Minnesota Department of Labor and Industry

STATEMENT OF NEED AND REASONABLENESS

Proposed Amendment to Rules Governing the Adoption of the International Building Code, Minnesota Rules, chapter 1305; Revisor's ID Number R-04142

INTRODUCTION

The Commissioner of the Department of Labor and Industry proposes to adopt amendments to rules governing the Minnesota Building Code, Minnesota Rules, chapter 1305. The proposed rules will incorporate by reference the 2012 International Building Code ("IBC"), with amendments.

On July 10, 2007, the 2006 edition of the International Building Code became effective and was adopted, with amendments, by the Department. The Department chose to skip the adoption of the 2009 edition of the IBC because of the drastic slowdown of the construction economy and the lack of technical experts available to assist the Department with that adoption. Therefore, the Department currently administers and enforces the 2006 edition of the IBC, with amendments.

The International Code Council ("ICC") publishes the IBC.[1] The ICC reviews and modifies the ICC Model Codes every three years to incorporate the most current construction code criteria to provide the construction industry with the most current code provisions for use throughout the nation. The IBC is the primary commercial, industrial and institutional code that provides minimum requirements to safeguard the public health, safety, and general welfare to occupants of new and existing buildings, facilities, and systems. The IBC applies to all occupancies, including one- and two-family dwellings and townhouses. While not required, the IBC may be used for one-and-two family dwellings and townhouses in lieu of the International Residential Code ("IRC"), however the differences between the IBC and IRC are not significant.

The Department utilized a Chapter 1305 Advisory Committee ("Advisory Committee") composed of commercial construction technical experts and fire safety experts to provide the Commissioner with recommended changes to the 2012 edition of the IBC.[2] Pursuant to Minnesota Statutes, section 326B.106, subdivision 1, the Department also consulted with the Construction Codes Advisory Council in establishing the proposed adoption of, and amendments to, the 2012 IBC in this rulemaking.

ALTERNATIVE FORMAT

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[1] The 2012 edition of the International Building Code is available for review at the Minnesota Department of Labor and Industry by contacting Gerald F. Norman, Construction Codes and Licensing Division, 443 Lafayette Road N., St. Paul, MN 55155-4341; Email: gerald.norman@state.mn.us; telephone: (651) 284-5872. Portions of the proposed rule reproduce excerpts from the 2012 IBC, International Code Council, Washington, D.C., copyright 2012, reproduced with permission, all rights reserved.

[2] A complete listing of the participating members of the Chapter 1305 Advisory Committee is attached as Exhibit A.

Upon request, this information can be made available in an alternative format, such as large print, braille, or audio. To make a request, contact Colleen Clayton at the Department of Labor and Industry, 443 Lafayette Road N., St. Paul, Minnesota 55155, telephone (651) 284-5867, FAX (651) 284-5749. TTY users may call the Department at 651-297-4198.

STATUTORY AUTHORITY

The Department's statutory authority to adopt the rules is stated in the following Minnesota Statutes:

326B.02, Subdivision 5. General rulemaking authority. The commissioner may, under the rulemaking provisions of chapter 14 and as otherwise provided by this chapter, adopt, amend, suspend, and repeal rules relating to the commissioner's responsibilities under this chapter, except for rules for which the rulemaking authority is expressly transferred to the Plumbing Board, the Board of Electricity, or the Board of High Pressure Piping Systems.

326B.101 Policy and purpose. The State Building Code governs the construction, reconstruction, alteration, and repair of buildings and other structures to which the code is applicable. The commissioner shall administer and amend a state code of building construction which will provide basic and uniform performance standards, establish reasonable safeguards for health, safety, welfare, comfort, and security of the residents of this state and provide for the use of modern methods, devices, materials, and techniques which will in part tend to lower construction costs. The construction of buildings should be permitted at the least possible cost consistent with recognized standards of health and safety.

