2, 710.5.2.3 and 716.2.6.1. Penetrations of the smoke partitions by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.
- ~~3. Additional doors or other devices shall be provided at each elevator hoistway door in accordance with Section 3002.6. Such doors or other devices shall comply with the smoke and draft control door assembly requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial seal at the bottom.~~
- ~~4. The elevator hoistway shall be pressurized in accordance with Section 909.21.~~
- ~~5. A smoke protective curtain assembly for hoistways shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such curtain assemblies shall comply with the smoke and draft control requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal. Such curtain assemblies shall be equipped with a control unit listed to UL 864. Such curtain assemblies shall comply with Section 2.11.6.3 of ASME A17.1/CSA B44. Installation and maintenance shall be in accordance with NFPA 105.~~

*Note: 2024 IBC removed automatic sprinkler protection as a condition of item 2 utilizing smoke partitions walls.*

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?

Elevator lobbies are intended to protect floors from smoke migrating through the elevator shaft since elevator doors that limit the passage of smoke are not widely available. Fire partitions do not have criteria for limiting the passage of smoke.

Elevator lobbies are an opportunity to mitigate stack effect building pressurization and air migration through buildings via elevator shafts. Doors and roll down smoke curtains do not mitigate air movement in non-emergency conditions. The condition allows free migration of air through the shaft under normal conditions contributing to stack effect building pressurization, air infiltration, energy loss, and lower indoor air quality

Elevator pressurization protects the shafts from smoke intrusion during emergency conditions but allows free migration of air through the shaft under normal conditions contributing to stack effect building pressurization, air infiltration, energy loss, and lower indoor air quality.

2. Why is the proposed code change a reasonable solution?  
It provides for a low technology, highly effective means to provide for fire safety, save energy and improve indoor air quality.
3. What other considerations should the TAG consider?
  - Building compartmentalization in Minnesota Rules Chapter 1323 to mitigate stack-effect air flow in buildings four stories and taller in height.
  - Consider allowing electrically operated automatic sliding doors for elevator lobbies when not part of the means of egress path.

### **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?

Continued air infiltration and exfiltration due to stack-effect, energy loss, increased energy costs, perpetuated poor air quality.

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: 8/18/2022

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 1011.2 Stairway Width and 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 1011.2 Stairway width and 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.

#### 2024 IBC

**1011.2 Width and capacity.** The required capacity of stairways shall be determined as specified in Section 1005.1, but the minimum width shall not be less than 44 inches (1118 mm). The minimum width for stairways that serve as part of the *accessible mean of egress* shall comply with Section 1009.3. Encroachments by handrails and other items equal to the handrail encroachment on each side and located below the handrails are permissible.

#### Exceptions:

1. Stairways serving an *occupant load* of less than 50 shall have a width not less than 36 inches (914 mm).
  2. *Spiral stairways* as provided for in Section 1011.10.
  3. Where an incline platform lift or *stairway* chairlift is installed on *stairways* serving occupancies in Group R-3, or within *dwelling units* in occupancies in Group R-2, a clear passage width of not less than 20 inches (508 mm) shall be provided. Where the seat and platform can be folded when not in use, the distance shall be measured from the folded position.
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 is confusion regarding application of the minimum clear width, especially at 36 inch wide stairways where handrail encroachment allows a passable narrowing to 27 inches. The confusion is in regards to encroachments other than handrails located below the handrail level.
2. Why is the proposed code change a reasonable solution?  
ICC has provided guidance that the walkline of a stairway is narrower than the shoulder-width requirements for a stair, and that encroachments below the handrail elevation may extend as far into the stairway as the handrail itself without interfering with stairway passage.
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. This is a clarification of encroachment allowances which has the potential but not the guarantee to save money on projects.
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 confusion regarding encroachment allowances below the handrail, if any.  
Potential increased construction cost for code minimum stairways designed with steel stringers which must project into the stairway typically 1 ½ inches on each side which would be acceptable under the proposed change, and could be interpreted as acceptable or not acceptable otherwise.
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: 8/30/2022

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 1502.3 Scuppers

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).  
1502.3 Scuppers

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.

