



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

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

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

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 706.2 Fire Walls- Structural Stability

Code or rule section to be changed: MR 1305

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.
MBC 706.2 Structural Stability

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

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

706.2 Structural stability. Fire wall shall be designed and constructed to allow collapse of the structure on either side without collapse of the wall under fire conditions. Fire walls designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section.

Exception:

1. ~~In Seismic Design Categories D through F, where~~ Where double fire walls are used in accordance with NFPA 221, floor and roof sheathing not exceeding $\frac{3}{4}$ inch (19mm) thickness shall be permitted to be continuous through the wall assemblies of light frame construction.
 2. Construction of new fire walls completely within existing buildings.
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?

Construction of fire walls through existing buildings in order to comply with allowable area requirements or for other reasons is very complex. Adding structural independence within a pre-existing structure makes most of this type of work technically infeasible.

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

DLI/CCLD has had a long-standing policy of allowing new fire walls to be constructed within existing buildings without requiring the structural independence. The benefit of meeting all but the structural independence requirements of fire walls for building compartmentalization far outweigh the additional cost to correct existing structural connectivity issues.

3. What other considerations should the TAG consider?

The conservation code for existing buildings allows existing building components and systems to remain as existing non-conforming when new construction does not make existing conditions less conforming than before the alteration. It is reasonable to allow fire walls to be constructed in existing buildings where the new fire wall is not structurally independent from the floor/roof/ceiling assemblies.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
The proposed codifies current policy widely disseminated across the state and therefore will not increase construction costs.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A

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

Regulatory Analysis

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

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

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
non-uniform application of a DLI/CCLD plan review policy because local building officials are unaware.
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.

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Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 706.8 Fire Walls- Openings

Code or rule section to be changed: MR 1305

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.
MBC 706.8 Fire Walls- Openings

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

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

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

Exceptions:

1. Openings are not permitted in party walls constructed in accordance with Section 706.1.1.
2. Openings shall not be limited to 156 square feet (15 m²) where both buildings are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
3. One contributing wall of a double fire wall condition shall be equally fire resistance rated but shall not be required to provide opening protection per Section 716.

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

Need and Reason

1. Why is the proposed code change needed?

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

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

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

3. What other considerations should the TAG consider?

Similar conditions for duct and air transfer openings in Section 706.11.

Cost/Benefit Analysis

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

4. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.
No.

Regulatory Analysis

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

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

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

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Author/requestor: Greg Metz

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

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

Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 706.11 Fire Walls- Ducts & Air Transfer Openings

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- A. Is the proposed change unique to the State of Minnesota?
- 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

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- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.
MBC 706.11 Fire Walls- Ducts and Air Transfer Openings

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

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

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

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

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

Need and Reason

1. Why is the proposed code change needed?

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

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

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

3. What other considerations should the TAG consider?

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

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
The proposed codifies current policy widely disseminated across the state and therefore will not increase construction costs.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
N/A
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city? A small business is any business that has

less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.

No.

Regulatory Analysis

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

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

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

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CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Ryan Rehn

Date: 09/03/2024

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

Model Code: IBC 2024

Telephone number: 651-284-5410

Code or Rule Section: 716.1(2)

Firm/Association affiliation, if any: DLI/CCLD

IBC Section 716.1(2)

Code or rule section to be changed:

IBC Section 716.1(2) – Opening Fire Protection Assemblies, Ratings, and Markings

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

- The proposed code change is meant to:
 - change language contained the model code book? If so, list section(s).
IBC Section 716.1(2) – Opening Fire Protection Assemblies, Ratings, and Markings
 - 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.
- 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.

See attached IBC Table.

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 modifications to this table are necessary to replicate the 2-hour minimum fire resistive rating provisions found in Section 706.4 and to provide the appropriate opening protection necessary to the fire wall. This table was also modified to move the most restrictive type of assembly to the top with the other type of assemblies moved down based on their restrictiveness.

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

This modification will reduce the misperception found in the current Table as it creates a separate cell for fire walls, so the reader doesn't misapply fire barrier protectiveness to fire wall conditions. This also reorganizes the table to flow with the most restrictive provisions at the top followed by other type of assemblies based on their restrictiveness.

3. What other considerations should the TAG consider?

This modification is in direct response to the National Hearings rework of this table with the misperception that 1 hour fire resistive assemblies may be permitted in fire wall conditions.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
No cost changes. This is a current interpretation but has caused misinterpretation between building officials and designers.
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?
non-uniform application of fire wall and opening provisions.
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.

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**TABLE 716.1(2)
OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS**

TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY RATING (hours)		MINIMUM FIRE DOOR AND FIRE SHUTTER ASSEMBLY RATING (hours)	DOOR VISION PANEL SIZE ^a	FIRE-RATED GLAZING MARKING DOOR VISION PANEL ^{b, c}	MINIMUM SIDELIGHT/TRANSOM ASSEMBLY RATING (hours)		FIRE-RATED GLAZING MARKING SIDE-LIGHT/TRANSOM PANEL	
						Fire protection	Fire resistance	Fire protection	Fire resistance
Fire walls and Fire barriers having a required fire-resistance rating greater than 1 hour	4		3	See Note a	D-H-W-240	Not Permitted	4	Not Permitted	W-240
	3		3 ^d	See Note a	D-H-W-180	Not Permitted	3	Not Permitted	W-180
	2		1½	100-sq. in.	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-W-90	Not Permitted	2	Not Permitted	W-120
	1½		1½	100-sq. in.	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-W-90	Not Permitted	1½	Not Permitted	W-90
Double fire walls constructed in accordance with NFPA 221	Single-wall assembly rating (hours) ^e	Each wall of the double-wall assembly (hours) ^f	—						
	4	3	3	See Note a	D-H-W-180	Not Permitted	3	Not Permitted	W-180
	3	2	1½	100-sq. in.	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-W-90	Not Permitted	2	Not Permitted	W-120
	2	1	1	100-sq. in.	≤100 sq. in. = D-H-60 >100 sq. in. = D-H-W-60	Not Permitted	1	Not Permitted	W-60

Enclosures for shafts, interior exit stairways and interior exit ramps.	2	1 ^{1/2}	100 sq. in. ^b	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-T-W-90	Not Permitted	2	Not Permitted	W-120
Horizontal exits in fire walls ^e	4	3	100 sq. in.	≤100 sq. in. = D-H-180 >100 sq. in. = D-H-W-240	Not Permitted	4	Not Permitted	W-240
	3	3 ^d	100 sq. in.	≤100 sq. in. = D-H-180 >100 sq. in. = D-H-W-180	Not Permitted	3	Not Permitted	W-180
Fire barriers having a required fire-resistance rating of 1 hour: Enclosures for shafts, exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls	1	1	100 sq. in.	≤100 sq. in. = D-H-60 >100 sq. in. = D-H-T-W-60	Not Permitted	1	Not Permitted	W-60
					Fire protection			
Other fire barriers	1	3/4	Maximum size tested	D-H-45		3/4 ^h		D-H-45 ^h
Fire partitions: Corridor walls	1	1/3 ^a	Maximum size tested	D-20		3/4 ^a		D-H-OH-45
	0.5	1/3 ^a	Maximum size tested	D-20		1/3		D-H-OH-20
Other fire partitions	1	3/4 ⁱ	Maximum size tested	D-H-45		3/4		D-H-45

	0.5	1/3	Maximum size tested	D-H-20	1/3	D-H-20		
Exterior walls	3	1 1/2	100 sq. in. ^a	≤100 sq. in. = D-H-90 > 100 sq. in. = D-H-W-90	Not Permitted	3	Not Permitted	W-180
	2	1 1/2	Maximum size tested	D-H 90 or D-H-W-90	1 1/2 ^h	2	D-H-OH-90 ^h	W-120
					Fire protection			
	1	3/4	Maximum size tested	D-H-45	3/4 ^h	D-H-45 ^h		
Smoke barriers					Fire protection			
	1	1/3	Maximum size tested	D-20	3/4	D-H-OH-45		

For SI: 1 square inch = 645.2 mm.