326B.106, Subdivision 1. Adoption of code. Subject to sections 326B.101 to 326B.194, the commissioner shall by rule and in consultation with the Construction Codes Advisory Council establish a code of standards for the construction, reconstruction, alteration, and repair of buildings, governing matters of structural materials, design and construction, fire protection, health, sanitation, and safety, including design and construction standards regarding heat loss control, illumination, and climate control. The code must also include duties and responsibilities for code administration, including procedures for administrative action, penalties, and suspension and revocation of certification. The code must conform insofar as practicable to model building codes generally accepted and in use throughout the United States, including a code for building conservation. In the preparation of the code, consideration must be given to the existing statewide specialty codes presently in use in the state. Model codes with necessary modifications and statewide specialty codes may be adopted by reference. The code must be based on the application of scientific principles, approved tests, and professional judgment. To the extent possible, the code must be adopted in terms of desired results instead of the means of achieving those results, avoiding wherever possible the incorporation of specifications of particular methods or materials. To that end the code must encourage the use of new methods and new materials. Except

as otherwise provided in sections 326B.101 to 326B.194, the commissioner shall administer and enforce the provisions of those sections.

Under these statutes, the Department has the necessary statutory authority to adopt the proposed rules.

REGULATORY ANALYSIS

Minnesota Statutes, section 14.131, sets out eight factors for a regulatory analysis that must be included in the SONAR. Paragraphs (1) through (8) below quote these factors and then give the Department's response.

"(1) a description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule"

The classes of persons who will likely be affected by the proposed rule include building officials, building contractors, architects, engineers, fire inspection personnel, building owners and managers, users of the facilities, and the general public.

The classes of persons who will bear the costs of the propose rule include primarily building owners who must pay for the construction costs, and where businesses pay for the construction costs, the costs will ultimately be passed on to the consumers.

Persons who will benefit from the proposed rule include the general public.

"(2) the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues"

The probable costs to the agency of implementation and enforcement of the proposed rule include costs to purchase code books for agency staff.

The probable costs to any other agency of implementation and enforcement include costs for code books for building officials and other entities involved with enforcement of the code, and any educational expenses necessary for training on the proposed rule.

There is no anticipated effect on state revenues as a result of the implementation and enforcement of the proposed rule.

"(3) a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule"

There are no less costly or intrusive methods for achieving the purpose of the proposed rule. The adoption of this code will provide more predictable uniform application and enforcement of construction standards, which will tend to lower costs by reducing the need for review by local and state boards or other entities responsible for code interpretation and review.

"(4) a description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule"

Because the IBC serves as the base document for Minnesota Rules, Chapter 1305, Minnesota Building Code, and it is currently the only primary commercial, industrial and institutional model l building code that is generally accepted and in use in the United States, no alternative model code was considered.

"(5) 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"

The proposed rule does not require compliance for existing buildings, unless the buildings undergo certain modifications. The proposed rule will only apply to new construction or any addition, alteration, or repair to a building. It is difficult to quantify actual compliance costs associated with the general construction or remodeling of a new or existing building because these costs are dependent upon the building's design, use, age, or condition.

There may be negligible costs to a municipal building department associated with a need for building officials to implement and update procedures, such as training, the purchase of new code books, or to revise certain documents, such as building permits. Most of the procedures and documentation are currently in place, so the changes would likely be revisions to current practices and would not create a need for new procedures or documents.

There are additional costs for single-family fire sprinkler systems required to be installed in newly built single-family dwellings of 4500 square feet or more. The requirements and associated costs for single-family sprinkler systems in these proposed rules are based on and identical to the recently adopted Minnesota Rules Chapter 1309, the International Residential Code, and its requirements that take effect in Minnesota on January 24, 2015.[3] The rules in this proposed chapter and Chapter 1309 for single-family dwelling sprinkler systems must be coordinated so that single-family fire sprinkler requirements are the same in both the IRC and IBC. While the automatic fire sprinkler requirements for single-family dwellings in mixed occupancies have changed in this proposed rule to mirror those recently adopted in Chapter 1309, it is important to note that the automatic fire sprinkler requirements for other occupancies regulated by existing Chapter 1305 and their costs have not changed and remain in effect as they have been in Minnesota since 2007.

