24CCP_104

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Cody Fischer, Stephen Smith

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Telephone number: 507-213-0730

Firm/Association affiliation, if any:
Footprint Development (Cody Fischer)
Center for Building in North America (Stephen Smith)

Date: May 29, 2024

Model Code: International Building Code

Code or Rule Section: Minnesota Building Code

Topic of proposal: Single-exit apartment buildings

Code or rule section to be changed: 1006.3.3

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

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

Proposed Language

1. The proposed code change is meant to:

☑ change language contained the model code book? If so, list section(s).
Minnesota Building Code 1006.3.3

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

1006.3.3 Single exits.
A single exit or access to a single exit shall be permitted from any story or occupied roof where one of the following conditions exists:

1. The occupant load, number of dwelling units or sleeping units, and common path of egress travel distance do not exceed the values in Table 1006.3.3(1) or 1006.3.3(2).

2. Rooms, areas, and spaces complying with Section 1006.2.1 with exits that discharge directly to the exterior at the level of exit discharge are permitted to have one exit or access to a single exit.

3. Parking garages where the vehicles are mechanically parked shall be permitted to have one exit or access to a single exit.

4. Group R-3 and R-4 occupancies shall be permitted to have one exit or access to a single exit.

5. Individual single-story or multistory dwelling units and sleeping units shall be permitted to have a single exit or access to a single exit from each dwelling unit or sleeping unit, provided that both of the following criteria are met:

   5.1. Each dwelling unit and sleeping unit complies with Section 1006.2.1 as a space with one means of egress.

   5.2. Each sleeping unit and dwelling unit either:
   (a) has an exit that discharges directly to the exterior at the level of exit discharge; or
   (b) has an exit access outside the entrance door that provides access to at least two approved independent exits.

6. A single exit shall be permitted to serve in Group R-2 occupancies in buildings where the total number of stories does not exceed four, provided that all of the following conditions are met:
   6.1. There are four or fewer dwelling units per story.
   6.2. The exit only serves apartment house dwelling units.
   6.3. The exit stairway does not serve more than one-half story below the level of exit discharge.
   6.4. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.
   6.5. The travel distance from the entrance door of any dwelling unit to an exit does not exceed 35 ft.
   6.6. Travel distance measured in accordance with Section 1017 shall not exceed 125 feet.
   6.7. All openings between the exit stairway enclosure and the building are protected with self-closing door assemblies having a minimum 1-hour fire protection rating.
   6.8. All corridors serving as access to exits have a minimum 1-hour fire resistance rating.

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

   Section 1006.3.3 of the Minnesota State Fire Code would need to be changed with the same language.

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.)

   Housing demand in Minnesota's cities has grown, and societal concerns about sprawl have increased since the I-codes were developed. Minneapolis in particular is zoning for infill multifamily development on single-family lots, which the current requirement for two remote exits in even very small four-story buildings is not compatible with. In developing the International Building Code on which the Minnesota Building Code is based, the International Code Council has not generally considered the need to accommodate such development, instead being dominated by interests more focused on single-family residential, commercial buildings, and low-rise garden apartment and large-lot, mid-rise multifamily typologies. As such, we are proposing the adoption of a different model code section that is more compatible with small-lot multifamily development.

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

   Our proposed code section duplicates the requirements of NFPA 101 (30.2.4.6) and 5000 (equivalent language), which have been vetted through the National Fire Protection Association's national consensus process. Seattle and New York City have extensive experience with single-exit buildings up to six stories, and officials from those jurisdictions have stated that they have not encountered issues with fires. Vermont (through its adoption of NFPA 101, which is the inspiration for this code change, in lieu of IBC Chapter 10) and the consolidated City and County of Honolulu (through its adoption of Seattle's unique code section) also allow taller single-stair buildings than what is currently allowed by the IBC and Minnesota's current code. This code section is on par with what is allowed statewide in Vermont, and more conservative than what is allowed in New York City, Seattle, and Honolulu.

3. What other factors should the TAG consider?

   The current philosophy around egress in multifamily buildings was developed long before many modern fire protection features, from fire sprinklers to enclosed stair shafts to fire-rated gypsum board. Current code sections were developed with large, double-loaded corridor buildings in mind, and apply the same standards for number of exits to four-story buildings with 2,500-sq. ft. floor plates as they do to 30-story buildings with 25,000-sq. ft. floor plates. Fire death in this country, especially related to egress, is now limited almost exclusively to unsprinklered dwellings.

   The intent of this code change is to harmonize IBC 1006.3.3 with NFPA 101 30.2.4.6, below. If there are any items from the NFPA 101 section which are not covered either in our 1006.3.3 language or elsewhere in the IBC, please let us know – that would be an oversight and we would like to update our proposal to reflect that.

   30.2.4.6 A single exit shall be permitted in buildings where the total number of stories does not exceed four, provided that all of the following conditions are met:

   (1) There are four or fewer dwelling units per story.
   (2) The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with 30.3.5.
   (3) The exit stairway does not serve more than one-half story below the level of exit discharge.
   (4) The travel distance from the entrance door of any dwelling unit to an exit does not exceed 35 ft (10.7 m).
   (5) The exit stairway is completely enclosed or separated from the rest of the building by barriers having a minimum 1-hour fire resistance rating.
   (6) All openings between the exit stairway enclosure and the building are protected with self-closing door assemblies having a minimum 1-hour fire protection rating.

(7) All corridors serving as access to exits have a minimum 1-hour fire resistance rating.
(8) Horizontal and vertical separation having a minimum ½-hour fire resistance rating is provided between dwelling units.

Cost/Benefit Analysis

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

   For small lots, this proposed code change will reduce costs by roughly 7 percent, by reducing the amount of floor area that must be built to serve an equal amount of rentable space by the same amount. See here for some examples of floor plans which illustrate the point.

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.

   This code section will decrease costs for very small buildings.

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

   This code section will decrease costs for very small buildings.

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

   The proposed code change is simple and should not increase enforcement or compliance costs.

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?

   Developers and architects will be affected, in that they will be allowed to build/design multifamily buildings that are one story taller than currently allowed with a single stair, which will be especially impactful on smaller lots. The sprinkler industry will be affected, in that more sprinklered structures will become economically viable (Minnesota does not currently require sprinklers in single-family houses, and almost none are provided with them). The fire service will be affected, in that more structures within their service area will be sprinklered and built with modern materials. In very rare circumstances, the fire service may be called upon to fight fires that are not suppressed by sprinkler systems in small, four-story multifamily buildings with a single exit. Building code officials will be affected, in that they will have to learn to approve plans meeting our proposed compliance option.

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.

   In speaking with stakeholders while developing this code language, we were presented with two options to achieve our goals without modifying the code language: an alternative means and methods process, and presenting this code change to the International Code Council for inclusion in their 2027 model code. The former process is not realistic for small multifamily buildings, since the financial stakes are too low to justify costly and

uncertain discretionary processes – as general a rule, performance-based and other non-prescriptive compliance routes are only financially justifiable with on large, profitable projects. One of the co-proponents to this Minnesota Building Code proposal did present a code change proposal to the ICC in Orlando in April, and while it is working its way through the process, a number of opponents suggested this code change would be better left to cities and states who feel they have an interest in allowing such buildings. Furthermore, even if the ICC does adopt our proposal for the 2027 edition, based on the lag in state adoptions, Minnesota would likely not even potentially adopt the language until the late 2020s – an unacceptably long delay in our view given the urgency of the housing and climate crises, and the desire by localities (like Minneapolis) to allow the development of more multifamily housing.

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

The cost of not adopting this code change is in continuing to make it very difficult to develop small multifamily buildings in Minnesota. Cities like Minneapolis which seek to allow small multifamily development on single-family and small commercial lots will be practically limited to three stories, working at cross-purposes with land use goals, and also making it highly unlikely that any project will be large enough to carry the financial burden of an elevator, making such structures inaccessible to those with disabilities, to the state's large and growing senior population, and to families with young children.

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

No.

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

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

Hello TAG Members,

I am a parent of young children, Minneapolis resident, and zoning reform advocate. I want to live in a city that my children can afford to live in when they are grown, and in a climate that isn't burning our forests to the ground. One of the vital ways to help achieve our climate goals is to build more homes within cities. And one way we can do that is to allow cities to build taller homes on smaller lots.

I'm writing to you in support of the proposal from the Center for Building in North America to amend the Minnesota Building Code and allow buildings of at least four stories to be built with a single point-of-access.

As a part of my zoning advocacy I learned that Minneapolis currently requires 15-20 ft sideyards for 6 story buildings in residential areas. Most residential lots are about 40 feet wide. This is due to the fact that they assume that all buildings above 3 stories MUST be a double loaded corridor building and take up 8 or more standard lots. 6 story buildings in commercial areas of the city are not required to have any setbacks. This regulation is clearly meant to discourage apartments, due to the format required by the building code.

However, Seattle (1977) and New York City (late 1800s) have allowed point access blocks or single egress apartment buildings of 6 stories in height for decades with no discernable difference in safety between those buildings and dual egress buildings. These homes almost always have close neighbors or share a wall with the adjacent property. Many of these homes are on lots less than 40' wide.

The City and County of Honolulu have recently adopted Seattle's unique code section which allows 6 stories, 4 units per story, and two blocks per property if there are pressurized stairs and sprinklers. In 2023 three state legislatures passed requirements that code councils recommend updates that allow for single stair buildings up to 6 stories. In April 2023, Washington state legislature passed SB 5491, in June 2023, the Oregon state legislature passed HB 3395, and in October 2023, California state legislature passed AB 835. The state of Vermont allows point access blocks up to four stories as they have already adopted NFPA 101.

Internationally, point access blocks are a universal building type frequently at 6-8 stories without sprinklers and much higher (14-19 stories as in Berlin, Germany) with specific fire protections.(https://secondegress.ca/Jurisdictions) These building types are safe, and common in countries with as good or better life fire safety as the U.S.

Please adopt this change and allow more infill to help us fight climate change in Minnesota through better land use.