- a. Fire-resistance-rated glazing tested to ASTM E119 in accordance with [Section 716.1.2.3](#) shall be permitted, in the maximum size tested.
- b. Under the column heading “Fire-rated glazing marking door vision panel,” W refers to the fire-resistance rating of the glazing, not the frame.
- c. See [Section 716.1.2.2.1](#) and [Table 716.1\(1\)](#) for additional permitted markings.
- d. Two doors, each with a fire protection rating of 1 1/2 hours, installed on opposite sides of the same opening in a fire wall, shall be deemed equivalent in fire protection rating to one 3-hour fire door.
- ~~e. As required in [Section 706.4](#).~~
- ~~f. As allowed in Section 4.6 of [NFPA 221](#).~~
- g. See [Section 716.2.5.1.2](#).
- h. Fire-protection-rated glazing is not permitted for fire barriers required by [Section 1207](#) of the *International Fire Code* to enclose energy storage systems. Fire-resistance-rated glazing assemblies tested to ASTM E119 or [UL 263](#), as specified in [Section 716.1.2.3](#), shall be permitted.
- i. Two doors, each with a fire rating of 20 minutes, installed on opposite sides of the same opening in a fire partition, shall be deemed equivalent in fire protection rating to one 45-minute fire door.

**TABLE 716.1(2)
OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS**

TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY RATING (hours)	MINIMUM FIRE DOOR AND FIRE SHUTTER ASSEMBLY RATING (hours)	DOOR VISION PANEL SIZE ^a	FIRE-RATED GLAZING MARKING DOOR VISION PANEL ^{b, c}	MINIMUM SIDELIGHT/TRANSOM ASSEMBLY RATING (hours)		FIRE-RATED GLAZING MARKING SIDE-LIGHT/TRANSOM PANEL	
					Fire protection	Fire resistance	Fire protection	Fire resistance
Fire walls	<u>4</u>	<u>3</u>	<u>See Note a</u>	<u>D-H-W- 240</u>	<u>Not Permitted</u>	<u>4</u>	<u>Not Permitted</u>	<u>W - 240</u>
	<u>3</u>	<u>3^d</u>	<u>See Note a</u>	<u>D-H-W-180</u>	<u>Not Permitted</u>	<u>3</u>	<u>Not Permitted</u>	<u>W-180</u>
	<u>2</u>	<u>1 ½</u>	<u>100 sq. in.</u>	<u>≤ 100 sq. in. = D-H- 90</u> <u>> 100 sq. in. = D-H-W- 90</u>	<u>Not Permitted</u>	<u>2</u>	<u>Not Permitted</u>	<u>W- 120</u>
<u>Horizontal exits in fire walls^e</u>	<u>4</u>	<u>3</u>	<u>100 sq. in.</u>	<u>≤100 sq. in. = D-H-180</u> <u>> 100 sq. in.=D-H-W- 240</u>	<u>Not Permitted</u>	<u>4</u>	<u>Not Permitted</u>	<u>W-240</u>
	<u>3</u>	<u>3^d</u>	<u>100 sq. in.</u>	<u>≤100 sq. in. = D-H-180</u> <u>> 100 sq. in.=D-H-W- 180</u>	<u>Not Permitted</u>	<u>3</u>	<u>Not Permitted</u>	<u>W-180</u>
<u>Enclosures for shafts, interior exit stairways and interior exit ramps.</u>	<u>2</u>	<u>1 ½</u>	<u>100 sq. in.^b</u>	<u>≤100 sq. in. = D-H-90</u> <u>> 100 sq. in.= D-H-T-W-90</u>	<u>Not Permitted</u>	<u>2</u>	<u>Not Permitted</u>	<u>W-120</u>
Fire barriers having a required fire-resistance rating greater than 1 hour	<u>4</u>	<u>3</u>	<u>See Note a</u>	<u>D-H-W-240</u>	<u>Not Permitted</u>	<u>4</u>	<u>Not Permitted</u>	<u>W-240</u>
	<u>3</u>	<u>3^d</u>	<u>See Note a</u>	<u>D-H-W-180</u>	<u>Not Permitted</u>	<u>3</u>	<u>Not Permitted</u>	<u>W-180</u>
	<u>2</u>	<u>1 ½</u>	<u>100 sq. in.</u>	<u>≤100 sq. in. = D-H-90</u> <u>>100 sq. in.=D-H-W-90</u>	<u>Not Permitted</u>	<u>2</u>	<u>Not Permitted</u>	<u>W-120</u>

	<u>1½</u>	<u>1½</u>	<u>100 sq. in.</u>	<u>≤100 sq. in. = D-H-90</u> <u>>100 sq. in. = D-H-W-90</u>	<u>Not Permitted</u>	<u>1½</u>	<u>Not Permitted</u>	<u>W-90</u>
Fire barriers having a required fire-resistance rating of 1 hour: Enclosures for shafts, exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls	1	1	100 sq. in.	≤100 sq. in. = D-H-60 >100 sq. in. = D-H-T-W-60	Not Permitted	1	Not Permitted	W-60
Fire protection								
Other fire barriers	1	¾	Maximum size tested	D-H-45	¾ ^h	D-H-45 ^h		
Fire partitions: Corridor walls	1	⅓ ^a	Maximum size tested	D-20	⅓ ^a	D-H-OH-45		
	0.5	⅓ ^a	Maximum size tested	D-20	⅓	D-H-OH-20		
Other fire partitions	1	¾ ⁱ	Maximum size tested	D-H-45	¾	D-H-45		
	0.5	⅓	Maximum size tested	D-H-20	⅓	D-H-20		
Exterior walls	3	1½	100 sq. in. ^a	≤100 sq. in. = D-H-90 > 100 sq. in. = D-H-W-90	Not Permitted	3	Not Permitted	W-180
	2	1½	Maximum size tested	D-H 90 or D-H-W-90	1½ ^h	2	D-H-OH-90 ^h	W-120

					Fire protection	
	1	³ / ₄	Maximum size tested	D-H-45	³ / ₄ ^h	D-H-45 ^h
					Fire protection	
Smoke barriers	1	¹ / ₃	Maximum size tested	D-20	³ / ₄	D-H-OH-45

For SI: 1 square inch = 645.2 mm.

- a. Fire-resistance-rated glazing tested to ASTM E119 in accordance with [Section 716.1.2.3](#) shall be permitted, in the maximum size tested.
- b. Under the column heading “Fire-rated glazing marking door vision panel,” W refers to the fire-resistance rating of the glazing, not the frame.
- c. See [Section 716.1.2.2.1](#) and [Table 716.1\(1\)](#) for additional permitted markings.
- d. Two doors, each with a fire protection rating of 1½ hours, installed on opposite sides of the same opening in a fire wall, shall be deemed equivalent in fire protection rating to one 3-hour fire door.
- ~~e. As required in [Section 706.4](#). **Not used.**~~
- ~~f. As allowed in Section 4.6 of [NFPA 221](#). **Not used.**~~
- g. See [Section 716.2.5.1.2](#).
- h. Fire-protection-rated glazing is not permitted for fire barriers required by [Section 1207](#) of the *International Fire Code* to enclose energy storage systems. Fire-resistance-rated glazing assemblies tested to ASTM E119 or [UL 263](#), as specified in [Section 716.1.2.3](#), shall be permitted.
- i. Two doors, each with a fire rating of 20 minutes, installed on opposite sides of the same opening in a fire partition, shall be deemed equivalent in fire protection rating to one 45-minute fire door.