Although it is difficult to quantify actual costs, the Department anticipates that the global costs associated with this proposed rule will be minimal from the rule it is replacing. While some specific requirements of this rule may be considered more restrictive than the current rule,

[3] Minnesota Rules, Chapter 1309, was filed with the Secretary of State's Office and formally adopted on April 23, 2014. The Notice of Adoption was published in the State Register on July 28, 2014. The effective date for Chapter 1309 is January 24, 2015.

others will be less restrictive. For most affected parties, any increase in costs will be passed on to the ultimate consumer, namely the building owner.

"(6) 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 probable costs of not adopting the proposed rule could include an increase in costs to obtain outdated equipment and materials. It will also be more difficult for the industry to obtain the older code book because the code book publisher prefers not to maintain outdated code books. The probable consequences of not adopting the proposed rule include confusion with application and enforcement of an older code when a newer code is available. The family of ICC Codes is designed to work together as they reference other ICC codes within the body of each separate code book. The Department intends to adopt several of the 2012 ICC Codes at the same time. Therefore, if this proposed rule were not adopted, it could create confusion in other rule chapters that adopt and incorporate the 2012 ICC Codes because references to sections within the IBC to the other ICC codes would not be coordinated.

Another consequence of not adopting the proposed rule would be the use of outdated materials and methods. The Department chose to skip the adoption of the 2009 ICC Codes because of the economic downturn in the economy. The existing rule chapter 1305 is therefore based on the 2006 edition of the IBC. Older methods may prove to be less efficient and outdated materials may become more difficult to obtain. Manufacturers do not have a financial incentive to maintain an inventory of outdated materials. As a result, failure to update the International Building Code by not adopting the proposed rule would have a negative impact on administration, safety, application, and enforcement of Minnesota's building code provisions.

The costs associated with not adopting the proposed rule will likely be borne by building owners, to whom the costs of purchasing outdated equipment and materials would be passed. The consequences of not adopting the proposed rule will likely be borne by industry personnel responsible for administering and enforcing the code because the various 2012 ICC codes adopted by the Department would not provide accurate references to sections to the 2006 IBC, which is currently adopted.

"(7) an assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference"

There are no applicable federal regulations that address construction regulated by the IBC.

"(8) an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule. . . . '[C]umulative effect' means the impact that result from incremental impact of the proposed rule in addition to other rules, regardless of what state or federal agency has adopted the other rules. Cumulative effects can result from individually minor but collectively significant rules adopted over a period of time."

The Minnesota State Building Code is a single set of coordinated building construction regulations that apply throughout the state of Minnesota. There are no other building codes that can be used or enforced in this state. When the Department adopts the individual rules that make up the State Building Code it works with other state agencies to identify other regulations that may also have an effect on certain buildings to ensure that the requirements that are parallel or that cover the same building type are not cumulative.

For example, portions of Minnesota Rules, chapter 1305, Adoption of the International Building Code, regulate the planning and construction of care facilities in Minnesota. The Department utilized an Advisory Committee to review the 2012 IBC. The committee members included technical expertise from other state agencies' personnel to ensure that the rule would coordinate with any other state regulations that may be affected by the rule.

Moreover, the adoption cycle for the Minnesota State Building Code generally occurs every three years so it is current and reflects the most recent changes that occur federally and with other state agencies. For example, the Department of Energy implements federal requirements for energy in construction by working through the model code process. By basing rules on the model codes developed by the ICC, the cumulative effect is thereby eliminated. Department staff also monitors any regulatory changes that occur federally and on a state level. The Department also has staff that monitors code changes being proposed to the model building codes at the national level to ensure that the Minnesota State Building Code will not conflict with other building code regulations.