Sincerely,

Brit Anbacht

they/them

Abundant housing, low-carbon transportation, and sustainable land use

Sustain Saint Paul

PO Box 16164, Saint Paul, MN 55116
www.sustainstpaul.org | info@sustainstpaul.org

Our Mission

Sustain Saint Paul champions abundant housing, low-carbon transportation, and sustainable land use in the City of Saint Paul through education, advocacy and political action, to ensure a more just and equitable city for all current and future residents.

Wednesday, June 5th, 2024

To the Commercial Building Code Technical Advisory Group,

Sustain Saint Paul **supports** the proposal from the Center for Building in North America to amend the Minnesota Building Code and allow buildings up to four stories to be built with a single stair means of egress .

Sustain Saint Paul is a volunteer-driven advocacy organization that champions abundant housing, low-carbon transportation, and sustainable land use in the City of Saint Paul. Our members believe that Saint Paul can become a more environmentally sustainable, affordable, equitable, and financially resilient city by building more homes in every neighborhood. We have worked to remove the barriers that needlessly inhibit the construction of much-needed housing in Saint Paul– particularly those barriers that prevent small-lot housing development driven by local developers. For example, an ambitious slate of zoning amendments that legalized 2-4 unit dwellings throughout the city in 2023, and the citywide elimination of minimum parking requirements in 2021.

The Minnesota Building Code's two-stair requirement over 3-stories unnecessarily constrains small-lot infill development in Saint Paul. The requirement effectively requires that a greater amount of a lot's buildable area be dedicated to hallways and staircases, and thus increases the rent the developer would need to charge to make the project financially viable. In most cases, this renders small-lot infill projects unviable, and stunts the development of locally-driven housing production. In the few instances where such projects do work financially, the rents are higher than they would need to be if less floor space was devoted to common hallways.

The two stair requirement also limits the development of homes spacious enough for large households, which are in short supply in Saint Paul. This requirement has made the double-loaded corridor, with studio and 1-bed units arrayed on either side of a long hallway, the mainstay of Minnesota multifamily development. The geometry

of these buildings make larger units with more bedrooms nearly impossible to build, and impossibly expensive to rent.. In buildings with a single stair means of egress, larger units with more bedrooms become feasible.

By utilizing the relevant sections of the National Fire Protection Association's (NFPA) model code, the proposed 1006.3.3 code change represents a modest 1-story increase in height from the current Minnesota Building Code while adding additional measures to ensure the safety of both occupants and first responders.

Minnesota has previously substituted NFPA for ICC model code provisions in our building codes. Our state's unique housing shortage (particularly in the form of multifamily housing with larger, family-oriented units located in existing urban neighborhoods), climate risks, and climate action plans are more than sufficient justification to support a substitution in this particular section of the code.

Legislation recently passed by the state legislature provided DLI funding to study how single means of egress buildings like these can be safely built up to 6 stories in height. That study is due by December 2025, and will provide the basis for exploring how Minnesota can allow these buildings beyond 4-stories in height. In the interim, our climate and housing challenges make it imperative that Minnesota take the intermediate step of adopting the language provided by NFPA's model code.

Seattle and New York City have allowed such buildings (up to six stories) for several decades, with good safety outcomes, as have many other countries across the world.

We urge you to support this proposal!

Sincerely,

Sustain Saint Paul Board of Directors

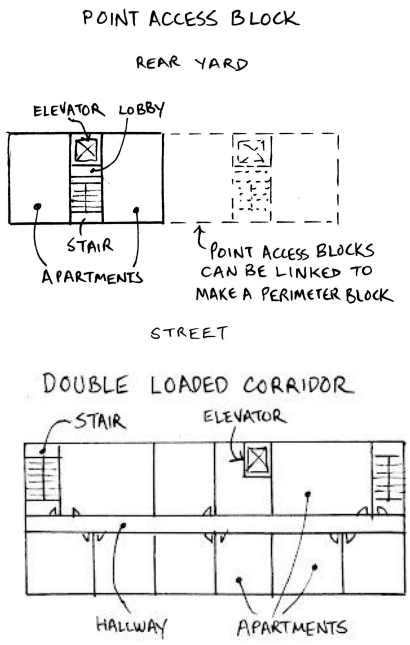
Neighbors for More Neighbors SUPPORTS adoption of NFPA 101 (30.2.4.6) and 5000

Neighbors for More Neighbors is an organization dedicated to a vision of housing abundance where every Minnesotan can find a home they love and can afford in any community they choose. We have supported common sense **changes to zoning in Minneapolis that created a mere 1% increase in rent over the last five years[1] compared to a 14% increase across Minnesota in the same period**. The research shows that this is due, at least in part, to an increase in supply of homes. We believe that building code reform is a vital step in the journey towards housing abundance.

Minnesota has a pressing housing crisis of more than 100k families[2] who cannot find a home they can afford, and often cannot find a home at all. **We urgently need to act to make increasing the supply of homes easier, cheaper, and safer by legalizing more homes in the form of Point Access Blocks of at least 4 stories in height. Neighbors for More Neighbors supports this proposed code change and urges you to adopt it.**

Mid-rise (around 4-8 story) multi-family buildings can provide high-quality homes for families, particularly in urban and suburban areas where land is more expensive. But building code requirements make mid-rise multifamily housing difficult and cost-prohibitive to develop.

Minnesota building code currently requires every mid-rise building to have what's called a double-loaded corridor. This type of building requires every unit in a multifamily dwelling to have access to two sets of stairs. These almost always look like a single hallway with apartments on either side of the building. And the format typically only allows 1 bedroom apartments in the middle, and 2 bedrooms on the corners due to a need for window egress. This creates a demonstrated shortage of family sized 2-4 bedroom homes seen in the **2% decrease in 1 bedroom** home prices in Minneapolis and a **14% increase for 3 bedroom** homes[3] over the last year.



Point Access Blocks (dual aspect) vs. Double loaded corridors (single aspect)by Alfred Twu
https://ordinaryhomes.blogspot.com/2023/09/point-access-block.html

Point Access Blocks allow more windows and balconies, more efficient floor plans, larger family sized units, and better energy efficiency. They allow builders to shift space now mandated for corridors into a third or fourth bedroom. This lowers housing costs for families and builds better quality homes, while reducing building and maintenance costs. Point Access Blocks also allow for better infill development because they fit on smaller land parcels. By encouraging sprinklered 4+ story apartments rather than large single family un-protected buildings on standard lots this code change can also help to improve Minnesota's fire safety.

We support the proposal proposed by Cody Fischer and the Center for Building in North America to amend the Minnesota Building Code and allow buildings of at least four stories to be built with a single point-of-access.

Sincerely,
Neighbors for More Neighbors
Board Members:
Zachary Wajda, Janne Flisrand, Matt Lewis, Linnea Goderstad, Anna Nelson, Adam Wysopal, Anton Schieffer, Brit Anbacht, Connor Carroll

[1] Minneapolis Land Use Reforms Offer a Blueprint for Housing Affordability | The Pew Charitable Trusts (pewtrusts.org)
[2] Up For Growth | 2023 Housing Underproduction™ in the U.S. - Up For Growth
[3] HousingLink - Minneapolis Rental Housing Briefs

Resources/More Information:

- Minneapolis Land Use Reforms Offer a Blueprint for Housing Affordability | The Pew Charitable Trusts (pewtrusts.org) - https://www.pewtrusts.org/en/research-and-analysis/articles/2024/01/04/minneapolis-land-use-reforms-offer-a-blueprint-for-housing-affordability

- Up For Growth | 2023 Housing Underproduction™ in the U.S. - Up For Growth - https://upforgrowth.org/apply-the-vision/2023-housing-underproduction/

- HousingLink - Minneapolis Rental Housing Briefs
- The Second Egress on what kinds of point access blocks are allowed internationally: https://secondegress.ca/Jurisdictions

- Why we can't build family-sized apartments in North America — Center for Building in North America: https://www.centerforbuilding.org/blog/we-we-cant-build-family-sized-apartments-in-north-america
- Ordinary Homes - Point Access Blocks history and details https://ordinaryhomes.blogspot.com/2023/09/point-access-block.html
- Larch Labs Policy Brief on Point Access Blocks https://www.larchlab.com/wp-content/uploads/2023/01/Larch-Lab-PAB_Policy-Brief.pdf

June 19, 2024

To the Commercial Building Code's Technical Advisory Group,

We're writing in support of having the TAG approve and recommend for CCAC consideration the proposal from the Center for Building in North America to amend the Minnesota Building Code and allow buildings up to four stories to be built with a single point-of-access.

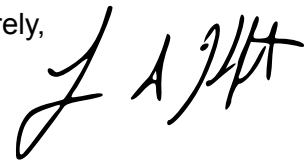
We authored a bill this past session on single staircase buildings (HF3351/SF3538) up to six stories. This bill eventually passed as a study of buildings up to six stories in height, with the study due by December 2025. Given the significant benefits of these types of buildings, and the fact that there is already a national code for 4-story buildings, we think this proposal merits strong consideration. Some of the benefits of single staircase buildings are:

- More efficient use of the building footprint for living space, which can help with housing affordability
- Typically every unit has walls facing two directions, improving cross-ventilation and reducing lighting needs, which reduces energy usage.
- More flexible floor plans, allowing for multiple bedroom, family size units.
- More flexibility in how buildings can be situated on lots.

The proposal to use sections of the National Fire Protection Association's (NFPA) model code (1006.3.3) would result in only a 1-story height increase from Minnesota's current building code while adding measures to ensure the safety of both occupants and first responders. Minnesota has previously leveraged NFPA in our state building codes, so there is precedent for using this model code.

Given that single staircase buildings can address both our urgent MN housing shortage AND the urgent need for climate action, we'd ask you to strongly consider the Center's proposal. Every year, every month, that we don't allow single staircase buildings over three stories results in many missed opportunities for more affordable, family-sized, energy efficient housing.

Sincerely,



State Representative Larry Kraft

State Senator Lindsey Port

To the Commercial Building Code's Technical Advisory Group,

The Sustainable Developer Collaborative (SDC) provides an ecosystem for 'missing middle' developers and related fields to share knowledge and cultivate meaningful relationships with one another in an effort to more effectively bring healthy, neighborly-scaled, high-performance buildings to cities throughout Minnesota.