706.1.2, 706.2	Deemed to comply	<p>2024 IBC moved the language allowing a fire wall to be constructed in accordance with NFPA 221 to its own section and clarified that the required fire-resistance rating is determined by Section 706.4.</p> <p><i>706.1.2 Deemed to comply. Fire walls designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section, subject to the limitations of Section 102.4. The required fire-resistance rating shall be determined by Section 706.4.</i></p>	<p>Tabled to be discussed with a upcoming code change proposal to address fire resistive ratings and reference NFPA 102 via NFPA 221.</p>
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CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: C. Scott Anderson

Date: 5/02/24

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

Model Code: 2024 IBC

Telephone number: 612-246-7303

Code or Rule Section: 1010.1.1

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: 1010.1.1 Door size

Code or rule section to be changed: 1010.1.1

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.
1010.1.1 and following

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.
Add new text as follows:

1010.1.1 Size of doors. Doors in the means of egress shall comply with the minimum clear opening width and minimum height requirements of Sections 1010.1.1.1 and 1010.1.1.2.

Revise as follows:

~~1010.1.1~~ **1010.1.1.1 Size of doors Minimum width.**

The required capacity of each door opening shall be sufficient for the *occupant load* thereof and shall provide a ~~minimum~~ clear opening width of not less than 32 inches (813 mm). ~~The clear opening width of doorways with swinging doors shall be measured between the face of the door and the frame stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear opening width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a minimum clear opening width of 32 inches (813 mm).~~ In Group I-2, doors serving as means of egress doors where used for the movement of beds shall provide a ~~minimum~~ clear opening width of not less than 41 1/2 inches (1054 mm). ~~The minimum clear opening height of doors shall be not less than 80 inches (2032 mm).~~

Exceptions:

1. In Group R-2 and R-3 dwelling and sleeping units that are not required to be an Accessible unit, Type A unit or Type B unit, the minimum clear opening width shall not apply to door openings that are not part of the required means of egress.
2. In Group I-3, door openings to resident sleeping units that are not required to be an Accessible unit shall have a minimum clear opening width of not less than 28 inches (711 mm).
3. Door openings to storage closets less than 10 square feet (0.93 m) in area shall not be limited by the minimum clear opening width.
- ~~4. Door openings within a dwelling unit or sleeping unit shall have a minimum clear opening height of 78 inches (1981 mm).~~
- ~~5. In dwelling and sleeping units that are not required to be Accessible, Type A or Type B units, exterior door openings other than the required exit door shall have a minimum clear opening height of 76 inches (1930 mm).~~
- ~~6.~~4. In Groups I-1, R-2, R-3 and R-4, in dwelling and sleeping units that are not required to be Accessible, Type A or Type B units, the minimum clear opening widths shall not apply to interior egress doors.
- ~~7.~~5. Door openings required to be accessible within Type B units intended for user passage shall have a ~~minimum~~ clear opening width of not less than 31.75 inches (806 mm).
- ~~8.~~6. Doors serving sauna compartments, toilet compartments or dressing, fitting or changing compartments that are not required to be accessible shall have a ~~minimum~~ clear opening width of not less than 20 inches (508 mm).
- ~~9.~~7. Doors serving shower compartments shall comply with Section 421.4.2 of the International Plumbing Code.

Add new text as follows:

1010.1.1.1.1 Clear opening width measurement. The clear opening width of doorways with swinging doors shall be measured between the face of the door and the frame stop, with the door open 90 degrees (1.57 rad).

1010.1.1.1.2 Two door leaves. Where a minimum clear opening width is required and a door opening includes two door leaves without a mullion, one leaf shall provide that required minimum clear opening width.

1010.1.1.1.3 Opposite-swinging doors. Where a pair of opposite-swinging doors are in the means of egress, each door required to swing in the direction of egress travel shall provide the required minimum clear opening width.

1010.1.1.2 Minimum height. The clear opening height of doors shall be not less than 80 inches (2032 mm).

Exceptions:

1. Door openings within a dwelling unit or sleeping unit shall have a clear opening height of not less than 78 inches (1981 mm).
2. In dwelling and sleeping units that are not required to be Accessible, Type A or Type B units, exterior door openings other than the required exit door shall have a clear opening height of not less than 76 inches (1930 mm)

Revise as follows:

~~1010.1.1.~~ **11010.1.1.3 Projections into clear opening.**

There shall not be projections into the required clear opening width lower than 34 inches (864 mm) above the floor or ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the floor or ground shall not exceed 4 inches (102 mm).

Exception: Door closers, overhead doorstops, frame stops, power door operators, and electromagnetic door locks shall project into the door opening height not lower than 78 inches (1980 mm) above the floor.

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.

NO

Need and Reason

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

This proposal editorially separates door size provisions into minimum width requirements (and related exceptions) from minimum height requirements (and related exceptions). All current requirements are retained, but many are relocated.

In several locations phrasing was revised from “minimum clear opening width of” to “clear opening width of not less than” for editorial consistency within the code. And, a few other editorial adjustments were made with the text.

This proposal adds provisions for where a pair of opposite-swinging doors are in the means of egress in proposed new section

1010.1.1.1.3. Where the occupant load is such that doors are required to swing in the direction of egress travel, the code currently does not make it clear that each door which is required to swing in the direction of egress travel (of the pair of opposite-swinging doors) is required to meet the required minimum clear opening width.

This new section (1010.1.1.1.3) clearly expresses the intent of the code,

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

This change clears up text and makes it easier to read. It also addresses a potential code interpretation issue with the door swing.

3. What other factors should the TAG consider?

None

Cost/Benefit Analysis

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

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

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 change

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

NA

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

No

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

No

Regulatory Analysis

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?

Not adopting this change will result in continued disagreement between code officials and designers as to how this code provision is to be applied.

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 was adopted by the ICC egress committee at the April 2024 Code Action Hearings by a vote of 14-0 and is unlikely to be overturned at the final action hearings and voting. Regardless of the ICC actions this is a significant improvement to the current code language.

***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: 8/15/2022

Revised: 5/15/2024

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 1010.1.7~~ 1010.1.6 Thresholds, Exception 2

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).
MBC ~~4040.1.7~~ 1010.1.6 Exception 2
- 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.
 2. In Type B units, where Exception 5 to Section 1010.1.5 permits a ~~4-inch (102 mm)~~ 2-inch (51 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed ~~4 ¾ inches (120 mm)~~ 2 ¾ inches (70 mm) in height above the exterior deck, patio, or balcony for sliding doors or ~~4 ½ inches (114 mm)~~ 2 ½ inches (63) above the exterior deck, patio, or balcony for other doors.
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 the Minnesota Accessibility Code, Section 1004.5.2.2.
2. Why is the proposed code change a reasonable solution?

The proposed change to this section will make it compatible with MBC Section 1010.1.5, Exception 5 which has been amended by Minnesota.
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.
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 allowable threshold heights at exterior balconies and patios of Type B dwelling units.

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

Revised 5/15/2024

Revised 6/6/2024

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 1010.1.9.7~~ 1010.2.13 Controlled Egress Doors

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 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.

~~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 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 ~~1010.1.9.7~~ 1010.2.13 may be revoked by the fire code official or building official for due cause.

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.
2. The egress control locks shall unlock upon loss of power controlling the lock or lock mechanism.
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.
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 Fire Code.
6. All ~~clinical~~ staff shall have the keys, codes, or other means necessary to operate the controlled egress locking devices or systems.
7. Emergency lighting shall be provided at both sides of a door equipped with a controlled egress locking device.
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.
9. ~~The controlled egress locking devices are designed to fail in the open position.~~
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.
11. The controlled egress door locking system units shall be listed in accordance with UL 294.
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 the 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:
 - a. The construction of smoke barrier compartmentation is not practical;
 - b. Existing sleeping rooms are provided with smoke-tight construction;

- c. 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.

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.
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.
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.
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 application of these provisions, and application of these locking provisions in occupancies where people are fully capable of self-preservation.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

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

Minnesota Department of Public Safety State Fire Marshal Division

24CCP_98

Fire Code Change Proposal Form

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

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

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

Date: [5-14-2024](#)

Email address: 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): [MR 7511.1010, Subpart 1d, Section 1010.1.9.7 and MR 1305.1010, Section 1010.1.9.7](#)

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 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.