PERFORMANCE-BASED RULES

Minnesota Statutes, section 326B.106, subdivision 1, authorizes the Department to establish by rule a code of standards for construction. This statute requires the code to "conform insofar as practicable to model building codes generally accepted and in use throughout the United States." At the same time, this statute mandates that, "to the extent possible, the code must be adopted in terms of desired results instead of the means of achieving those results, avoiding wherever possible the incorporation of specifications of particular methods or materials."

The 2012 IBC establishes minimum regulations for building systems using prescriptive and performance-based provisions, with emphasis on performance. The proposed rules that contain amendments to the 2012 IBC incorporate the philosophy required by Minnesota Statutes, section 326B.106, subdivision 1.

ADDITIONAL NOTICE

Our Notice Plan includes giving notice required by statute. We will mail or email the Dual Notice, which will contain an easily readable and understandable description of the nature and effect of the proposed rule, to everyone who has registered to be on the Department's rulemaking mailing list under Minnesota Statutes, section 14.14, subdivision 1a. We will also give notice to the Legislature per Minnesota Statutes, section 14.116.

Our Notice Plan also includes giving additional notice to associations and trade groups

not required by statute. This Additional Notice Plan was reviewed by the Office of Administrative Hearings and approved in an Order dated October 3, 2014, by Administrative Law Judge George A. Beck.We will mail the Dual Notice to the following interested industry groups or associations. Those groups or associations include:

a. All certified building officials involved in code administration. This list includes all municipal building officials responsible for administration of the State Building Code;
b. Association of Minnesota Building Officials
c. Builders Association of Minnesota
d. Builders Association of the Twin Cities
e. Minnesota Housing Finance Agency
f. Minnesota Multi-Housing Association
g. Building Owners and Managers Association
h. Minnesota State Fire Marshal Division
i. Minnesota State Fire Chiefs Association
j. League of Minnesota Cities
k. Association of Minnesota Counties
l. American Institute of Architects – Minnesota
m. Minnesota Manufactured Home Association
n. Minnesota Board of Electricity

Our Notice Plan did not include notifying the Commissioner of Agriculture because the rules do not affect farming operations per Minnesota Statutes, section 14.111.

CONSULTATION WITH MMB ON LOCAL GOVERNMENT IMPACT

As required by Minnesota Statutes, section 14.131, the Department consulted with the Commissioner of Minnesota Management and Budget (MMB) concerning the fiscal impact and benefits the proposed rules may have on units of local government. This was done on September 4, 2014, by providing MMB with copies of the Governor's Office Proposed Rule and SONAR Form, the proposed rules, and the near-final SONAR. On September 23, 2014, the Department received a memorandum dated the same day from MMB Executive Budget Officer Elisabeth Hammer which provided general comments and concluded that:

> [b]ased upon the information provided to me by the Department of Labor and Industry, there does not appear to be significant costs to local units of government that are not recoverable through local fees as a result of this proposed rule.

The Department will submit a copy of its correspondence with MMB and the September 23, 2014 response it received from that agency to OAH at the hearing or with the documents it submits for ALJ review.

DETERMINATION ABOUT RULES REQUIRING LOCAL IMPLEMENTATION

As required by Minnesota Statutes, section 14.128, subdivision 1, the agency has considered whether these proposed rules require a local government to adopt or amend any ordinance or other regulation in order to comply with these rules. Pursuant to Minnesota Statutes, section 14.128, the Department has determined that a local government will not be required to adopt or amend an ordinance or other regulation to comply with these proposed rules. The State Building Code is the standard that applies statewide. Minnesota Statutes, section 326B.121, subdivision 1, mandates compliance with the State Building Code whether or not a local government adopts or amends an ordinance. As a result, an ordinance or other regulation is not required for compliance. If a city wishes that its ordinances accurately reflect legal requirements in a situation in which the State Building Code has superseded the ordinances, then the city may want to amend or update its ordinances.