Many SDC members have been involved with single stair means of egress projects and have directly observed benefits over a '2 stair, double loaded corridor approach', including:

- More efficient use of resources and space, especially at infill, urban sites.
- Promoting 'missing middle' buildings at a size and dwelling unit count that both can blend into existing urban fabric and foster community building where neighbors are more likely to interact with one another.
- Increased potential for windows on multiple exterior walls, which provide more (and better balanced) daylight, cross ventilation, and access to the outdoors.
- Reduced square footage for common circulation hallways that enables:
    - A higher percentage of occupiable square footage that translates to lower maintenance and operational costs as well as lower project building costs. Both of which can help reduce housing costs.
    - Larger dwelling units, which can better accommodate more bedrooms for families.

In concert with the above benefits and as witnessed in other cities throughout the U.S. that have already allowed 4 stories or more and upheld life-safety, SDC members listed below (and cc'd) support the proposal by Cody Fischer and the Center for Building in North America to amend the Minnesota Building Code and allow buildings of at least four stories to be served by a single stair means of egress.

Sincerely,

Adam Bradley Jonas adambradleyjonas@gmail.com
Sustainable Developer Collaborative Co-Founder

Jay Rajaratnam jay.rajaratnam@gmail.com
Sustainable Developer Collaborative Co-Founder

Sandra Rieger sandra@sandrariegerandco.com
Sustainable Developer Collaborative Co-Founder

Charles Burdick cburdick@streetfront.us
Sustainable Developer Collaborative Member

Jim Kumon jim@heirloomproperties.net
Sustainable Developer Collaborative Member

Tan Nguyen tan@nguyenarchitects.com
Sustainable Developer Collaborative Member

Alex Zikmund jazikmund@hotmail.com
Sustainable Developer Collaborative Member

Jacob Zikmund jzikmund@doublejackdesign.com
Sustainable Developer Collaborative Member

Bryan Ramirez bryanramirezdesign@gmail.com
Sustainable Developer Collaborative Member

SUSTAINABLE SDC DEVELOPER COLLABORATIVE

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_87

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: 4-26-2024
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 7511.903, Subpart 6, Section 903.4

Is the subject matter of the proposed change also regulated by the Minnesota Building Code?
YES: ☒ NO: ☐ UNKNOWN: ☐
***If yes, a building code change proposal must also be completed and submitted to the Minnesota Department of Labor and Industry – Construction Codes and Licensing Division.*

General Information

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

Proposed Language

1. The proposed code change is meant to:

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

☒ Change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
MR 7511.903, Subpart 6, Section 903.4

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

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

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

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

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

903.4 Sprinkler system supervision and alarms. Valves controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

Exceptions:

1. *Automatic sprinkler systems* protecting one- and two-family *dwellings*.
2. Limited area sprinkler systems in accordance with Section 903.3.8.
3. *Automatic sprinkler systems* installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the *automatic sprinkler system*, and a separate shutoff valve for the *automatic sprinkler system* is not provided.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.
8. For existing sprinkler systems, monitoring is required in accordance with the code in effect at the time of installation or when the number of sprinklers is 100 or more, whichever is the most restrictive.

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 1305.0903, Section 903.4. However, as this amendment is specific to existing installations only, it's possible there's no need to maintain this current amendment in the state building code. This will be discussed with the 1305 TAG.

Need and Reason

1. Why is the proposed code change needed?
   This change is necessary to clarify the intent regarding when existing sprinkler systems are required to be electrically supervised a fire alarm control unit. The intent for existing sprinkler systems having 100 or more sprinklers to be electrically supervised is to ensure existing systems installed under a former code that did not have a supervision requirement are monitored for water supply integrity, valve tampering, and waterflow conditions. However, the current language is lacking sufficient detail because, as written, it could be interpreted to allow some existing supervised sprinkler systems to forgo monitoring.

   Example: An owner of an existing sprinkler system installed in 2016, where the code in effect at the time of installation required monitoring for systems having 20 or more sprinklers, may interpret Section 903.4, Exception 8, to mean their system, which has only 80 sprinklers, is no longer required to be monitored and therefore the monitoring service required for supervised systems under Section 903.4.1 may be discontinued.

   This change clarifies that if an existing system was required to be electrically supervised in accordance with the code in effect at the time of installation, then that monitoring must be maintained.

2. Why is the proposed code change a reasonable solution?
   The change is reasonable as it only clarifies the intent of an existing amendment. There is no substantive change to the requirements.

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 costs. Clarifying language, 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?
   Local fire and building code officials, 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. Clarifying language, only.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
   None.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
   By not adopting the proposed change, there may be cases where property owners or operators mistakenly believe they're able to discontinue monitoring services for building sprinkler systems. This could result in sprinkler waterflow conditions going unnoticed for extended periods of the time when the building is not occupied (e.g., after business hours), causing extensive water damage to the property. The loss of monitoring can also allow sprinkler water supply valves to be closed without anyone's knowledge, completely negating a required fire- and life-safety system and jeopardizing the safety of occupants.

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.*

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_80

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: Tom Jenson, Code Specialist, SFM
Date: 4-26-2024
Email address: Thomas.Jenson@state.mn.us
Telephone number: 651-201-7221
Organization/Association/Agency, if any: DPS – State Fire Marshal

Code or rule section to be changed (include code or rule title and edition year): 7511.0903

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).

☒ Change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
7511.0903, 1305.0903

☐ 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.

   903.4.4 Valve security. All valves controlling water supplies for automatic sprinklers shall be locked or secured in the open position by methods approved by the fire code official.

   Exception: Valves located in a room or space when access is limited to essential personnel only.

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?
   Typically fire protection contractors secure valves controlling water supply to sprinklers and standpipe systems with heavy chain and lock. First in fire crews do not carry bolt cutters as part of their equipment cache. To shut down the control valve requires returning to the apparatus for tools or retrieving keys from the fire department lock box. After a fire is out or in case of a broken sprinkler, any delay in shutting down water flow leads to further property damage. This change will allow fire code officials to allow the use of heavy-duty tie wraps to secure the valve and quickly removed with a knife or other tool in their immediate possession and shut down water flow.

2. Why is the proposed code change a reasonable solution?
   The use of a plastic tie wrap provides the same type of security to deter people from closing the control valve.

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

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

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
   No

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

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
   Fire protection contractors, fire code 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.
   No

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
   None

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

   Continued use of chain and lock delaying shut down of water flow leads to additional water damage. This can add to the negativity of installing sprinklers and the perception of water damage.

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.*

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_79

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: Tom Jenson, Code Specialist SFM
Date: 4-29-2024
Email address: Thomas.Jenson@state.mn.us
Telephone number: 651-201-7221
Organization/Association/Agency, if any: DPS – State Fire Marshal

Code or rule section to be changed (include code or rule title and edition year): 7511.0905 Sudd 2

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).

☐ 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).
7511.0905 Subd 2

☐ 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.
   Yes. 299F.011 Subdivision 4

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.

   ~~**905.3.2.1 Group A exhibition.** Class I automatic standpipes shall be provided in Group A-3 occupancies where the floor area used for exhibition exceeds 12,000 square feet (1,115 m2).~~

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.
   1305.0905

Need and Reason

1. Why is the proposed code change needed?
   Standpipe requirements for Group A occupancies with exhibition space first appeared in the 1979 Uniform Building Code for areas over 5,000 square feet (sf). In 1998, the first Minnesota amendment to increase the size to over 12,000 sf was adopted into the 1997 Minnesota State Building Code and Minnesota Uniform Fire Code. This requirement was not brought forward with the merger of several codes into the 2000 International Building and Fire Codes. Minnesota continued with the amendment, modifying it to fit the format of the new codes. However, the 2003 Statement of Need and Reasonableness (SONAR) does not provide any rationale as to why the amendment was continued.

Due to the lack of a rationale for the amendment and because any significantly sized Group A-3 occupancy now requires sprinkler protection, the proposal is to delete the amendment in deference to the standpipe provisions of the model code.

2. Why is the proposed code change a reasonable solution?
   Minnesota Statute 326B.02 Subdivision 6 requires the State Fire Marshal to adopt a model code. This coincides with Statute 326B.106 Subdivision 1 for the Minnesota Building Code. This requirement is not unique to Minnesota and if necessary, should be addressed through the model code process.

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.
   Decrease removing a requirement not found in the model codes.

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

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
   No

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

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
   Fire and building code officials, owners, contractors, and architects.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
   None

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
   Costs to install standpipes in exhibition halls not required by the model codes.

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.
   None

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

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_78

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: Tom Jenson, Code Specialist SFM
Date: 4-24-2024
Email address: Thomas.Jenson@state.mn.us
Telephone number: 651-201-7221
Organization/Association/Agency, if any: DPS – State Fire Marshal

Code or rule section to be changed (include code or rule title and edition year): 7511.0905, 1305.0905

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).

☒ Change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
7511.0905, 1305.0905

☐ 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.

905.3.10 Group R-2 occupancies; small hose connections. In Group R-2 occupancies not required to have standpipes per Section 905.3, s~~S~~mall hose connections shall be installed in Group R-2 occupancies three ~~or more~~ stories in height where any portion of the building's interior area is more than 200 feet (60,960 mm) of travel, vertically or horizontally, from the nearest point of fire department vehicle access. Small hose connections required by this section shall comply with the following:

1. Supply one 1-1/2-inch (38 mm) fire hose valve at each floor level or intermediate stair landing in each required and enclosed stairway.
2. The water for the small hose connections shall be supplied separately from the sprinkler system protecting that area so that the small hose connections are still functional if the water supply to the sprinkler system is shut down following fire extinguishment.
3. The piping shall be a minimum of 1-1/2-inch (38 mm).
4. The water shall be supplied from a wet-pipe sprinkler system only.
5. The piping shall be comprised of metallic piping and hose valve connections.

Permanent signage shall be required which reads "Fire Department Overhaul Hose Connection" at each connection in the building. ~~If a separate standpipe system is provided, a sign shall also be provided at the exterior fire department connection.~~

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?
   Clarify that these are only required in buildings not required to be provided with standpipes.