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.

1010.1.9.7 Controlled egress doors in Groups 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 Groups I-1, I-2, R-3, and R-4 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 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.~~ Electric locking systems and controlled egress doors shall comply with the requirements in items 1 through 11 below.

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 1010.1.9.7](#)

Need and Reason



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1. Why is the proposed code change needed?
The current language requires a smoke detection system installed in accordance with Section 907. However, this reference isn't clear as Section 907 is 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?
It's reasonable to provide clarification to current rule language in order to better demonstrate the intent and application.
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.
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?
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?



Minnesota Department of Public Safety State Fire Marshal Division

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?

No change in costs – clarification only.

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?

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.

N/A

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



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Minnesota Department of Public Safety State Fire Marshal Division

24CCP_96

Fire Code Change Proposal Form

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

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

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

Date: [5-14-2024](#)

Email address: 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): [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.

1010.1.9.8.1 Delayed egress locking system. The delayed egress locking system shall be installed and operated in accordance with one of the following:

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



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vicinity of the door. Once the delay electronics have been deactivated from the door or an approved location, relocking 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.

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 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 as without the clarification, a 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.

2. Why is the proposed code change a reasonable solution?
The change in item 4 is reasonable because it clarifies the intent and application of the smoke detection system requirement, and thus eliminates confusion for the reader and prevents misapplication of the code.
3. Is there additional data or information that should be considered?
No



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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
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



Minnesota Department of Public Safety State Fire Marshal Division

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?

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).

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.*



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24CCP_97

Fire Code Change Proposal Form

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

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

Author/requestor: Forrest Williams

Date: 1-10-2024

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

Telephone number: 651-769-7784

Organization/Association/Agency, if any: DPS – State Fire Marshal

Code or rule section to be changed (include code or rule title and edition year): MR 7511.1010.1.11 & MR 1305.1010.1.11

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 7511.1010.1.11

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

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

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

2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.

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

1010.1.11 Special detention arrangements. Special detention arrangements meeting the requirements of Sections 1010.1.11.1 through 1010.1.11.4 are permitted only for rooms, other than cells, where a single occupant is ~~the occupants are being~~ temporarily restrained for safety or security reasons. Special detention arrangements shall not be used on egress doorways serving multiple occupants. The use of Sections 1010.1.11.1 through 1010.1.11.4 may be revoked by the fire code official for due cause.

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?

This state amendment has often been misinterpreted by code officials and design professionals, believing this type of locking arrangement can be employed on any egress door, even those serving multiple occupants, provided the reason is for occupant security or safety. However, the intent of this section is to allow a single occupant, who's behavior may pose a danger to themselves or others, to be temporarily detained within a room until



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the threat has passed. The most common use of special detention arrangements is in Group E (educational) occupancies, specifically in special education areas to assist with behavioral issues.

2. Why is the proposed code change a reasonable solution?
It helps clarify the intent of the language and promotes uniform application and enforcement of the provisions. No substantive change are made to the amendment.
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.
No change in cost.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
n/a
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No change in cost.
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?
None, as there is no substantive change to the code provisions.
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?
n/a



Minnesota Department of Public Safety State Fire Marshal Division

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. The purpose is only for clarification of intent and to promote consistent application and enforcement.
5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
By not making these clarifications, fire and building code officials and design professionals will continue to misapply these provisions. Once these mistakes are identified, they must be corrected, causing additional and unnecessary costs to the property owner.
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.*



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Minnesota Department of Public Safety State Fire Marshal Division

24CCP_101

Fire Code Change Proposal Form

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

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

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

Date: [5-17-2024](#)

Email address: 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): [2024 IFC/IBC 1010.2.6 \(stairway doors\)](#)

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

2024 IFC/IBC 1010.2.6 (stairway doors)

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

MR 7511.1010, Section 1010.1.9.12 and MR 1305.1010, Section 1010.1.9.12

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.

(2024 IFC/IBC)

[BE] 1010.2.6 Stairway doors.

Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. In stairways serving not more than four stories, doors are permitted to be locked from the side opposite the egress side.

~~1.2.~~ Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.

~~2.3.~~ This section shall not apply to doors arranged in accordance with Section 403.5.3 of the International Building Code.



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~~3.4.~~ Stairway exit doors shall not be locked from the side opposite the egress side, unless they are openable from the egress side and capable of being unlocked simultaneously without unlatching by any of the following methods:

~~3.1.4.1~~ Shall be capable of being unlocked individually or simultaneously upon a signal from the fire command center, where present, or a signal by emergency personnel from a single location inside the main entrance to the building.

~~3.2.4.2~~ Shall unlock simultaneously upon activation of a fire alarm signal when a fire alarm system is present in an area served by the stairway.

~~3.3.4.3~~ Shall unlock upon failure of the power supply to the electric lock or the locking system.

~~4.5.~~ Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single exit stairway where permitted in Section 1006.3.4.

~~5.6.~~ Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit stairway where permitted in Section 1006.3.4.

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.
[MR 7511.1010, Section 1010.1.9.12](#) and [MR 1305.1010, Section 1010.1.9.12](#)

Need and Reason

1. Why is the proposed code change needed?
The 2024 IFC/IBC has revised this section by adding an additional exception, so this change incorporates a current state amendment into the updated IFC/IBC language, thus maintaining the current allowance for stairway doors serving 4 or fewer stories to be locked on the side opposite egress in order to prevent building reentry while allowing for additional release options now included in the model code.
2. Why is the proposed code change a reasonable solution?
This change is reasonable because the allowance currently exists under MN Rules, 7511 and 1305.
3. Is there additional data or information that should be considered?



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This language is similar to NFPA 101, Life Safety Code, which allows stairway enclosure doors serving 4 or fewer stories to be locked on the side opposite egress in order to prevent building reentry.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
[Cost neutral, as this provision already exists under current rule.](#)
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?
[Fire and building code officials, design professionals, construction industries, electrical contractors, and building 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. This provision already exists under current MN Rules.](#)
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](#)



Minnesota Department of Public Safety State Fire Marshal Division

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?
N/A. This provision already exists under current MN Rules.
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?
The cost of construction would increase for multi-story buildings having 4 or fewer stories. Under current rule, interior stairway doors serving 4 or fewer stories are allowed to have the doors secured from the non-egress side in order to prevent reentry for the purposes of maintaining building/tenant security. By not incorporating our current exemption for stairways serving 4 or fewer stories, an electrified door-release system would be necessary in order for these doors to be secured against building reentry.
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: C. Scott Anderson

Date: 5/06/24

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

Model Code: 2024 IBC

Telephone number: 612-246-7303

Code or Rule Section: Table 1010.2.4

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: Table 1010.2.4

Code or rule section to be changed: Table 1010.2.4

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.
Table 1010.2.4

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 ~~striketrough~~ words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.
Add new text as follows:

TABLE 1010.2.4

MANUAL BOLTS, AUTOMATIC FLUSH BOLTS AND CONSTANT LATCHING BOLTS ON THE INACTIVE LEAF OF A PAIR OF DOORS

APPLICATION WITH A PAIR OF DOORS WITH AN ACTIVE LEAF AND AN INACTIVE LEAF	THE PAIR OF DOORS IS REQUIRED TO COMPLY WITH SECTION 716	PERMITTED USES OF MANUAL BOLTS, AUTOMATIC FLUSH BOLTS AND CONSTANT LATCHING BOLTS ON THE INACTIVE LEAF OF A PAIR OF DOORS.		
		Surface- or flush-mounted manual bolts	Automatic flush bolts	Constant latching bolts
Group B, F, <u>M</u> or S occupancies with occupant load less than 50.	No	P	P	P
	Yes	NP	NP <u>p^b</u>	<u>p^b</u>
Group B, F, <u>M</u> or S occupancies where the building is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 and the inactive leaf is not needed to meet egress capacity requirements.	No	P	P	P
	Yes	NP	NP <u>p^b</u>	<u>p^b</u>
Group I-2 patient care and sleeping rooms where inactive leaf is not needed to meet egress capacity requirements.	No	NP	NP <u>p^b</u>	P
	Yes	NP	NP ^b	P
Any occupancy where panic hardware is not required, egress doors are used in pairs, and where both leaves are required to meet egress capacity requirements.	No	NP	P	NP
	Yes	NP	NP <u>p^b</u>	NP
Storage or equipment rooms where the inactive leaf is not needed to meet egress capacity requirements.	No	p ^a	P	P
	Yes	p ^a	P	P

P = Permitted. NP = Not Permitted.