*2020 MSBC and 2024 IBC deleted this section.*

**1502.3 Scuppers.** Deleted. The quantity, size, location and inlet elevation of the scuppers shall be sized to prevent the depth of ponding water from exceeding the structural design capacity of the roof as determined by Section 1611.1. Scuppers shall be sized in accordance with Table 1502.2.3. Scuppers shall not have an opening weir width of less than 4 inches (102 mm). The flow through the primary roof drainage system, including flow through primary drainage scuppers, shall not be considered when locating and sizing secondary (emergency) scuppers. Scuppers shall not discharge onto public sidewalks or sidewalks used as a part of the means of egress.

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 building code previously correctly included scuppers within the scoping, Minnesota has also previously deleted it out. Minnesota needs to include scuppers as part of the building code design criteria so that they get sized correctly.
2. Why is the proposed code change a reasonable solution?  
Secondary drainage systems are required to equal the capacity of primary drainage systems. Minnesota includes a sizing table for emergency overflow scuppers that matches the drainage requirements in the plumbing code. It is reasonable to refer to the same table in order to properly size scuppers that are used as the primary drainage system.
3. What other considerations should the TAG consider?  
Minnesota plumbing code coordination.

### **Cost/Benefit Analysis**

1. Will the proposed code change increase or decrease costs? Please explain.  
No. The requirements are already in place but the code section needs clarification to establish the parameters scupper sizing for both primary drainage scuppers as well as emergency overflow scuppers.
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 confusion over how to properly size scuppers used as the primary system for roof drainage. Continued confusion if a secondary drainage system is required if scuppers are used as the primary drainage system.

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: 7/26/2022

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 713.13 Waste and Linen Chutes

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).

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 713.13 Waste and linen chutes and incinerator rooms, Exception

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.

**713.13 Waste and linen chutes and incinerator rooms.** Waste and linen chutes shall comply with the provisions of NFPA 82, Chapter 6 and shall meet the requirements of Sections 712 and 713.13.1 through 713.13.6. Incinerator rooms shall meet the provisions of Sections 713.13.4 through 713.13.5.

Exceptions:

1. Chutes serving and contained within a single dwelling unit.
2. Linen chutes and trash chutes shall not be required to be open to the atmosphere as required by NFPA 82, section 5.2.2.4.3. Chutes shall be provided with vents having a free area not less than 3 1/2 % the size of the chute cross section with an absolute minimum size of 0.5 square feet of free area. Vents shall be provided with gravity dampers to allow air to enter the shaft from the building exterior. Chutes shall not be used for room exhaust.

Tabled for more information on NFPA 82. Forrest mentioned he would look into NFPA 82 more.

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?
  - a. The 2012 Minnesota Mechanical Code had a similar exception eliminating the requirement for waste and linen chutes to be open to the atmosphere per NFPA 82. The exception was eliminated in the 2018 code cycle because it occurred in a section specific to ductwork. Chutes are not ductwork and the exception was mis-placed. The work at that time was not coordinated with the building code update and the exception was lost.
  - b. Minnesota's very cold climate causes significant problems with open atmosphere chutes. Fire sprinkler systems can freeze, cold air is introduced into the depths of the building in interior locations not designed to handle the condensation that will occur, resulting in moisture damage and microbial growth.
  - c. The previous amendment did not include any specific venting requirements. Venting is still required to ensure that the chutes do not become readily clogged. Items falling through the shaft cause negative air pressure above the falling items. If there is not ventilation relief, the falling items will slow in the shaft and can stop and cause blockages. Venting requirements introduced are based upon the same ventilation requirements for dumbwaiters which cause the same type of air pressure differential. Gravity dampers are required to ensure that when ventilation air is not needed, that chute is not open to the exterior air and potentially freezing sprinklers, etc.
2. Why is the proposed code change a reasonable solution?

It allows for chute functioning while keeping chutes within the climate-controlled environment of the building so that they do not freeze or cause condensation damage in cold weather conditions.
3. What other considerations should the TAG consider?

If there is an actual need for an open vent at the top of these chutes in the event of a fire. Open atmosphere chutes create a chimney effect and can contribute to the propagation of fire.

### **Cost/Benefit Analysis**

1. Will the proposed code change increase or decrease costs? Please explain.  
No cost change. The cost for the additional gravity damper is offset by costs to mitigate the affects of sub-zero air in the sprinkled shaft.
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 need for building officials to approve code modifications to allow chutes that are not open to the atmosphere for their full size resulting in plan approval delays and increased permit fees. Mandatory installation of open-atmosphere chutes throughout the state where there is no building official to approve a code modification.