2. Why is the proposed code change a reasonable solution?
   Provides minimal fire hose connections for three story buildings where distances from the fire apparatus vehicles are extensive.

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

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 code officials and 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 the 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 amongst affected parties and misinterpretation of the original intent of the rule. In addition, the model codes addressed the travel distance from the apparatus to upper stories by now including four story buildings needing standpipes.

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.
   None

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

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_77

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: Tom Jenson, Code Specialist SFM
Date: 3-28-2024
Email address: thomas.jenson@state.mn.us
Telephone number: 651-201-7221
Organization/Association/Agency, if any: DPS – State Fire Marshal

Code or rule section to be changed (include code or rule title and edition year): 7511.0906

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).
IFC 906.1

☒ Change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
7511.0906

☐ 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.

906.1 Where required. Portable fire extinguishers shall be installed in the following locations:

1. In all Group A, B, E, F, H, I, M, R-1, R-2, R-4, and S occupancies.

Exceptions:

1. In Group E occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, fire extinguishers shall be required only in laundry and soiled linen rooms, boiler and furnace rooms, mechanical and electrical rooms, garages, stages, projection booths, shops, laboratories, kitchens, locker rooms, custodial closets, trash-collection rooms, storage rooms greater than 100 square feet, and similar areas.
2. In Group S parking garages, fire extinguishers shall only be required at stairways and elevator lobbies.

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

Minnesota Department of Public Safety
State Fire Marshal Division

1. Why is the proposed code change needed?
   Vehicle fires inside parking ramps is one of the most dangerous fires to fight with extremely toxic smoke produced where one breath by an unprotected person could be their last breath. Placing fire extinguishers throughout parking ramps encourages the public to use them. In addition, many ramps are now automated with no personnel on site. Fire extinguishers are often stolen and/or used as a form of vandalism or projectile.

2. Why is the proposed code change a reasonable solution?
   It is better to locate the fire extinguishers in a stairway or elevator lobby moving the public away from the fire to an exit and then they can decide if it is worth the risk. Most vehicles involved in a fire are not repairable.

   Comments from MAC Fire Marshal: Portable fire extinguishers for untrained people are meant to extinguish a small controllable fire, when they can safely do so, not a vehicle fire. We have taught people for decades that the first thing to do is to ensure you have an exit path and to exit the area. Placing fire extinguishers at or near exits provides people the option, exit the area and call 911, or call 911 and safely use the fire extinguisher on small fires, but always maintain your exit and escape path.

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

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
   It will most likely reduce costs to the owner due to not having to replace stolen extinguishers.

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

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
   No

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

Regulatory Analysis

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

Owners. No anticipated impact on fire extinguisher companies.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
   None

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
   None

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

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.
   None

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

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_76

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: Tom Jenson, Code Specialist SFM
Date: 4-11-2024
Email address: Thomas.Jenson@state.mn.us
Telephone number: 651-201-7221
Organization/Association/Agency, if any: DPS – State Fire Marshal

Code or rule section to be changed (include code or rule title and edition year): 7511.0906

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).

☒ Change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
7511.0906

☐ 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.
144G.45 for assisted living facilities added language for fire extinguishers in Group R-3 homes that were not required in the MSFC at the time the statute was enacted.

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.

906.1 Where required. Portable fire extinguishers shall be installed in the following locations:

7. ~~R-3 occupancies used as family day care, group family day care, foster care, adult family day services, and residential hospices.~~ Group R-3 and R-4 occupancies licensed as a care facility as defined in Table 202.1. In such occupancies, as an alternative to the provisions of Section 906.6, where approved by the fire code official, portable fire extinguishers may be mounted in approved locations that are obstructed from view provided they are accessible to care providers.

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

Need and Reason

1. Why is the proposed code change needed?
This rule has required portable fire extinguishers in licensed Group R-3 residential occupancies. The change adds all licensed care facilities as defined in Table 202.1. In

addition, it allows portable fire extinguishers to be mounted out of site of residents and accessible to care providers.

2. Why is the proposed code change a reasonable solution?
   It expands the requirement to all licensed care facilities including the newly licensed assisted living facilities to match requirements in Minnesota Statute 144G.45 Subdivision 2 (2). For resident and care provider safety reasons, it is better that the fire extinguishers are located out of site, such as a front closet, but must be mounted in compliance with Section 906.7.

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, already required by statute and rule.

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

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
   No

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

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
   None as already required by existing statute and rule.

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.
   None

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?
   None

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.
   None

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

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_84

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: 5-1-2024
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 7511.0907, MR 7511.1103, and MR 1305.0907

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).

☒ Change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
MR 7511.0907, MR 7511.1103, and MR 1305.0907, including Subsections 907.2.1.1, 907.2.3.1, 907.2.4.1, 907.2.5.1, 907.2.6.1.1, 907.2.6.2.1, 907.2.6.3.1, 907.2.6.4.1, 907.2.8.1, 907.2.9.1.1, 907.2.9.2.1, 1103.7.1.2, 1103.7.2.2, 1103.7.4.2, and 1103.7.5.2.

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

   This proposal is to add 'elevator equipment rooms' to the list of areas required to have automatic fire detection under the various initiation subsections found in Sections 907.2 for new buildings and 1103.7 for existing buildings. Including 907.2.1.1, 907.2.3.1, 907.2.4.1, 907.2.5.1, 907.2.6.1.1, 907.2.6.2.1, 907.2.6.3.1, 907.2.6.4.1, 907.2.8.1, 907.2.9.1.1, 907.2.9.2.1, 1103.7.1.2, 1103.7.2.2, 1103.7.4.2, and 1103.7.5.2.

   Here's an example:

   907.2.1.1 Initiation. Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be installed in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, elevator equipment rooms, shops, kitchens, trash-collection rooms, storage rooms, and similar areas.

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 1305.0907

Need and Reason

1. Why is the proposed code change needed?
   In buildings that require a fire alarm system per Section 907.2 or 1103.7, both SFM and DLI/CCLD have historically required fire alarm system detection in elevator equipment rooms based on the "…and similar areas" qualifier in the respective initiation subsections. However, it's acknowledged that local jurisdictions may not necessarily have a similar interpretation, and thus allowing elevator equipment rooms to be without automatic fire detection for the purposes of early notification to occupants and emergency services.

   In buildings protected by automatic fire alarm systems, it's important that building occupants receive early notification of a potential fire condition within rooms or areas not normally occupied and where a fire could develop and progress unnoticed. This is the rationale behind the list of locations requiring automatic fire protection. The early warning via the fire alarm evacuation signal is intended to provide occupants sufficient time for evacuation before the situation becomes hazardous. It also enables a timelier fire department response and reduces the potential of fire extending to other areas of the building. Further, the need for detection in elevator equipment rooms is even more critical because such rooms are prohibited from containing fire sprinklers.

2. Why is the proposed code change a reasonable solution?
   This proposal simply clarifies the intent that elevator equipment rooms are to be equipped with fire detection when located in buildings required to have a fire alarm system pursuant to Section 907.2 or 1103.7. It does not add a new requirement.

3. Is there additional data or information that should be considered?
   This change proposal was coordinated with DLI/CCLD building plan review and elevator code staff members.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
   No change in costs – 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/fire alarm industries, 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?
   N/A – clarification only. Not a new requirement.

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

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. This change involves a current MN Rule.

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. Clarification only. Not a new requirement.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
   Without adopting the proposed rule change, design professionals, fire alarm system designers, and local code officials may erroneously interpret this section to not require fire detection in elevator equipment rooms because such areas are not specifically listed as one of the examples. This could allow for a fire to grow undetected, which may pose a life-safety hazard to building occupants and increase the potential for fire to extend to other areas of the building before extinguishment attempts can be made by the responding fire department. Further, by not adopting this proposal there will continue to be inconsistent enforcement among various jurisdictions.

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

Minnesota Department of Public Safety
State Fire Marshal Division

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

Updated July 2022

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_86

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: 5-7-2024
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 7511.0907, Subpart 8, Section 907.2.6 and MR 1305.0907, Section 907.2.6

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).

☒ Change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
MR 7511.0907, Subpart 8, Section 907.2.6, and MR 1305.0907, Section 907.2.6

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

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

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

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

907.2.6 Group I, general. A fire alarm system shall be installed in accordance with Sections 907.2.6.1 through 907.2.6.4.2 in Group I occupancies.

907.2.6.1 Group I-1 occupancies, general. A manual and automatic fire alarm system shall be installed in Group I-1 occupancies in accordance with Sections 907.2.6.1.1 through 907.2.6.1.3.

907.2.6.1.1 Initiation. Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be installed in laundry and soiled linen rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, custodial closets, trash-collection rooms, storage rooms, lounges, gift shops, and similar areas. Automatic smoke detectors shall be provided in corridors and areas that are open to corridors.

Exception: Manual fire alarm boxes in ~~patient~~ sleeping areas of Group I-1 occupancies shall not be required at exits if located at ~~all nurses' stations or other~~ constantly attended staff locations, provided such fire alarm boxes are visible and continuously accessible and provided that travel distances required by Section 907.4.2 are not exceeded.

907.2.6.1.2 Notification. Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal. In addition, activation of the fire

alarm system shall immediately transmit an alarm to an approved central station or remote station service.

~~**Exceptions:**~~

~~1. In lieu of audible notification appliances, visible notification appliances shall be allowed to be used in critical care areas.~~

~~2. Where occupants are incapable of evacuating themselves because of age, physical/mental disabilities or physical restraint, only the attendants or other personnel required to evacuate occupants from a zone, area, floor, or building shall be required to be notified. This notification shall include means to readily identify the zone, area, floor, or building in need of evacuation.~~

907.2.6.1.3 Sleeping room smoke alarms. Smoke alarms shall be installed in resident sleeping rooms in accordance with Section 907.2.10.2.

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.
MR 1305.0907, Section 907.2.6

Need and Reason

1. Why is the proposed code change needed?
The first change removes 'nurses' stations' from the exception to manual fire box locations in Section 907.2.6.1.1 as Group I-1 occupancies typically do not contain such locations. Thus, the mention of nursing stations is not needed and may cause confuse the reader.