COST OF COMPLYING FOR SMALL BUSINESS OR CITY

Agency Determination of Cost

As required by Minnesota Statutes, section 14.127, the Department has considered whether the cost of complying with the proposed rules in the first year after the rules take effect will exceed $25,000 for any small business or small city. The Department has determined that the cost of complying with the proposed rules in the first year after the rules take effect will not exceed $25,000 for any small business or small city because the proposed rules do not apply retroactively and do not require any construction to occur within the first year after the rules take effect. Any small business or city contemplating new construction or remodeling will decide whether or not to undertake the construction or remodeling project and when that construction or remodeling will occur. Because no new construction or remodeling is required by the proposed rules within the first year after the rules take effect, no new construction or remodeling need be undertaken within the first year.

Additionally, any small business in the construction industry will likely pass through any additional costs that occur resulting from code changes, so the costs would not be borne by the small business, but by the building owner. A small city would likely need to purchase new code books and attend training to learn about new code changes, but this cost would not exceed $25,000 for the small city.

Small businesses and cities will never build the exact same building under the existing code and under the proposed rules. The number of variables and the fact that the proposed rule changes will provide for cost savings as well as cost increases, makes it unlikely that the specific set of provisions that apply to a specific building on a specific site will increase the cost by more than $25,000.

The costs of construction are subject to many variables, including the current construction economy, material costs, and local labor costs. The cost of life-safety provisions that change in the rule are part of the base costs upon which the cost of the other features are added. Other features may be reduced to adjust the cost. Every attempt was made by the

Department to address estimated cost increases or cost savings of each proposed rule change in the Rule-By-Rule Analysis section which follows.

LIST OF WITNESSES

If these rules go to a public hearing, the Department anticipates having the following witnesses testify in support of the need for and reasonableness of the rules:

1. Division staff from the Construction Codes and Licensing Division, if necessary;
2. Division staff from the Minnesota State Fire Marshal Division, if necessary; and
3. Other members of the Advisory Committee, if necessary.

RULE-BY-RULE ANALYSIS

GENERAL.

References to IBC Editions and Minnesota Rule Parts. When referencing the IBC throughout the proposed rules, the year "2006" is deleted and replaced with the year "2012." The Department is proposing to adopt the 2012 edition of the IBC, replacing the 2006 edition, with amendments. Also, in many locations throughout the proposed rules, the phrase "Minnesota Rules" is added prior to references to specific Minnesota rule chapters and parts to provide clarity about chapter reference. Similarly, references to "IBC" are added prior to references to specific IBC chapters and sections to clarify that the specific chapter or section that is being referenced in the proposed rule is a section of the IBC.

Definitions. Throughout the proposed rules and in this SONAR, specific terms are used to explain requirements contained in certain rule parts. These terms are defined in detail within Chapter 2 of the 2012 IBC or within Part 1305.0202 of the proposed rules, and are described in this "GENERAL" section so that referring to the IBC is not necessary to understand these terms.

Occupancy Groups. Throughout the proposed rules and in this SONAR, various "occupancy groups" are frequently mentioned when describing application of specific requirements under the 2012 IBC and its proposed amendments to structures occupied and used by various groups of people. While not separately defined in Chapter 2 of the IBC, these occupancy groupings are described in detail in Sections 301 through 312 of the 2012 IBC. A brief summary of all occupancy groupings follows to assist the reader in more fully understanding the scope and application of the 2012 IBC to specific types of building occupancies:

Assembly Group A occupancies (A-1, A-2, A-3, A-4, and A-5). Generally, Group A occupancies are places where people assemble in small or large groups. Examples of Group A occupancies would include indoor symphony or concert halls, night clubs, restaurants, amusement arcades, places of worship, bowling alleys, gymnasiums, museums, outdoor amusement park structures, outdoor grandstands, and outdoor stadiums. Group A occupancies are more fully described in Section 303 of the International Building Code.

Business Group B occupancies.

Group B occupancies are structures or buildings, or a portion thereof, that provide general business services for people, including the use for office, professional, or service-type transactions, and the storage of records and accounts. Group B occupancies are more fully described in Section 304 of the International Building Code.