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: 9/7/2022; revised 11/12/2024

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 3007.2.1 Fire Service Access Elevator  
Sprinkler system prohibited locations

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 3007.2.1 Prohibited Locations

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.

Original Proposal

**IBC 3007.2.1 Prohibited locations.** Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces, and elevator hoistways of fire service access elevators.

**Exception:** Health care occupancies that are: (1) required to have NFPA 13 systems; (2) licensed by the Minnesota Department of Health; and (3) participate in Title XVIII (Medicare) or Title XIX (Medicaid) of the Social Security Act.

Revised – based on TAG discussion

**IBC 3007.2.1 Prohibited locations.** Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces, and elevator hoistways of fire service access elevators.

**Exception:** Health care occupancies that are: 1) required to have NFPA 13 systems; (2) licensed by the Minnesota Department of Health; (3) participate in Title XVIII (Medicare) or Title XIX (Medicaid) of the Social Security Act; and (4) where sprinkler protection is required by licensing.

**MR 1305.903.3.1.1.1 Exempt locations.**

7. Sprinkler protection shall not be installed in elevator shafts, elevator pits, or elevator machine rooms.

**Exception to Item 7.** Health care occupancies that are: (1) required to have NFPA 13 systems; (2) licensed by the Minnesota Department of Health; ~~and~~(3) participate in Title XVIII (Medicare) or Title XIX (Medicaid) of the Social Security Act; and (4) where sprinkler protection is required by licensing.

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 coordinate with federal standards requirements for licensing of federally funded healthcare facilities so that they may maintain their healthcare licenses.
2. Why is the proposed code change a reasonable solution?  
It addresses the specific requirement of the healthcare licensing industry without including other building types where sprinkler discharge in the elevator equipment areas could be problematic.
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. The change is consistent with MBC 903.3.1.1.1 Exempt Locations, Item 7 exception.

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?  
Mis-coordinated code sections and continued confusion as to whether sprinklers can be installed in elevator machine rooms or not.
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: Britt McAdamis, Ryan Rehn - staff

Date: 10/29/2024

Email address: britt.mcadamis@state.mn.us

Model Code: IBC 2024

Telephone number: 651-284-5276

Code or Rule Section: MR 1305.3002.6, IBC 3006.3

Firm/Association affiliation, if any:

Topic of proposal: Smoke control doors at elevator hoistways

Code or rule section to be changed: MR 1305.3002.6, IBC 3006.3

Intended for Technical Advisory Group ("TAG"): Commercial Building Code 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).  
IBC 3006.3

change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).  
MR 1305.3002.6

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

**MR 1305.3002.6 Prohibited doors.** Doors, other than hoistway doors, the elevator car doors, and smoke control doors, when required, shall be prohibited at the point of access to an elevator car. Smoke control doors shall be:

1. Held open during normal operation by a “hold-open” device that is activated for closure by fire- or smoke sensing devices located in the elevator lobby or its immediate vicinity; and
2. Readily openable from inside the car without a key, tool, special knowledge, or effort when closed.

3. Such doors assemblies or other devices shall comply with Section 2.11.6.3 of ASME A17.1/CSA B44.

**IBC 3006.3 Elevator hoistway doors protection.**

3. Additional doors or other devices shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such doors or other devices shall comply with the smoke and draft control door assembly requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal. Such door assemblies shall comply with Section 2.11.6.3 of ASME A17.1/CSA B44.

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.  
None.

**Need and Reason**

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

Minnesota Elevator Code 1307 requires compliance with Section 2.11.6.3 of ASME A17.1/CSA B44 for smoke control doors located over elevator hoistway doors. There are multiple specific requirements for the operation and installation of the doors located over elevator entrances. Adding the pointer for compliance with the specific section of ASME A17 will ensure uniform compliance across the state. Adding this reference to the building code will help ensure compliant design of the doors during plan review and help to correct any issues prior to the field inspections and elevator enforcement inspecting the installation.