The second change deletes the 2 exceptions in Section 907.2.6.1.2 which requires a general evacuation signal to notify all building occupants of a fire alarm condition. Exception 1 allows visible notification only in critical care areas; however, such areas do not exist in Group I-1 occupancies, and therefore Exception 1 should be deleted. Exception 2 applies to occupants who are incapable of self-preservation, where only those personnel responsible for evacuating occupants need be notified of a fire alarm signal. However, by definition both I-1, Condition 1 and Condition 2 occupancies cannot have residents who are incapable of self-preservation. Such care facilities would likely be classified as Group I-2. As such, exception 2 does not apply to Group I-1 and thus should be deleted.

These exceptions do not apply to Group I-1 occupancies, and therefore may cause confusion, resulting in misinterpretation and misapplication of fire alarm system requirements. It would pose a fire- and life-safety hazard to allow staff-only fire alarm notification in Group I-1 occupancies where constantly attending locations are rare and staff are limited and incapable of affecting rapid notification of building occupants. Since occupants are capable of evacuation with limited to no assistance in Group I-1

occupancies, fire alarm activation must initiate a general evacuation signal that notifies all building occupants of a potential fire condition.

2. Why is the proposed code change a reasonable solution?
   This change is reasonable because it deletes language that does not apply to Group I-1 occupancies and therefore may cause confusion, resulting in misinterpretation and misapplication of fire alarm system requirements.

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 is cost-neutral, as it only seeks to prevent a misapplication of the fire alarm provisions by deleting exceptions for conditions that don't exist in Group I-1 occupancies.

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, fire alarm system contractors, owners/operators of assisted living facilities, group homes, congregate care facilities, half-way houses, board & care homes.

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?
   No additional costs.

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 cost changes.

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 adopting this proposed rule change, exceptions intended to apply to Group I-2 occupancies will remain within the Group I-1 section. Thus, allowing confusing and non-sensical language to remain, leaving the potential for misapplication of the code. It would pose a fire- and life-safety hazard to allow staff-only fire alarm notification in Group I-1 occupancies where constantly attending locations are rare and staff are limited and incapable of affecting rapid notification of building occupants. Since occupants are capable of evacuation with limited to no assistance in Group I-1 occupancies, fire alarm activation must initiate a general evacuation signal that notifies all building occupants of a potential fire condition.

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.*

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_85

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: 4-26-2024
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): MN Rules 7511.0907.3, Subpart 15a.

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).

☒ Change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
7511.0907.3, Subpart 15a

☐ 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.

   907.3 Fire safety functions. Automatic fire detectors required by Section 907.2 and Chapter 11 are to activate notification appliances in accordance with those sections. When automatic fire detectors are installed for other fire safety functions, they shall perform the intended function upon activation. When automatic detectors are installed for fire safety functions and the building has a fire alarm system required by Section 907.2, the detectors shall activate supervisory signals at the fire alarm control panel or at a constantly attended location. When the building does not have a fire alarm system required by Section 907.2, the detectors shall activate a visual and audible supervisory signal at an approved location, which shall indicate the source of the signal.

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.
   The MBC includes the same amendment in MR 1305.0907.3, and would also require a change for proper coordination.

Need and Reason

1. Why is the proposed code change needed?
   The proposed change is for clarification purposes only. There are no technical changes. The change clarifies that detection devices installed specifically for the control of equipment are to be supervised by a fire alarm control panel only if the building requires a fire alarm

system pursuant to Section 907.2. This qualifier is consistent with the intent of the model code language on which this amendment is based, and coordinates with the MN Mechanical Code, Section 606.4.1, for air distribution systems.

2024 IFC Section 907.3

907.3 Fire safety functions.
Automatic fire detectors utilized for the purpose of performing fire safety functions shall be connected to the building's fire alarm control unit where a *fire alarm system* is required by Section 907.2.

2024 IMC Section 606.4.1

[F] 606.4.1 Supervision. P

The duct smoke detectors shall be connected to a fire alarm system where a fire alarm system is required by Section 907.2 of the *International Fire Code*. The actuation of a duct smoke detector shall activate a visible and audible supervisory signal at a constantly attended location. In facilities that are required to be monitored by a supervising station, duct smoke detectors shall report only as a supervisory signal, not as a fire alarm.

This change will enable uniform enforcement, as some code officials have interpreted the current language to require interconnection to any fire alarm control panel within the building, even if the building does not have a building fire alarm system required by Section 907.2. For example, buildings protected with fire sprinkler systems must be monitored for valve supervision and waterflow. This is often done by a dedicated function fire alarm control panel. In such cases, some code officials have been incorrectly requiring in-duct smoke detection for air-distribution equipment control to be connected to the sprinkler system's dedicated function control panel. This is not the intent and will likely increase the cost of compliance.

2. Why is the proposed code change a reasonable solution?
   It's reasonable because it provides language that clarifies intent and coordinates with the model codes, including the MN Mechanical Code, and does not make a technical change to the existing requirements.

3. Is there additional data or information that should be considered?
   No

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
   The proposed change will decrease costs in circumstances where local code officials are mistakenly requiring smoke detection for air handling equipment to be connected to a fire alarm panel where a building alarm system isn't required per Section 907.2.

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

No cost increases.

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, fire alarm contractors, and property owners.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
   No associated costs.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
   The consequences of not adopting this change will be the continued inconsistent application and enforcement of the MSFC/MBC, and language that remains in conflict with the MN Mechanical Code.

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.*

24CCP_38.1

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Dan Morehead *Date:* 4-28-24

Email address: danm@callmtg.com *Model Code:* 2024 IBC

Telephone number: 952-564-5844 *Code or Rule Section:* 907.5.2.1.3

Firm/Association affiliation, if any: Minnesota Automatic Fire Alarm Association

Code or rule section to be changed: 2024 IBC 907.5.2.1.3

Intended for Technical Advisory Group ("TAG"):

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:

   X Change language contained the model code book? If so, list section(s).
   2024 IBC 907.5.2.1.3

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

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

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

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

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

3. Provide *specific* language you would like to see changed. Indicate proposed new words with underlining and words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.
   2024 IBC

   907.5.2.1.3 Audible alarm signal frequency in Group R-1, R-2 and I-1 sleeping rooms. Audible alarm signal frequency in Group R-1, R-2 and I-1 occupancies shall be in accordance with Sections 907.5.2.1.3.1, ~~and~~ 907.5.2.1.3.2, and 907.5.2.1.3.3.

   907.5.2.1.3.1 Fire alarm system audible signal. In sleeping rooms of Group R-1, R-2 and I-1 occupancies, the audible alarm signal activated by a fire alarm system shall be a 520-Hz low-frequency signal complying with NFPA 72.

   907.5.2.1.3.2 Smoke alarm signal in sleeping rooms. In sleeping rooms of Group R-1, R-2 and I-1 occupancies that are required by Section 907.2.8 or 907.2.9 to have a fire alarm system, the audible alarm signal activated by single- or multiple-station smoke alarms in the dwelling unit or sleeping unit shall be a 520-Hz signal complying with NFPA 72.
   Where a sleeping room smoke alarm is unable to produce a 520-Hz signal, the 520-Hz alarm signal shall be provided by a listed notification appliance or a smoke detector with an integral 520-Hz sounder.

   907.5.2.1.3.3 For the purpose of 907.5.2.1.3, sleeping rooms shall include interior habitable space which includes but is not limited to bedrooms, living rooms, spare rooms, and dens.

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 intent of this proposal is to clarify the definition of “sleeping rooms” as it relates to requirements for waking sleeping occupants to alert them of an emergency. The lack of a definition of sleeping rooms in chapter 2 creates inconsistent enforcement by code officials throughout the state. This inconsistent enforcement creates a situation that allows for the intent of the code to be ignored, removing safeguards for some residents based on their choice of sleeping location.

2. Why is the proposed code change a reasonable solution?
   It is reasonable to modify code language to provide clarity and consistency that will lead to more uniform installations and enforcement throughout the state. This proposal does not change the intent of the code. It is reasonable to approve a code language change that does not change the intent of the code yet potentially saves lives. It is reasonable to understand that people sleep in living rooms and dens.

3. What other considerations should the TAG consider?
   The 2025 NFPA 72 technical code committee has approved the following language in the 2025 edition of the NFPA 72 “F*or the purpose of 18.4.6, sleeping areas shall include bedrooms, as well as living rooms, spare rooms, dens, and other spaces where sleeping will occur.” The 2022 NFPA 72 Annex Section A18.4.6.3 also explains the intent of the code is to require low frequency notification devices “in areas that might be reasonably used for sleeping”.*
   The 2025 NFPA 72 will not be referenced by the 2026 MSBC and the Annex material in NFPA 72 is not enforceable; however, this does not negate the relevance of this information. The above code

sections were written by individuals with a life safety background and these sections explain the definition of “sleeping room” with the proper context. When a definition is not provided in chapter 2 of the MSBC, code officials are directed by section 201.4 of the MSBC to use the definition found in the Merriam Websters Collegiate Dictionary. In this case the dictionary does not have a definition for “sleeping room”. It is inappropriate to use the term “bedroom” to define “sleeping room” because that term is not mentioned in this code section and lacks context as it relates to waking sleeping occupants of a building.

Cost/Benefit Analysis

Will the proposed code change increase or decrease costs? Please explain.
If the new requirements of the 2024 IFC section 907.5.2.1.3.2 are met by installing a fire alarm system-controlled smoke detector with an integral 520HZ sounder rather than a single or multi-station smoke alarm the costs associated with this proposal could be eliminated. The credit from removing devices no longer needed to comply with section 907.5.2.1.3.1 would completely offset any additional costs associated with this proposal.

Section 907.5.2.1.3.2 was introduced in the 2021 IFC and as of 4-28-24 a single or multi-station smoke alarm device that can produce the required 520 HZ sound is not readily available for installation. If a cost effective single or multi-station device becomes available, the below scenarios hope to explain what the overall cost increase might be to comply with this proposal.