- a. Not permitted on corridor doors in group I-2 occupancies where corridor doors are required to be positive latching
 - b. Permitted only where both doors-leafs are self closing or automatic closing, and both leaves are arranged to automatically latch in the closed position. ~~are provided with a coordinator that causes the inactive leaf to be closed prior to the active leaf~~
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.)

Mercantile occupancy (M) is added to the first two rows of Table 1010.2.4 to specifically permit manual bolts, automatic flush bolts, or constant latching bolts on the inactive leaf of a pair of doors. A common application of these hardware items are the doors to automobile showrooms, where the inactive leaf opens wide enough to permit cars to be rolled into and out of the showroom. These two rows in Table 1010.2.4 are where the inactive leaf is not needed for egress capacity.

Also, footnote b is added to two cells in the right-hand column. In these applications where the doors are required to comply with Section 716, these doors are required by other parts of the IBC to be opening protectives, and required to be self-closing or automatic-closing, and to latch when closed. This nuance was overlooked when the table was included in the 2024 IBC.

Footnote b currently is not quite accurate as some pairs of doors are designed such that both door leaves (the active leaf and the inactive leaf) close and latch without needing a coordinator to close the inactive leaf prior to the active leaf.

In Group I-2, patient care and sleeping room doors are, for all practical purposes, not required by the IBC to comply with Section 716 (i.e. to be fire rated doors). Thus, it is appropriate to remove this partial row for Group I-2 patient care rooms and sleeping rooms.

IBC Section 407.3.1 specifically states that Group I-2 corridor doors are not required to be self-closing or automatic-closing except in the very limited situations where the corridor doors are in a wall required to be rated by Section 509.4 Incidental uses, or for enclosure of a vertical opening or an exit. In Group I-2, patient care and sleeping room doors are essentially not installed in these situations.

Also, in Group I-2, patient care and sleeping room doors are not required to be self-closing or automatic-closing, and the footnote in the cell under Automatic flush bolts should not be there.

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

This change clears up a couple of missed issues when the table was adopted in the 2024 code and clarifies some additional requirements.

3. What other factors should the TAG consider?

None

Cost/Benefit Analysis

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

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

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 change

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

NA

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

Regulatory Analysis

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?
Not adopting this change will result in continued disagreement between code officials and designers as to how this code provision is to be applied.
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 was adopted by the ICC egress committee at the April 2024 Code Action Hearings by a vote of 12-1 and is unlikely to be overturned at the final action hearings and voting. Regardless of the ICC actions this is a significant improvement to the current code language.

***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: 5/2/24

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

Model Code: 2024 IBC

Telephone number: 612-246-7303

Code or Rule Section: 1010.2.8.2

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: 1010.2.8.2

Code or rule section to be changed: 1010.2.8.2

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
1010.2.8.2
- 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.
1010.2.8.2

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.

~~**1010.2.8.2 — Rooms with electrical equipment.**~~

~~Exit or exit access doors serving transformer vaults, rooms designated for batteries or energy storage systems, or modular data centers shall be equipped with panic hardware or fire exit hardware. Rooms containing electrical equipment rated 800 amperes or more that contain overcurrent devices, switching devices or control devices and where the exit or exit access door is less than 25 feet (7620 mm) from the equipment working space as required by NFPA 70, such doors shall not be provided with a latch or lock other than panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel.~~

1010.2.8.2 Rooms with electrical equipment. Where an electrical equipment room, enclosure, or vault meets one or more of the following criteria, exit doors or exit access doors shall comply with Section 1010.2.8.2.1.

1. Room, enclosure, or vault for electrical equipment of 1000 volts, nominal, or less and rated 800 amperes or more that contain overcurrent devices, switching devices, or control devices and where the exit door or exit access door is less than 25 feet (7620 mm) from the equipment working space as required by NFPA 70.
2. Vault for electrical equipment of over 1000 volts, nominal.
3. Room or enclosure for electrical equipment of over 1000 volts, nominal, and where the exit door or exit access door is less than 25 feet (7620 mm) from the equipment working space as required by NFPA 70.
4. Transformer vault.
5. Room, enclosure, or vault for batteries or energy storage systems having a capacity greater than 1 kWh (3.6MJ).
6. Modular data center.

Add new text as follows:

1010.2.8.2.1 Electrical equipment room doors. Exit doors and exit access doors of such electrical room, enclosure, or vault shall swing in the direction of egress travel, and locks and latches on the doors shall be provided with panic hardware or fire exit hardware.

- 1011** Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.

NO

Need and Reason

1. Why is the proposed code change needed? Please provide a general explanation as well as a specific explanation for any changes to numerical values (heights, area, etc.)
This proposal is intended to be editorial and to more closely mesh with the requirements in NFPA 70 National Electrical Code.

The IBC, in Chapter 27, requires compliance with NFPA 70. The current text in Section 1010.2.8.2 closely follows requirements in NFPA 70 regarding panic hardware and fire exit hardware, but the revised text more closely follows the requirements in NFPA 70, making it easier to understand what's required to comply with NFPA 70.

The charging language of 1010.2.8.2 is primarily the existing language in 1010.2.8.2 with editing to more closely mesh with terms used in NFPA 70. For example, electrical enclosures of wire fence-like material surrounding electrical equipment may not be considered an electrical equipment room – hence the proposed revisions to electrical equipment room, enclosure, or vault.

The criteria in Items 1 through 6 are from current requirements in 1010.2.8.2 and augmented by requirements in these sections of NFPA 70:

1. 110.26(C)(3) – electrical equipment rooms, enclosures, or vaults for 1000 volts or less
2. 110.31(A)(4) – electrical equipment vaults for more than 1000 volts
3. 110.33(A)(3) – electrical equipment rooms or enclosures for more than 1000 volts
4. 450.43(C) – transformer vaults
5. 480.1 and 480.10(E) – batteries and energy storage systems
6. 646.19 – modular data centers

Also, these six criteria were separated into items for easier correlation to NFPA 70 requirements.

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

It correlates the requirements with NFPA 70 thus making compliance more readily achievable

3. What other factors should the TAG consider?

None

Cost/Benefit Analysis

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

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

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 change

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

NA

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

No

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

No

Regulatory Analysis

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?
Not adopting this change will continue the difficulty in gaining compliance with two different codes that tend to fall under two different jurisdictions

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 was adopted by the ICC egress committee at the April 2024 Code Action Hearings by a vote of 14-0 and is unlikely to be overturned at the final action hearings and voting. Regardless of the ICC actions this revision will result in better code compliance

***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: 8/18/2022

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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.