Educational Group E occupancies.

Group E occupancies are facilities or building structures that provide educational services for people, including the use of a building or structure, or portion thereof, by six or more persons at any one time for educational purposes through the twelfth grade. Group E occupancies are more fully described in Section 305 of the International Building Code.

Factory Group F occupancies (F-1 and F-2).

Group F occupancies are factory industrial buildings or structures used for assembly, disassembly, fabrication, finishing, manufacturing, packaging, repair or processing operations that are not otherwise classified as a Group H hazardous or Group S storage occupancy. Group F occupancies are more fully described in Section 306 of the International Building Code.

High-Hazard Group H occupancies (H-1, H-2, H-3, H-4, and H-5).

Group H occupancies are generally buildings or structures used for the manufacturing, processing, generation or storage of materials in quantities that constitute a high physical or health hazard as established by various IBC provisions. Group H occupancies are more fully described in Section 307 of the International Building Code.

Institutional Group I occupancies (I-1, I-2, I-3, and I-4).

Generally, Group I occupancies are facilities or buildings that provide care services for people, long-term detention for people, or serve as a long-term residence for persons that receive custodial care from persons other than parents or guardians. Examples of Group I occupancies would include assisted living facilities, group homes, rehabilitation facilities, hospitals, nursing homes, detoxification facilities, prisons, reformatories, and detention centers. Group I occupancies are more fully described in Section 308 of the International Building Code and in Minnesota Rules, part 1305.0308, subparts 1, 2, and 3.

Mercantile Group M occupancies.

Group M occupancies are buildings or structures, or portions thereof, accessible to the public and used for the display and sale of merchandise, including the stocking of goods, wares or merchandise incidental to such purposes. Group M occupancies are more fully described in Section 309 of the International Building Code.

Residential Group R occupancies (R-1, R-2, R-3 and R-4).

Group R occupancies are typically places that people board for short or long periods of time, family dwellings, adult and child care facilities, congregate living facilities, and residential care or assisted living facilities. Examples of Group R occupancies include boarding houses, hotels, motels, apartment houses, fraternities, sororities, monasteries, one and two family dwellings, adult care facilities, smaller child day care facilities, and residential care/assisted living

facilities. Group R occupancies are more fully described in Section 310 of the International Building Code and Minnesota Rules, part 1305.0310.

Storage Group S occupancies (S-1 and S-2).

Group S occupancies are buildings or structures, or portions thereof, used for storage that is not classified as a high-hazardous occupancy under Section 307 of the IBC. Group S occupancies are more fully described in Section 311 of the International Building Code.

Utility and Miscellaneous Group U occupancies.

Group U occupancies are buildings and structures of an accessory character and miscellaneous structural use not classified in any other specific occupancy group by the IBC. Group U occupancies are more fully described in Section 312 of the International Building Code.

1305.0011 ADOPTION OF THE INTERNATIONAL BUILDING CODE BY REFERENCE AND ADMINISTRATIVE AUTHORITY.

Subpart 1. General. This subpart is modified by revising the code publisher's information because the address and the edition have changed since the last code adoption cycle. This modification is necessary to properly incorporate by reference the 2012 edition of the IBC.

Subp. 2. Mandatory chapters. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. In addition, the phrase "Minnesota State Building" was added before the word "code" in the first sentence to clarify that the code referred to in this case means the Minnesota State Building Code.

Subp. 3. Replacement chapters. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. In addition, the phrase "State Building" was added before the phrase "code administration" to provide the proper reference to the title of Minnesota Rules, chapter 1300.

Subp. 5. Flood hazard or floodproofing regulations. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

1305.0021 REFERENCES TO OTHER INTERNATIONAL CODE COUNCIL CODES.

Subpart 3. Residential code. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the sentence is revised by relocating the phrase "adopted pursuant to" to correct a grammatical error in the sentence.