The cost to comply with this proposed change should be neutral because the requirement to install 520-Hz devices in sleeping rooms already exists in the code. From a practical standpoint many AHJ’s have not been enforcing the installation of 520-Hz devices in living rooms and dens. If accepted, this proposed change will require the installation of additional 520-Hz devices in many jurisdictions. This will ultimately increase the overall cost of fire alarm systems in buildings classified as R1 or R-2 occupancy types. It is difficult to apply a universal formula to a condition-based code requirement. Below are some scenarios based on real buildings in Minnesota. These scenarios will help explain the potential cost increases. The costs will vary depending on the building design, the fire alarm system design, and the capabilities of the specified fire alarm equipment.

Scenario #1
Small R-2 Occupancy

- The AHJ interprets dens and living rooms as sleeping rooms
- The system includes (52) 520Hz low frequency horns in bedrooms, dens and living rooms
- The total fire alarm system installation cost for this project is $32,180
- This proposal would result in a 0% overall fire alarm system cost increase for this scenario

Scenario #2
Small R2 Occupancy

- The AHJ does not interpret dens and living rooms as sleeping rooms but does require standard notification devices in dens and living rooms
- The system includes (24) 520Hz low frequency horns in bedrooms and (28) standard horns in dens and living rooms
- The proposed change would require replacing the (28) standard horns installed in dens and living rooms with (28) 520Hz Low Frequency Horns
- In this scenario the standards horns can be replaced with 520Hz low frequency horns without adding additional power supplies, boxes or cabling
- The base price of the project in this scenario is $30,940

- The labor and material to replace (28) standard horns with (28) 520Hz Low Frequency Horns would be $1,240
- This proposal would result in a 4% overall fire alarm system cost increase for this scenario

Scenario #3
Small R2 Occupancy

- The AHJ does not interpret dens and living rooms as sleeping rooms and does not require any notification devices in dens or living rooms
- The layout of the building in this scenario does not allow for (1) device to produce the proper dB level in multiple rooms
- The system includes (24) 520Hz low frequency horns in bedrooms
- The proposed change would require (28) additional 520Hz low frequency horns to be installed in living rooms and dens to meet the required dB levels
- In this scenario (28) 520Hz low frequency horns can be added without adding additional power supplies
- The base price of the project in this scenario is $24,195
- The labor and material to add (28) additional 520Hz Low Frequency Horns is $7,985
- This proposal would result in a 33% overall fire alarm system cost increase for this scenario

Scenario #4
Large R2 Occupancy

- The AHJ does interpret dens and living rooms as sleeping rooms
- The system includes (315) 520Hz low frequency horns in bedrooms, dens and living rooms
- The total fire alarm system installation cost for this project is $135,395
- This proposal would result in a 0% overall fire alarm system cost increase for this scenario

Scenario #5
Large R2 Occupancy

- The AHJ does not interpret dens and living rooms as sleeping rooms but does require notification devices in dens and living rooms
- The system includes (155) 520Hz low frequency horns in bedrooms and (160) standard horns in dens and living rooms
- The proposed change would require replacing the (160) standard horns installed in dens and living rooms with (160) 520Hz low frequency horns to meet the required dB levels
- In this scenario replacing the 520Hz low frequency horns will also require the power supplies to be upgraded
- The base price of the project in this scenario is $126,880
- The labor and material to replace (160) standard horns with (160) 520Hz low frequency horns is $8,515
- This is a 6.7% overall fire alarm system cost increase for this scenario

Scenario #6
Large R2 Occupancy (Worst Case)

- The AHJ does not interpret dens and living rooms as sleeping rooms.
- The layout of the building in this scenario does not allow for (1) device to produce the proper dB level in multiple rooms
- The system includes (155) 520Hz low frequency horns in bedrooms.
- The proposed change would require (160) additional 520Hz Low Frequency Horns to be installed in living rooms and dens to meet the required dB levels

- In this scenario adding the 520Hz low frequency horns will also require the addition of power supplies, boxes and cabling
- The base price of the project in this scenario is $90,355
- The labor and material to add (160) additional 520Hz Low Frequency Horns is $45,040
- This is a 49.8% overall fire alarm system cost increase for this scenario

Scenario #7
Large R2 Occupancy

- The AHJ does not interpret dens and living rooms as sleeping rooms.
- The system includes (155) 520Hz low frequency horns in bedrooms.
- This scenario involves a building layout that would allow (1) low frequency device to produce the proper dB level in two separate rooms in most areas. The code does not mandate a separate device per room. The layout of the building would still require adding (7) additional 520Hz Low Frequency Horns in some living rooms and dens to meet the required dB levels
- In this scenario adding the 520Hz low frequency horns will not require additional power supplies to be installed
- The base price of the project in this scenario is $90,355
- The labor and material to add (7) additional 520Hz Low Frequency Horns is $721
- This is a 0.8% overall fire alarm system cost increase for this scenario

1. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   The cost will be offset by ensuring all sleeping residents will have an equal opportunity to wake up and escape a fire regardless of where they choose to sleep.

2. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
   If the code is clear and consistent, a fire alarm system can be properly designed and applied throughout the state. Inconsistent enforcement can lead to design changes later in a construction project, typically resulting in increased costs. Clarifying the definition of “sleeping rooms” will eliminate the confusion and the need for last minute changes in fire alarm design. The clarity that this proposed change brings, will reduce the overall cost of enforcement and compliance. The cost for inspecting additional devices will be offset by increased inspection fees based on total device count or total project cost.

3. 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.

   If the new requirements of the 2024 IFC section 907.5.2.1.3.2 are met by installing a fire alarm system-controlled smoke detector with an integral 520HZ sounder rather than a single or multi-station smoke alarm the costs associated with this proposal could be eliminated. If a code compliant single or multi-station smoke alarm is used the below explanation would apply. The costs associated with this proposal are condition-based and project based. There will not be a consistent cost increase. The uniform enforcement that this proposal will create may result in additional costs to building owners or general contractors that may be considered small businesses. It is possible that this proposal could cause an increase for those small business that would exceed $25,000 in the first year after this proposal takes effect. The cost increase would only exceed $25,000 if a project with the proper conditions was built in certain jurisdictions. The total cost increase would depend on many factors. Please see the list of scenarios in Cost Benefit Analysis Question #1 for an example of potential monetary cost increases.

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
   Building owners, general contractors, fire alarm contractors, electrical contractors, homeowners, or renters.

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?
   If additional devices are added to a fire alarm design, this will result in increased inspection fees, ultimately creating additional revenue for the state.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   N0

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 main objective of the proposed code change is to provide consistency across the state and safeguard human life. This objective can also be partially achieved in a more cost-effective way by defining "sleeping rooms" as not including dens, living rooms or similar rooms. This would be in direct contrast with the intent of the code as explained in the 2022 NFPA 72 annex and the new code language of the 2025 NFPA 72. This method does not provide safeguards for all sleeping residents. It only provides safeguards for Minnesotans who chose to sleep in traditional "bedrooms".

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?
   Please see the list of scenarios in Cost Benefit Analysis Question #1 for an example of potential monetary cost increases. Any monetary cost increase will ultimately be borne by the building owner or developer.

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?
   Not adopting a clear and consistent definition of a "sleeping room" will continue to encourage unfair bidding practices, inconsistent enforcement of a state code and potential avoidable loss of life.

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.
   Not aware

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

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

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_99.1

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: 5/22/2024
Email address: forrest.williams@state.mn.us
Telephone number: 651-769-7784
Organization/Association/Agency, if any: DPS – State Fire Marshal

Code or rule section to be changed (include code or rule title and edition year): 2024 IFC/IBC 907.3

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).

2024 IFC/IBC 907.3 and 2024 IMC 606.4.1

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

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

☒ Delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
MR 7511.

☐ 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.

[Note: This change proposal seeks to incorporate current state amendments in 7511.0907, Section 907.3 and 1305.0907, Section 907.3 with the updated language in 2024 IFC/IBC Section 907.3. The added references to Chapter 11 are not intended to be included in the building code amendment.]

907.3 Fire safety functions.
Automatic fire detectors utilized for the purpose of performing fire safety functions shall be connected to the building's fire alarm control unit where a *fire alarm system* is required by Section 907.2 or Chapter 11. Detectors shall, upon actuation, perform the intended function and shall initiate a visible and audible supervisory signal at the fire alarm control unit ~~activate the alarm notification appliances or activate a visible and audible supervisory signal~~ or at a constantly attended location. In buildings not equipped with a *fire alarm system*, the automatic fire detector shall be powered by normal electrical service and, upon actuation, perform the intended function and activate a visual and audible supervisory signal at an approved location which shall indicate the source of the signal. The detectors shall be located in accordance with NFPA 72.

907.3.1 Duct smoke detectors.

Smoke detectors installed in ducts shall be *listed* for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit where a *fire alarm system* is required by Section 907.2 or Chapter 11. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at the fire alarm control unit ~~a *constantly attended location*~~ and shall perform the intended fire safety function in accordance with this code and the *International Mechanical Code*. Activation of a duct smoke detector shall not initiate a general evacuation signal. In facilities that are required to be monitored by a supervising station, duct smoke detectors shall report only as a supervisory signal and not as a fire alarm. They shall not be used as a substitute for required open area detection.

Exceptions~~:~~

~~1. The supervisory signal at a *constantly attended location* is not required where duct smoke detectors activate the building's alarm notification appliances.~~

In occupancies not required to be equipped with a *fire alarm system*, actuation of a smoke detector shall activate a visible and an audible signal in an *approved* location. Smoke detector trouble conditions shall activate a visible or audible signal in an *approved* location and shall be identified as air duct detector trouble.

907.3.2 Special locking systems.

Where special locking systems are installed on *means of egress* doors in accordance with Section 1010.2.13 or 1010.2.12, an automatic detection system shall be installed as required by that section.

907.3.3 Elevator emergency operation.

Automatic fire detectors installed for elevator emergency operation shall be installed in accordance with the provisions of ASME A17.1/CSA B44 and NFPA 72.

907.3.3.1 Elevator control functions. Fire detectors installed to control or recall elevators or to control doors for elevators, elevator lobbies, or elevator shafts and that are connected to a fire alarm system shall not activate a general evacuation signal. Elevator emergency operations and control functions shall not be initiated by fire detectors or initiating devices installed for purposes other than elevator control.