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). See Section 1009.3 for accessible means of egress stairways. 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: [Britt McAdamis](#)

Date: [04/23/2024](#)

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

Model Code: [2024](#)

Telephone number: [651-284-5276](#)

Code or Rule Section: [1011.15](#)

Firm/Association affiliation, if any: [DLI/CCLD](#)

Topic of proposal: [Ships ladders](#)

Code or rule section to be changed: [1305.1011.15](#)

Intended for Technical Advisory Group ("TAG"): [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).
[1011.15 Ships ladders](#)

change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
[1305.1011.15 Ships ladders](#)

delete language contained in the model code book? If so, list section(s).
[1011.15 Ships ladders](#)

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

MR 1305.1011.15

1011.15 Ships ladders. Ships ladders ~~constructed as required for permanent stairs in accordance with the Minnesota Mechanical Code, Minnesota Rules, part 346.306, subpart 1, amending IMC Section 306.5,~~ shall be permitted to be used as a means of egress component at the following locations:

1. ~~Ships ladders are permitted to be used in~~ In Group I-3 ~~occupancies for as a component of a means of egress to and from at~~ control rooms or elevated *facility* observation stations not more than 250 square feet (23 m²) ~~in floor area. with not more than 3 occupants.~~

2. For access to unoccupiable roofs.

~~3. 2. Ships ladders are permitted to be used as~~ As a component for means of egress at recessed or elevated floors or platforms when the area served has an occupant load of five or fewer and the space meets all of the following criteria:

3.1. Access to the area served is limited to building facilities staff, maintenance staff, employees, or other authorized personnel.

3.2. Required access to the area served is limited and periodic.

3.3. The area served is used for building maintenance service functions, or for equipment access or monitoring.

3.4. The area served is not required to have a second means of egress by other provisions of this code.

3.5. The area served is not classified as a Group H occupancy.

~~4. 3. Ships ladders are permitted to be used for~~ For access to mechanical equipment and appliances on roofs or elevated structures unoccupied spaces in accordance with the *Minnesota Mechanical Code*.

Following code language from 1346.0306.5 and IBC 1011.15, 1011.15.1 and 1011.15.2 merged to new 1305 code section.

1011.15.1 Ships ladder construction. The ~~permanent stair~~ ships ladder shall, at a minimum, meet the following:

1. The ~~stair~~ ships ladder shall be installed at an angle of ~~not more than 60-50-70~~ degrees measured from the horizontal plane.

2. ~~The stair shall have flat treads at least 6 inches (152 mm) deep and a clear width of at least 18 inches (457 mm) with equally spaced risers at least 10.5 inches (267 mm) high and not exceeding 14 inches (356 mm). Ship's ladders shall have a minimum tread depth of 5 inches (127 mm). The tread shall be projected such that the total of the tread depth plus the nosing projection is not less than 8 1/2 inches (216 mm). The maximum riser height shall be 9 1/2 inches (241 mm).~~

~~3. The stair shall have intermediate landings not exceeding 18 feet (5.5 m) vertically.~~

~~3. 4. Continuous handrails shall be installed on both sides of~~

~~the stair. Handrails shall be provided on both sides of ship's ladders.~~

~~4. The minimum clear width at and below the handrails shall be 20 inches (508 mm).~~

~~5. Ship's ladders shall be designed for the live loads indicated in Section 1607.10.~~

~~5. Interior stairs shall terminate at the under side of the roof at a hatch or scuttle of at least 8 square feet (0.74 m²) with a minimum dimension of 20 inches (508 mm).~~

~~6. When a roof access hatch or scuttle is located within 10 feet (3.0 m) of a roof edge, a guard shall be installed in accordance with IMC Section 304.11.~~

~~6. 7. Exterior stairs shall terminate at the roof access point or at a level landing of at least 8 square feet (0.74 m²) with a minimum dimension of 20 inches (508 mm). The landing shall have a guard installed in accordance with IMC Section 304.11.~~

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.

1346.0306.5

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 body language is amended to indicate the areas where a ships ladder can be used and not direct all compliance to a permanent stair in accordance with the MN mechanical code.

Item 1 is rewritten to the same language as the IBC for Group I-3 for consistency with the model code.

Item 2 is added in allow ships ladders to be used to access unoccupiable roofs as permitted by the IBC.

Item 3 is renumbered and rewritten for constancy with the other items, content remains the same as the current amendment.

Item 4 is renumbered and reworded to be consistent with the terminology of the MN Mechanical Code.

New Section 1011.15.1 is taken from the current MR 1346.0306.5 provisions for a permanent stair and merged with the IBC requirements from section 1011.15, 1011.15.1 and 1011.15.2 for ships ladders. The requirements and dimensions were derived from the IBC and comparing the current MR 1346.0306.5 along with OSHA standards to be aligned with industry standards. Other subitems were removed as they are addressed elsewhere in the mechanical code and or building code and are not necessary to be included here.

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

Current MR directs the designer to the MMC for construction requirements for a ships ladder, when a ships ladder is permitted by the MBC for uses other than mechanical access, therefor it is reasonable to keep the construction requirements within the building code which is also in line with the IBC. Additionally, the architect is typically the designer for roof access and or mechanical access components and is already operating in the building code for code compliance.

Current MR 1346.0306.5 which contains the construction requirements for a permanent stair, is not using the same terminology or dimensional uniformity that is seen in both the IBC and OSHA standards for ships ladders.

It is reasonable to maintain the building code to be as close to the model IBC as possible while mirroring the MR from 1346 for consistency across both codes. Proposal is to change 1346.0306.5 to mirror the new code section proposed as 1011.15.1.

3. What other factors should the TAG consider?

MR 1346.0306.5 has amended this section for climate factors due to our unique weather conditions and limits the use of ladders as access to mechanical equipment for safety considerations.

Cost/Benefit Analysis

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

This proposal is a clarification of the code requirements and would impose no cost increase.

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

N/A

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

N/A

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

N/A

5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is

any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.

N/A

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
Architects, Engineers, Mechanical contractors

2. Can you think of other means or methods to achieve the purpose of the proposed code change? What might someone opposed to this code change suggest instead? Please explain what the alternatives are and why your proposed change is the preferred method or means to achieve the desired result.
No significant changes, reorganization and relocation of code requirements.

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

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

***Note: 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: 4/22/24

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Model Code: 2024 IBC

Telephone number: 612-246-7303

Code or Rule Section: 1014.8
Exceptions

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: 1014.8 Exceptions

Code or rule section to be changed: 1014.8 Exceptions

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
1014.8 Exceptions
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.

2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.

No

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

1014.8 Clearance.

Clear space between a handrail and a wall or other surface shall be not less than 1 / inches (38 mm). A handrail and a wall or other surface adjacent to the handrail shall be free of any sharp or abrasive elements.

Exceptions:

- ~~1. A decrease in the clearance due to the curvature or angle of handrail returns shall be allowed.~~
- ~~2. Mounting flanges not more than / - inch (12.7 mm) in thickness at the returned ends of handrails shall be allowed.~~

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.)
2024 IBC added 2 exceptions to section 1014.8. These exceptions would allow for two conditions prior to the minimum handrail extension being met. The conflict these exceptions create in the IBC is that neither of these exceptions are allowed to be done prior to the minimum extension length being met, first per Sections 505.5 & 505.6 in the 2017 ICC A117.1 Standard, and prior additions, and second the same Sections 505.5 & 505.6 in the 2010ADA - ADA Standards for Accessible Design.
Additionally, the 2024 IBC section 1014.7 added the text, "and shall extend the required minimum length before any change in direction or decrease in the clearance required by Section 1014.5 or 1014.8."
The 2 exceptions to 1014.8 will only create the conflict in code language by allowing conditions that are not allowed by 1014.7, 2010ADA, nor A117.1 within the minimum length of the handrail extension.
2. Why is the proposed code change a reasonable solution?
Corrects an inadvertent conflict in code language from previous revisions.
3. What other factors should the TAG consider?
None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.
This is an editorial change and should not impact the cost of construction.

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 change
3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
NA
4. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.
No

Regulatory Analysis

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?
Not adopting this change will result in a conflict within the code as well as a conflict with other construction standards
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 was adopted by the ICC egress committee at the April 2024 Code Action Hearings by a vote of 10-4 and is unlikely to be overturned at the final action hearings and voting. Regardless of the ICC actions this code conflict needs to be corrected.