Subp. 4. Electrical code. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the sentence is revised by relocating the phrase "adopted pursuant to" to correct a grammatical error in the sentence.

Subp. 5. Fuel gas code. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the sentence is revised by relocating the phrase "adopted pursuant to" to correct a grammatical error in the sentence.

Subp. 6. Mechanical code. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the sentence is revised by relocating the phrase "adopted pursuant to" to correct a grammatical error in the sentence.

Subp. 7. Plumbing code. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the sentence is revised by relocating the phrase "adopted pursuant to" to correct a grammatical error in the sentence. The reference to Minnesota Statutes, section 326B.106, subdivisions 1 and 2 is deleted and replaced with a reference to Minnesota Statutes, section 326B.435. This change is necessary because the statute section was renumbered and the proposed rule now contains the correct statutory citation.

Subp. 8. Private sewage disposal code. References to Minnesota Rule chapters 7081, 7082, and 7083 are added to this subpart to direct the user to the appropriate rules governing individual sewage treatment systems.

Subp. 9. Energy conservation code. References to Minnesota Rule chapters 1322 and 1323 are added to this subpart to clarify that the Minnesota Energy Code is comprised of both Minnesota Rules, chapter 1322, the residential provisions of the International Energy Conservation Code, with amendments, and Minnesota Rules, chapter 1323, the commercial provisions of the International Energy Conservation Code, with amendments. Additionally, the section reference to Minnesota Statutes, section 326B.115, is deleted and replaced with section 326B.106, subdivision 1, to reflect the correct statutory authority for adoption of the Minnesota Energy Code.

Subp. 11. Fire code. This subpart is modified by adding the phrase "Minnesota Rules" before "chapter 7511" to clarify that chapter 7511 is a Minnesota Rule and not a chapter in the International Fire Code.

Subp. 12. International Existing Building Code. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. This subpart is amended to correct the title from "State Building Conservation Code" to "Conservation Code for Existing Buildings." Additionally, the sentence is revised by relocating the phrase "adopted pursuant to" to correct a grammatical error in the sentence.

1305.0030 ADMINISTRATIVE PROCEDURE CRITERIA.

Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this rule part. This subpart is modified by changing the statutory reference from Minnesota Statutes, section 16B.57, to section 326B.101,

because the statutory requirement was renumbered and relocated in Minnesota Statutes to Chapter 326B.

1305.0040 VIOLATION [Repeal].

This rule part is being repealed because this language is now located in Minnesota Rule, chapter 1300, which provides administrative direction for all chapters of the Minnesota State Building Code. As a result, the rule part is no longer necessary.

1305.0202 SECTION 202, DEFINITIONS.

Subpart 1. Amended definitions. This subpart and its title are modified to provide the user with amended definitions to terms used in this proposed rule. This subpart contains definitions that are being modified from those definitions contained in Chapter 2 of the 2012 IBC. The definition for "Agricultural Building" is relocated alphabetically within this subpart and is revised as described below.

Agricultural building. The existing definition for "agricultural building" is being deleted because the term is defined in Minnesota Statutes, section 326B.103, subdivision 3. The reference to that statutory citation is added to this definition instead of the current definition to ensure that a consistent definition is used between the proposed rule and Minnesota Statutes.

Aisle. The amended definition for "aisle" is being proposed to be relocated here without change because this definition is currently located in Minnesota Rules, part 1305.1002, but the 2012 IBC definition section has been relocated to Chapter 2 of the International Building Code. Therefore, it is reasonable and necessary to relocate this definition to the corresponding location in Minnesota Rules, now located in part 1305.0202. The definition remains unchanged.