Exception: Occupant evacuation elevators and fire service access elevators shall function as required by Chapter 30 of the Minnesota Building Code.

907.3.4 Door hold-open functions. Smoke detectors that are installed to hold open fire doors or fire shutters under nonemergency conditions and that are connected to the

building's fire alarm system shall sound a general evacuation signal when the doors or shutters being held open are directly communicating with an exit access corridor, exit access stairway or exit enclosure. When not connected to a fire alarm system, smoke detectors that are installed to hold open fire doors or fire shutters are not required to activate a visual or audible signal.

907.3.54 Wiring.

The wiring to the auxiliary devices and equipment used to accomplish the fire safety functions shall be monitored for integrity in accordance with NFPA 72.

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.
   Yes, 2024 IMC 606.4.1. This section will need to be amended similar to what's proposed for IFC/IBC Section 907.3.1.

Need and Reason

1. Why is the proposed code change needed?
   Because IFC/IBC Section 907.3 has been revised since the 2018 editions, it's necessary to incorporate our current state amendments so they properly coordinate with the updated language.

2. Why is the proposed code change a reasonable solution?
   It's reasonable because it maintains currently adopted state amendments in MR 7511 and 1305.

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.
   There will be no change in costs as the currently adopted provisions are being maintained.

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?
   None, as the currently adopted provisions are being maintained.

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?
   There will be no probable costs of compliance as the currently adopted provisions are being maintained.

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 the proposed change would be that the existing state amendments would overwrite much of the updated model code language.

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

Minnesota Department of Public Safety
State Fire Marshal Division

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

Updated July 2022

Minnesota Department of Public Safety
State Fire Marshal Division

24CCP_83

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: 4-11-2024
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 7511.0910 Subpart 5, Section 910.5, and Subpart 6, Section 910.6.

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).

☐ 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).
MR 7511.0910, Subparts 5 and 6. Section 910.5 - Calculated engineering design of mechanical smoke exhaust, and Section 910.6 – Testing and maintenance.

☐ 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.
Although not necessarily a requirement of MN Statutes, 326B.02 Subd. 6 states: "The code and its amendments shall conform insofar as practicable to model fire codes generally accepted and in use throughout the United States…" Thus, the repealing of this state amendment in deference to the provisions of the model code is consistent with this statement.

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.

This proposal would delete MR 7511.0910, Subparts 5 and 6, in deference of the model code language in IFC Section 910.4 (mechanical smoke removal systems) and IFC Section 910.5 (maintenance and testing).

~~**910.5 Calculated engineering design of mechanical smoke exhaust.** Calculated engineering design of mechanical smoke exhaust shall be in accordance with Sections 910.5.1 through 910.5.5.~~
~~**910.5.1 Methodology.** Mechanical smoke exhaust systems shall be designed to remove smoke after a fire is extinguished and to assist the fire department during suppression operations or during marginal sprinkler control situations. They are not considered life safety systems and are not designed for occupant safety.~~
~~**910.5.2 Calculation method.** Volumetric flow rate calculations~~

~~shall demonstrate that the system will provide at least three air changes per hour for the space required to be provided with smoke exhaust. When only a portion of a space is used for high-piled storage requiring smoke exhaust, the volume to be extracted shall be based on the ceiling height multiplied by the actual gross floor area for storage.~~

~~**910.5.3 Operation.** Mechanical smoke exhaust fans shall be manually activated. In addition, individual manual controls of each fan unit shall also be provided.~~

~~**910.5.4 Supply air.** Supply air for exhaust fans shall be sized to provide a minimum of 50 percent of the required exhaust. Air velocity at each supply air opening shall not exceed an average of 200 feet per minute when measured 4 feet (1,219 mm) in front of the opening. Openings for supply air shall be uniformly distributed around the periphery of the area served and be located or ducted to a position not more than one-half the storage height above the floor. Supply air openings shall open automatically upon operation of the smoke exhaust system and shall not require a manual action at each supply opening for operation. Supply air openings shall be kept clear of storage or obstructions to airflow for at least 4 feet (1,219 mm) in front of the opening. Supply air openings shall be separated from exhaust fans and exterior combustibles to prevent introduction of smoke into the building.~~

~~**910.5.5 Equipment.** Wiring and controls shall be as required in Sections 910.4.5 and 910.4.6. Interlock controls shall be as required in Section 910.4.7. Exhaust fans shall be uniformly spaced and each fan shall have a maximum individual capacity of 30,000 cfm (850 m3/min).~~

~~**910.6 Testing and maintenance.** Mechanical smoke exhaust systems shall be tested and maintained as required in Sections 910.6.1 through 910.6.4.~~

~~**910.6.1 Acceptance testing.** Mechanical smoke exhaust systems shall be acceptance tested as required by Sections 909.18 and 909.19.~~

~~**910.6.1.1 Controls.** For testing purposes, each smoke exhaust system equipped for automatic activation shall be put into operation by the actuation of the automatic initiating device. Control sequences shall be verified throughout the system, including verification of override from the firefighter's control panel when systems are equipped for automatic activation.~~

~~**910.6.2 Special inspections.** Special inspections for mechanical smoke exhaust shall be conducted according to Section 909.18.8.~~
~~**910.6.3 Maintenance.** Mechanical smoke exhaust systems, including exhaust fans, supply air openings and controls, shall be maintained and unobstructed.~~
~~**910.6.4 Operational testing.** Operational testing of the smoke exhaust system shall include all equipment such as initiating devices, fans, dampers, controls and supply air openings. Mechanical smoke exhaust systems shall be operated and tested under each control sequence at least annually.~~
~~**910.7 Maintenance.** Smoke and heat vents shall be maintained in an operative condition in accordance with NFPA 204. Fusible links shall be promptly replaced whenever fused, damaged, or painted. Smoke and heat vents shall not be modified.~~

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.
   Affected rules include the following from MR 7511.0910, Subpart 1.

   - Section 910.1.1, exception 1 to be deleted as it references 910.5.
   - Section 910.1.3 to be deleted as it references 910.5.

Need and Reason

1. Why is the proposed code change needed?
   The model code language now adequately addresses the design, installation, and maintenance of smoke and heat removal systems. The IFC design language includes provisions for minimum exhaust rates, makeup air, activation method, and manual control locations. As such, there is no need for an additional design option under MN Rules beyond what's permitted under the national model code.

   The following selection is from the 2007 Chapter 7511 SONAR for Section 910.5, as amended. The primary rationale for the state amendment was to allow for a less complicated engineering design method. However, since then the model code language has been greatly simplified, prescribing a design method with a minimum exhaust rate of 2 air changes per hour (see 2024 IFC Section 910.4).

   The proposal would vastly simplify the current rule by eliminating the need for a fairly complex fire engineering analysis, and instead requiring three air changes per hour. This would also greatly reduce the amount of text in the rule and the complexity of the requirements. Most mechanical contractors are accustomed to dealing with movement of air (air changes per hour). The State Fire Marshal Division modeled several fire

scenarios using computer simulation software programs. These models showed that 3 air changes per hour were roughly equivalent to the volumetric calculations required under the current rule.

The 2007 SONAR also states that 3 air changes per hour, as required by the amendment, were roughly equivalent to the more complex design method offered by the 2006 IFC. However, that language has since been replaced for a much simpler design method of 2 air changes per hour. This is another indication the state amendment is outdated as it no longer offers an equivalent option to the model code design requirements as initially intended.

Further, Section 910.6, as amended, should also be repealed along with Section 910.5 as the maintenance and testing provisions in the mode code under IFC Section 910.5 are written to coordinate with the overall provisions of Section 910. And with the repealing of Section 910.5, there's no longer a need for amended (added) Section 910.6.

2. Why is the proposed code change a reasonable solution?
   Repealing the current state amendment in deference to similar provisions of a nationally recognized model code is consistent with M.S. 326B.02 Subd. 6, conforming insofar as practicable to model fire codes in use throughout the United States. It's reasonable because the current amendment is no longer serving its intended purpose.

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

Cost/Benefit Analysis

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

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.
   None

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

Minnesota Department of Public Safety
State Fire Marshal Division

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
   None

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
   None

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
   None

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.*

24CCP_40.1

DEPARTMENT OF LABOR AND INDUSTRY

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 1006.3.3 Single exits.

Code or rule section to be changed: MR 1305

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

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   IBC 1006.3.3 Single exits

   ☐ 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.

   2020 MBC 1006.3.3 Single exits. A single exit or access to a single exit shall be permitted from any story or occupied roof where one of the following conditions exist:

   1. The occupant load, number of dwelling units or sleeping units, and common path of egress travel distance do not exceed the values in Table 1006.3.3(1) or 1006.3.3(2). Group R-3 is not included in these tables.
   2. Rooms, areas, and spaces complying with Section 1006.2.1 with exits that discharge directly to the exterior at the level of exit discharge are permitted to have one exit or access to a single exit.
   3. Parking garages where vehicles are mechanically parked shall be permitted to have one exit or access to a single exit.
   4. Group ~~R-3 and~~ R-4 occupancies shall be permitted to have one exit or access to a single exit.
   5. Individual single-story or multi-story dwelling units and sleeping units shall be permitted to have a single exit or access to a single exit from each dwelling unit or sleeping unit, provided that ~~both~~ all of the following criteria are met:
      5.1. Each dwelling unit and sleeping unit complies with section 1006.2.1 as a space with one means of egress
      5.2. Each sleeping unit and dwelling unit has either:
         (a) Has an exit that discharges directly to the exterior at the level of exit discharge; or
         (b) Has an exit access outside the entrance door that provides access to at least two approved independent exits.
      5.3 Each sleeping room is provided with an emergency escape and rescue opening in accordance with Section 1030.
      5.4 Fire walls shall be constructed as party walls in accordance with Section 706.1.1 in order to create separate buildings for determination of allowable area in accordance with Section 506.2 with no openings or penetrations 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.

   Yes, this must be considered in conjunction with proposed modifications to Table 506.2 because the model code language pre-supposes that all Group R occupancies are sprinkled, and Group R-3 is currently allowed unlimited area, even if unsprinkled in Minnesota.