***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: C. Scott Anderson

Date: 4/22/24

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

Model Code: 2024 IBC

Telephone number: 612-246-7303

Code or Rule Section: 1015.2

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: 1015.2

Code or rule section to be changed: 1015.2

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.
1015.2

2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.

No

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

Add new text as follows:

1015.2 Where required. Guards shall be located along open-sided walking surfaces, such as mezzanines, equipment platforms, aisles, stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side, and at the perimeter of occupiable roofs, and at walking surfaces near retaining walls in accordance with Section 1807.2.5. Guards shall be adequate in strength and attachment in accordance with Section 1607.9

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.)
2024 IBC added the requirement for guards at retaining wall to section 1807.2.5 which is a section not normally reviewed by designers nor inspectors with regard to guard requirements. A pointer is needed to ensure that this requirement is not missed.
2. Why is the proposed code change a reasonable solution?
The unique location of the guard requirement in section 1807 requires a reference to ensure compliance.
3. What other factors should the TAG consider?
None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.
This is an editorial change and should not impact the cost of construction.
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 change
3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
NA
4. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No

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

No

Regulatory Analysis

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?
Not adopting this change will likely result in this requirement being inconsistently enforced.
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 was adopted by the ICC egress committee at the April 2024 Code Action Hearings by a vote of 12-2 and is unlikely to be overturned at the final action hearings and voting. Regardless of the ICC actions this is a significant improvement to the current code language.

***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: 8/12/2022

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 1023.5 Stairway Penetrations

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 1023.5 Penetrations.

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

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

IBC 1023.5 Penetrations. Penetrations into or through interior exit stairways and ramps are prohibited except for the following:

1. Equipment and ductwork necessary for independent ventilation or pressurization.
 2. Fire protection systems where penetrations are limited to the penetration of sprinklers serving the exit stairway or exit ramp enclosure.
 3. Security systems that serve the exit stairway or ramp.
 4. Wiring that serves the exit stairway or ramp.
 5. Two-way communication systems that serve the exit stairway or ramp.
 6. Electrical raceway for fire department communication systems.
 7. Electrical raceway serving the interior exit stairway or ramp and terminating in a steel box not exceeding 16 square inches.
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?
Fire protection systems are frequently routed through stairway shafts to save cost. The sprinkler piping is cause for multiple penetrations in the protected enclosure when the purpose for the penetration is not serving to enhance enclosure protection but rather other parts of the building
2. Why is the proposed code change a reasonable solution?
Fire protection systems is the only item listed that does not specifically state that the penetration is strictly limited to those penetrations directly serving the protected enclosure.
3. What other considerations should the TAG consider?

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?
Continued installation of fire sprinkler distribution piping in stair enclosures with multiple penetrations through the protected enclosure.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

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



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: C. Scott Anderson

Date: 5/29/24

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

Model Code: 2024 IBC

Telephone number: 612-246-7303

Code or Rule Section: 1027.2

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: 1027.2

Code or rule section to be changed: 1027.2

Intended for Technical Advisory Group ("TAG"):

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- delete language contained in the model code book? If so, list section(s).
- delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- add new language that is not found in the model code book or in Minnesota Rule.
1027.2

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

Add new text as follows:

1027.2 Use in a means of egress.

Exterior exit stairways shall not be used as an element of a required means of egress for Group I-2 occupancies. For occupancies in other than Group I-2, exterior exit stairways and ramps shall not be used as an element of a required means of egress ~~for buildings exceeding six stories above grade plane or that are high-rise buildings, where the highest walking surface of the excterio exit stairway or ramp exceeds 65 feet above the lowest finishe grade below the stairway.~~

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.

NO

Need and Reason

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

This change ties the limits of exterior exit stairs to a specific height of the landing above grade below. 65' (20M) is the height at which significant vertigo will appear in most individuals. See NIH published studies by D Huppert – 2020 and R Teggi 2019. It makes sense to use this limitation as it is specific to the stair in question nstead of a building classification. As currently written in code, if the building is a highrise or exceeds 6 stories then no exterior stair may be permitted regardless of the height or location of the stair.

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

This change addressed the specific issue of the exterior stair.

3. What other factors should the TAG consider?

None

Cost/Benefit Analysis

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

This is an editorial change and may result in reduced cost of construction because now exterior stairs may be used in situations where they previously would not have been allowed.

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 change

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

NA

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

Regulatory Analysis

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?
Not adopting this change will result in continued difficulty in use of the exterior exit stair provisions.
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 was adopted by the ICC egress committee at the April 2024 Code Action Hearings by a vote of 14-0 and is unlikely to be overturned at the final action hearings and voting. Regardless of the ICC actions this is a significant improvement to the current code language.

***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: 8/12/2022

Revised: 6/6/2024

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 1028.5 Exit Discharge Access to Public Way

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.
IBC 1028.5 Access to Public Way

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

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

IBC 1028.5 Access to a public way. The exit discharge shall provide a direct and unobstructed access to a public way. The surface of the exit discharge to the public way shall be a maintainable surface able to be cleared free of ice and snow.

Exception: Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

1. The area shall be of a size to accommodate not less than 5 square feet (0.46 m²) for each person.
 2. The area shall be located on the same lot not less than 50 feet (15.24 m) away from the building requiring egress.
 3. The area shall be permanently maintained and identified as a safe dispersal area. The safe dispersal area shall be a maintainable surface able to be kept free and clear of ice and snow.
 4. The area shall be provided with a safe and unobstructed path of travel from the building having a maintainable surface able to be kept free and clear of ice and snow.
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?
Exit discharge to turf or landscaped areas are ineffective as means of egress during the six months when the ground can be covered with ice and snow.
2. Why is the proposed code change a reasonable solution?
It does not dictate specific surface requirements but does reinforce that means of egress must be unobstructed. In Minnesota, snow and ice can obstruct the means of egress
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. This is a code clarification specific to Minnesota climate. The model code already requires means of egress to be clear and unobstructed. The addition merely clarifies that snow and ice are obstructions.
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 arguments over whether it is acceptable for exit discharge doors to discharge to a stoop and then landscaping or turf.
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: 8/24/2022

Revised: 5/15/2024

Revised 6/6/2024

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 ~~1029.2~~ 1030.2 Assembly Main Exit

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 1029.2 Assembly main exit

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.

1030.2 Assembly main exit. A building, room or space used for assembly purposes that has an occupant load of greater than 300 ~~and is~~ shall be provided with a main exit. ~~that~~ The main exit shall be of sufficient capacity to accommodate not less than one-half of the occupant load. ~~but~~ Each exit capacity shall be not less than the total required capacity of all means of egress leading to ~~the~~ that exit. Where the building is classified as a Group A occupancy, the main exit shall front on not less than one street or an unoccupied space of not less than 10 feet in width that adjoins a street or public way. ~~In a building, room or space used for assembly purposes where there is not a well-defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total capacity of egress is not less than 100 percent of the required capacity.~~

Exception: In assembly occupancies, rooms or spaces having an occupant load of 300 or more where there is no well-defined main exit or where multiple exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that:

1. Some of the distributed exits shall be grouped to account for the total width required for the main exit and shall, as a group, count as one exit, and
2. The total number of exits shall comply with Section 1006.2.1 and subsections when the main exit grouping counts as one exit, and
3. The total width of egress is not less than 100 percent of the required width.

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 language is changed and is very unclear. Interpretation will lead to non-uniform application of this section across the state.
2. Why is the proposed code change a reasonable solution?
The revised language proposed represents the interpretation and application consistent with DLI/CCLD protocols and would result in no change to the application of this section.
3. What other considerations should the TAG consider?