2. Why is the proposed code change a reasonable solution?  
It ensures correct design of the doors located over the hoistway entrance. This code change proposal was coordinated with the Elevator Code TAG 1307.
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 cost difference, as this is already a requirement. However, this code change could be a code decrease, helping to eliminate costly corrections after installation of non-complaint doors.
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.  
None.
5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.

### **Regulatory Analysis**

1. What parties or segments of industry are affected by this proposed code change?  
Building officials, Elevator inspectors, Architects, Building Owners.
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?  
Continues confusion and installation of non-complaint doors.
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: 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"):

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### 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 <sup>f</sup> (see Section 202)	3 <sup>a, b</sup>	2 <sup>a, b, c</sup>	1 <sup>b, c</sup>	0 <sup>c</sup>	1 <sup>b, c</sup>	0	3 <sup>a</sup>	2 <sup>a</sup>	2 <sup>a</sup>	HT	1 <sup>b, c</sup>	0
Bearing walls												
Exterior <sup>e, f</sup>	3	2	1	0	<u>2</u> <u>1</u>	<u>2</u> <u>1</u>	3	2	2	2	1	0
Interior	3 <sup>a</sup>	2 <sup>a</sup>	1	0	1	0	3	2	2	1/HT <sup>g</sup>	1	0
Nonbearing walls and partitions Exterior <sup>e, f</sup>	See Table 705.5				<u>1</u>	<u>1</u>	See Table 705.5					
Nonbearing walls and partitions Interior <sup>d</sup>	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 <sup>b</sup>	1 <sup>b, c</sup>	1 <sup>b, c</sup>	0 <sup>c</sup>	1 <sup>b, c</sup>	0	1 1/2	1	1	HT	1 <sup>b, c</sup>	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\_96.2

## Fire Code Change Proposal Form

(Submit via email to: [fire.code@state.mn.us](mailto: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](mailto: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.



Updated July 2022

# Minnesota Department of Public Safety State Fire Marshal Division

~~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

Page 669 of 1591  
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]



# Minnesota Department of Public Safety State Fire Marshal Division

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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# Minnesota Department of Public Safety State Fire Marshal Division

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: 8/16/2022, revised 07/24/2024

Revised

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 310.4 Residential Group R-3

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 310.4 Residential Group R-3

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.

**310.4 Residential Group R-3.** R-3 Residential occupancies where occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I, including:

Assisted living (five or fewer care recipients)

Assisted living with dementia care (five or fewer care recipients)

Boarding care homes

Buildings that do not contain more than two dwelling units

Care facilities that provide accommodations to five or fewer persons receiving care

Chemical dependency and Mental health treatment programs – Residential (five or fewer care recipients)

Congregate living facilities (non-transient) with 16 or fewer occupants

Boarding houses (non-transient)

Convents

Dormitories

Emergency services living quarters

Fraternities and sororities

Monasteries

Congregate living facilities (transient) with ~~10 or fewer occupants~~ five or fewer sleeping rooms

Boarding houses (transient)

Dwelling units (two or fewer) in mixed occupancy buildings

~~Family a-Adult foster care homes~~ (five or fewer care recipients)

Child Foster care (six or fewer care recipients)

~~Housing with services establishment~~

Lodging houses with five or fewer guest rooms

Hotels (nontransient) with five or fewer guest rooms

Motels (nontransient) with five or fewer guest rooms

Residential hospice with five or fewer occupants

Supervised living facility Class A-1 (six or fewer care recipients)

Supervised living facility Class B-1 (six or fewer care recipients)

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?
  - a. Clarification of when assisted living can use the R-3 designation
  - b. Addition of chemical dependency can use the R-3 designation
  - c. Clarification of when adult foster care can use the R-3 designation, change the term family to adult to align with care facility table
  - d. Clarification of when foster care can use the R-3 designation, add the term child to align with care facility table
  - e. Deletion of Housing with services because that licensing type no longer exists.
  - f. Change Congregate Living Facilities (transient) limitations to a parameter of the built environment.
  - g. Addition of supervised living facilities with six or fewer

2. Why is the proposed code change a reasonable solution?  
The code change clarifies the parameters of the R-3 designation for many of the uses.
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 additional wording clarifies the condition required for classification 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, home owners with care facilities, foster care 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?  
Continued confusion over R-3 occupancy 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 considered by the TAG.