Need and Reason

1. Why is the proposed code change needed?

   There have been a number of project proposals submitted for consideration that propose an overall development of multiple R-3 occupancies, each separated by a fire wall, each on a separate land parcel, the center units are only open on one side, and the composite is proposed to not be sprinkled. The code is gray at best in this area because Minnesota does not require mandatory sprinkling of all R occupancies.

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

   The party wall is a higher level of protection than a fire wall because the charging language does not allow any openings. The addition of an emergency escape and rescue opening from all sleeping spaces ensures that if the overall structure is not sprinkled, then the safety provisions for fire rescue more closely match those of an R-2 occupancy with only one means of egress.

3. What other considerations should the TAG consider?

- Ensuring coordination with changing Table 506.2 such that Group R-3 occupancies have the same allowable area restrictions as all other Group R occupancies.

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 confusion over code application when back-to-back and side-by-side single-family attached projects are proposed.

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.

24CCP_41

DEPARTMENT OF LABOR AND INDUSTRY

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: 1006.3.4 Exception 2

Firm/Association affiliation, if any: City of Minneapolis

Topic of proposal: 1006.3.4 Exception 2

Code or rule section to be changed: 1006.3.4 Exception 2

Intended for Technical Advisory Group ("TAG"):

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.
1006.3.4 Exception 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.
   1006.3.4 Single exits.
   A single *exit* or access to a single *exit* shall be permitted from any *story* or *occupiable roof* where one of the following conditions exists:
   1. The *occupant load*, number of *dwelling units* and exit access travel distance do not exceed the values in Table 1006.3.4(1) or1006.3.4(2).
   2. Rooms, areas and spaces complying with Section 1006.2.1 and located at a *level of exit discharge*, with *exits* that discharge directly to the exterior ~~at the level of exit discharge~~, are permitted to have one *exit* or access to a single *exit*

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.)
   Item 2 for a single exit story is intended to be for rooms, areas or spaces that comply with 1006.2.1 as a single exit space, are located on the level of exit discharge, and have exits that discharge directly to the exterior. The commentary discusses how vertical travel takes longer than horizontal travel and indicates that if a space can exit directly to the exterior, rather than egress into an interior corridor or exit stairway, a higher level of safety is provided. A common use of this item is for a single-story strip mall where a tenant space complies as a single exit space and has an exit door directly to the exterior.
   The current wording for Item 2 does not meet the intent of the item as indicated above since the level of exit discharge requirement is tied to the discharge of the exit instead of the location of the room, area or space. For example, an interior exit stairway is an "exit" by definition and, if the discharge from the interior exit stairway is directly to the exterior, any single exit space that egresses through this stairway would not have to have access to a second exit, regardless of what story the space is on. It is clearly not the intent of the code that a single exit room, area or space on any story or occupiable roof of the building could have access to a single exit as this would directly contradict Tables 1006.3.4(1) and 1006.3.4(2) that have limits on which stories or occupiable roofs can have a single exit. Architect has tried to use this section to provide a single exit from an occupiable roof above a 3, 4 or 5-story building or tried to use this section to provide a single exit for a second-story B occupancy with up to 49 occupants, as allowed by Table 1006.2.1 for a single exit space, which conflicts with Table 1006.3.4(2) that would allow a maximum of 29 occupants instead.
   To fix the issue described above, this proposal revises the wording to tie level of exit discharge requirement to the location the room, rather than the location of the discharge from the exit. This change aligns the wording in the code with the intent of the code.

2. Why is the proposed code change a reasonable solution?
   This addition to the definition reduced confusion and clarifies code requirement.

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 10-4 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.

24CCP_42.1

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

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Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1305

Date: 8/15/2022

Revised: 6/6/2024

Model Code: IBC 2024

Code or Rule Section:

IBC 1010.1 Doors

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 1010.1 Doors

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 Doors. Means of egress doors shall meet the requirements of this section. Doors serving a means of egress system shall meet the requirements of this section and Section 1022.2. Doors provided for egress purposes in numbers greater tan required by this code shall be the requirements of this section. Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on means of egress doors. Means of egress doors shall not be concealed by curtains, drapes, decorations, or similar materials.

   Where a door is adjacent to, constructed similar to, and can be confused with a means of egress door, that door shall be identified with a sign that identifies the room name or use of the room, or labels the door "Not an Exit" and shall be locked from the means of egress side. Signage shall be in accordance with ANSI A117.1.

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

Need and Reason

1. Why is the proposed code change needed?
   To ensure consistency with the Minnesota State Fire Code, Section 1031.5.

2. Why is the proposed code change a reasonable solution?
   Including this section in the building code will ensure that this code requirement does not get missed by architects. This portion is included in the Minnesota Fire Code and can be required by the fire marshal upon building completion. It is more cost effective to include the requirement as part of the initial construction. Locking not from the egress side but rather from the means of egress side ensures that occupants attempting to exit in an emergency will not confuse the door with a means of egress door and unknowingly leave the path 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. The proposed change is already a code requirement in another code. Inclusion in this location is a convenience to avoid costly field changes due to oversight.

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?
   Minimal costs and more inconvenience that a building owner will be required to purchase additional signage upon completion of their building in order to comply with the Minnesota Fire Code.

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.

24CCP_43

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: C. Scott Anderson

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

Telephone number: 612-246-7303

Firm/Association affiliation, if any: City of Minneapolis

Code or rule section to be changed: 1010.1.1

Intended for Technical Advisory Group ("TAG"):

Date: 5/02/24

Model Code: 2024 IBC

Code or Rule Section: 1010.1.1

Topic of proposal: 1010.1.1 Door size

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.
   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 considered by the TAG.

24CCP_44.1

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

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Revised: 5/15/2024

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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 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?	☐	☒
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).
   MBC ~~1010.1.7~~ 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.

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

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

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1305

Date: 8/15/2022

Revised 5/15/2024

Revised 6/6/2024

Model Code: IBC 2024

Code or Rule Section:

~~IBC 1010.1.9.7~~ 1010.2.13 Controlled Egress Doors

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 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 ~~to~~ areas are occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.
2. Items 1 through 4 shall not apply to doors to areas where a listed egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 hospital.
3. Item 10 shall not apply to exiting Group R-3 ~~or R-4 Condition 1 occupancies~~ where all of the following conditions apply:
    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 ~~1030~~ 1031.

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

Need and Reason

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

   To limit the application to occupancy groups that allow care for persons incapable of self-preservation who, because of psychiatric conditions may compulsively elope; and not inhibit the free movement of care recipients who understand the risk of elopement.

   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
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).

☒ 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

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 it too general in nature, covering the fire alarm system requirements for numerous occupancy classifications. The current language also doesn't state in what areas smoke detection is specifically required. The ambiguous nature of the language can cause confusion, resulting in inconsistent design, enforcement, and application of these provisions.

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

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 government 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 intents 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.*

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
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).

☒ 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

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

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

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.*

Minnesota Department of Public Safety
State Fire Marshal Division

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).

☒ 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

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

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.*

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
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).

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.

~~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?

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

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.*

24CCP_46

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: C. Scott Anderson

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

Telephone number: 612-246-7303

Firm/Association affiliation, if any: City of Minneapolis

Date: 5/06/24

Model Code: 2024 IBC

Code or Rule Section: Table 1010.2.4

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?	☐	☒
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.
   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 ~~strikethrough~~ 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, M or S occupancies with occupant load less than 50.	No	P	P	P
	Yes	NP	~~NP~~ P[b]	P[b]
Group B, F, M 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~~ P[b]	P[b]
Group I-2 patient care and sleeping rooms where inactive leaf is not needed to meet egress capacity requirements.	No	NP	~~NP~~ P[b]	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~~ P[b]	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 leafs 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 leafs (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 requiments.

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 considered by the TAG.

24CCP_47

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: C. Scott Anderson

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

Telephone number: 612-246-7303

Firm/Association affiliation, if any: City of Minneapolis

Code or rule section to be changed: 1010.2.8.2

Intended for Technical Advisory Group ("TAG"):

Date: 5/2/24

Model Code: 2024 IBC

Code or Rule Section: 1010.2.8.2

Topic of proposal: 1010.2.8.2

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).
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 corrolates 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 jursidictions

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 considered by the TAG.

24CCP_48

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

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Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1305

Date: 8/18/2022

Model Code: IBC 2024

Code or Rule Section:

IBC 1011.2 Stairway Width and Capacity

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 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.

24CCP_100

DEPARTMENT OF LABOR AND INDUSTRY

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?	☒	☐
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).
   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 exceeding18 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 considered by the TAG.

24CCP_49

DEPARTMENT OF LABOR AND INDUSTRY

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: 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?	☐	☒
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).
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 ~~strikethrough~~ 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 by1014.7, 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.

24CCP_50

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: C. Scott Anderson

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

Telephone number: 612-246-7303

Firm/Association affiliation, if any: City of Minneapolis

Code or rule section to be changed: 1015.2

Intended for Technical Advisory Group ("TAG"):

Date: 4/22/24

Model Code: 2024 IBC

Code or Rule Section: 1015.2

Topic of proposal: 1015.2

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.
   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 ~~strikethrough~~ 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.

24CCP_51

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

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Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1305

Date: 8/12/2022

Model Code: IBC 2024

Code or Rule Section:

IBC 1023.5 Stairway Penetrations

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 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 considered by the TAG.

24CCP_102

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: C. Scott Anderson

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

Telephone number: 612-246-7303

Firm/Association affiliation, if any: City of Minneapolis

Code or rule section to be changed: 1027.2

Intended for Technical Advisory Group ("TAG"):

Date: 5/29/24

Model Code: 2024 IBC

Code or Rule Section: 1027.2

Topic of proposal: 1027.2

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.
   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 ~~strikethrough~~ 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 considered by the TAG.

24CCP_52.1

DEPARTMENT OF LABOR AND INDUSTRY

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 considered by the TAG.

24CCP_53.1

DEPARTMENT OF LABOR AND INDUSTRY

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?	☐	☒
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☒	☐
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

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

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