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
No. The code change proposed will result in consistency with the current building code.
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?
Wide interpretation of when main exits are required and what it takes to avoid/disregard this section. Model code can be interpreted as optional. Where the occupant load is greater than 300 and a main exit is provided then follow these requirements. If a main exit is not provided, the rest is essentially moot.
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: 8/23/2022

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 1202.1 Ventilation- General

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 1202.1 Ventilation- General

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

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

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

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

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

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

1202.1 General. Buildings shall be provided with ~~natural ventilation in accordance with Section 1202.5~~ or mechanical ventilation in accordance with Minnesota Rules, Chapter 1346. For additional ventilation requirements, see Minnesota Rules Chapters 1322 and 1323 as applicable. Not less than one space within a dwelling unit shall comply with natural ventilation in accordance with Section 1202.5 in addition to complying with mechanical ventilation requirements.

Exceptions:

1. Buildings or portions thereof that are not intended for normal human occupancy, or where the primary purpose is not associated with human comfort.
 2. Group U occupancies.
 3. Spaces not defined as conditioned space by the Minnesota Energy Code may comply with Section 1202.5 Natural Ventilation.
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 clarify that natural ventilation is not viable in Minnesota. Natural ventilation relies upon being able to open doors and windows to fully ventilate a space at any time of year AND still maintain minimum temperatures. The result is oversizing of mechanical equipment to heat a space to accommodate design temperatures (-15°F in the twin cities) with the windows and doors open and maintain a minimum indoor temperature of 68°F throughout the habitable space.

The building code is the minimum standard, and there is currently no requirement that a dwelling unit is provided with openings to the outside. The code becomes the standard for the poorest of the poor who may not have the funds to air condition during summer months and need to be able to open a space to the outside to cool their dwelling.

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

The Minnesota Mechanical Code Section 401.3 requires ventilation when rooms or spaces are occupied. Minnesota Building Code Section 1204.1 requires that spaces intended for human occupancy shall be capable of being heated to a minimum indoor temperature of 68°F. Since Minnesota's weather requires heating 6 months of the year, it is reasonable to have the doors and windows closed while the heat is on and control the ventilation.

Operable windows in at least one habitable space is not unreasonable in order to ensure that everyone has access to outdoor air in at least one space.

3. What other considerations should the TAG consider?

Minnesota Energy Code

Cost/Benefit Analysis

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

No. The cost to provide a correctly sized mechanical ventilation system will be offset by the size reduction in correctly sized mechanical heating equipment when spaces are being naturally ventilated at design heating temperatures.

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 mis-use of natural ventilation as a means for space ventilation without adequately sizing mechanical heating systems to comply with code requirements, resulting in poor indoor air quality.

Without including a requirement for operable windows in at least one space within a dwelling unit, all dwelling units may be fitted with fixed glazing as a cost-saving measure making air conditioning mandatory. Those forced into minimum standard housing are typically financially challenged and would be required to air condition in order to be comfortable.
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.

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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 1202.2.1 Ventilated Attics and Rafter Spaces
(Smart Vapor Retarders)

Code or rule section to be changed: MR 1305

General Information

Yes **No**

- | | | |
|----------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| A. Is the proposed change unique to the State of Minnesota? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| B. Is the proposed change required due to climatic conditions of Minnesota? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| C. Will the proposed change encourage more uniform enforcement? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| D. Will the proposed change remedy a problem? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| E. Does the proposal delete a current Minnesota Rule, chapter amendment? | <input checked="" type="checkbox"/> | <input 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 1202.2.1 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.

Exception: The net free cross-ventilation area shall be permitted to be reduced to 1/300 provided ~~both~~ all of the following conditions are met:

1. In Climate Zone 6, a vapor retarder with a perm rating of 1.0 or lower under 30 percent or lower humidity conditions and having a perm rating of 5.0 or higher in 60 percent or higher humidity conditions is installed on the warm-in-winter side of the ceiling.
 2. In Climate Zones 6, 7 and 8, a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.
 3. At least 40 percent and not more than 50 percent of the required venting area is provided by ventilators located in the upper portion of the attic or rafter space. Upper ventilators shall be located not more than 3 feet (914 mm) below the ridge or highest point of the space, measured vertically, with the balance of the ventilation provided by eave or cornice vents. Where the location of wall or roof framing members conflicts with the installation of upper ventilators, installation more than 3 feet (914 mm) below the ridge or highest point of the space shall be permitted.
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?
More and more buildings in southern and central Minnesota are air conditioned during the warm humid summer months. The increase in the prevalence of air conditioning combined with the more recent increase in both temperature and humidity during the summer months increase the likelihood of condensation and wetting behind standard vapor retarders during summer conditions.
2. Why is the proposed code change a reasonable solution?
Smart vapor retarders can be high tech products or can be as simple and inexpensive as kraft paper backed insulation with sealed edges. Smart vapor retarders are an easy way to incorporate best practices for building science and building longevity.
3. What other considerations should the TAG consider?
Smart vapor retarders in walls within Climate Zone 6, Section 1404.3

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
No. The proposed describes a performance requirement that can be met with inexpensive materials which may already be incorporated into construction.
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?
Condensation problems in ceiling/attic spaces resulting in microbial growth, reduction in indoor air quality, and moisture damage to roof structural materials and ceiling materials.
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.

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CODE CHANGE PROPOSAL FORM

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Date: 8/23/2022

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 1202.4.2 Under floor ventilation in cold climates

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 1202.4.2
 - change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
 - delete language contained in the model code book? If so, list section(s).
 - delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
 - add new language that is not found in the model code book or in Minnesota Rule.
2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.
No

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

1202.4.2 Ventilation in cold climates. In ~~extremely cold climates~~ Climate Zone 6 and Climate Zone 7, ~~where a ventilation opening will cause a detrimental loss of energy, ventilation openings to the interior of the structure shall be provided~~ crawl spaces shall comply with one of the following:

1. Crawl spaces shall be thermally isolated from the building interior in accordance with the Minnesota Energy Code and ventilation shall be provided in accordance with Section 1202.4.3.1. Foundations adjacent to the crawl space shall be protected from frost assuming that the crawl space temperature is the same as the exterior temperature.
 2. Crawl spaces shall be included within the building thermal envelope and the space mechanically ventilated to the building interior per Section 1202.4.3.2.
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 term “extremely cold climate” is undefined in the building code.
2. Why is the proposed code change a reasonable solution?
Climate Zone 7 is termed by the energy code as “very cold”. The next climate zone north is considered “sub arctic”. It is reasonable to interpret that “very cold” is extreme and in effort to provide uniformity for ventilation requirements, it is reasonable to treat Climate Zone 6 “Cold” and Climate Zone 7 “Very Cold” as the same.
3. What other considerations should the TAG consider?
Minnesota Energy Code

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 of each ventilation option.
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 construction of underfloor crawl spaces that are poorly insulated, under ventilated, and contributors to poor indoor 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.

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Model Code: IBC 2024

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 1204.1 Lighting- General

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 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 checked="" type="checkbox"/> | <input 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 1204.1 General

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.

1204.1 General: Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section 1204.2 or shall be provided with artificial light in accordance with Section 1204.3. Exterior glazed openings shall open directly onto a public way or onto a yard or court in accordance with Section 1205. All dwelling units shall have not less than one habitable space that complies with the requirements of Section 1204.2 Natural light.

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 currently no requirement that a person's dwelling must be provided with any windows at all. Since the code is a minimum standard, at least one space with windows should be included in that standard for a person's dwelling. The minimum standard becomes the bottom threshold for the very poor.
2. Why is the proposed code change a reasonable solution?
Minnesota has long periods with very little daylight. Requiring that the minimum standard for someone's home includes at least one space with a window meeting minimum requirements is reasonable. It is not unreasonable that even the poorest of the poor among us would have some access to daylight in one of their living spaces.
3. What other considerations should the TAG consider?
Minimum natural ventilation requirements for not less than one space within a dwelling.
MBC 1202.1 General Ventilation.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
No. Most construction today already includes this because the housing market demands it, but as housing becomes more expensive and scarce, the minimum standards for reasonable habitation will become more critical.
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?
In effort to provide housing at what is perceived as affordable cost, the minimum standards will be pushed to their limits and housing will be constructed with minimal to no windows.
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.

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