Alternating Tread Device. This definition has been modified to clarify that it is the device that is "standing" between 50 and 70 degrees from horizontal, rather than the language that described a series of steps between 50 and 70 degrees from horizontal. This change is needed to clarify that it is the device that is standing between 50 and 70 degrees and not that the treads are at 50 to 70 degrees from horizontal. Additionally, the phrase "that has a series of steps" has been relocated to complete the description of the device. This definition is also amended from the 2012 IBC by adding the second sentence to provide another option for designers. The second sentence permits the use of a ships ladder that complies with Minnesota Rules, part 1305.1209, as an equivalent to an alternating tread device, when permitted. This modification is reasonable because both ships ladders (*see* Minnesota Rule, part 1305.1209) and alternating tread devices provide safe alternatives as limited-use stair devices.

Ambulatory care facility. This is a new definition in the 2012 IBC, which addresses medical facilities that provide care on a less than 24-hours basis where the care recipient may be rendered incapable of self-preservation without assistance from care providers. Normally, the inability to exit the building without assistance would place this use in the Group I-2 occupancy classification, but since one criterion for the Group I-2 occupancy classification is that the care is on a 24-hour basis, they are instead defined as a "outpatient clinic" and classified as a Group B occupancy.

The amended definition, along with the revision of the "outpatient clinic" definition, is an attempt to mandate additional safeguards under the "ambulatory care facility" use not required under the "outpatient clinic" use to address the concerns of the care recipients being rendered incapable of self-preservation. These additional safeguards include a fire sprinkler system, smoke detection, and a smoke barrier that can be utilized as an area of refuge in the event the occupants cannot exit the building.

An amendment to the new definition is also necessary to clarify the scoping of the definition for kidney dialysis centers to coordinate with Minnesota Department of Health rules as they relate to Federal Medicare/Medicaid reimbursement provisions. Without the modification, Minnesota building and fire officials would not know how to properly classify kidney dialysis facilities ("ambulatory care facility" or "outpatient clinic") which would lead to a lack of consistency in code interpretation and enforcement among code officials. The omission of a kidney dialysis center located on the level of exit discharge from the classifications as an ambulatory care facility is also necessary and reasonable as the time necessary for these dialysis patients to egress when located on the ground floor is minimized since there would be no stairs to traverse and assistance from a care provider is therefore not necessary.

Approved. This definition is modified to coordinate the definition of "approved" with the same term contained in other chapters of the Minnesota State Building Code. The modified definition also provides the building official with methods to ensure that similar situations are uniformly addressed when the building official must determine whether or not construction methods comply with the Minnesota State Building Code and formal action is required. The methods listed in this definition establish whether or not proposed construction methods comply with the Minnesota State Building Code while maintaining the intent and purpose of the code. It is reasonable to provide the same definition for this term that is frequently used throughout the Minnesota State Building Code to ensure uniformity and help prevent conflicts from one rule to another.

Corridor. The amended definition of "corridor" is being proposed to be relocated here without change because this definition is currently located in Minnesota Rules, part 1305.1002, but the 2012 IBC definition section has been relocated to Chapter 2 of the International Building Code. Therefore, it is reasonable and necessary to relocate this definition to the corresponding location in Minnesota Rules, now located in part 1305.0202. The definition remains unchanged.

Live/work unit. This is a new term in the 2012 IBC which identifies construction requirements for a building pertaining to live/work units, commonly referred to as "home occupations" in Minnesota. This term is being deleted in its entirety from the 2012 IBC because regulation of live/work units is considered a local zoning issue in Minnesota, not a code compliance issue. This deletion is reasonable and necessary to prevent conflicts between the proposed rule and local zoning regulations in Minnesota.

Outpatient clinic. This definition is modified to coordinate with an existing definition that is currently located in chapter 1300. This definition is being relocated from chapter 1300 to chapter 1305 because this term is specific to buildings constructed under the IBC. It is also necessary to modify this definition to include the phrase "and ambulatory care facilities" to the

definition to provide a more complete list of uses and to help building officials determine which of those facilities should be classified as outpatient clinics with respect to the use or function of the occupancy.

This amendment is necessary due a definition change in the 2012 IBC for the term "ambulatory care facility." The current definition of "outpatient clinic" is almost identical to the new "ambulatory care facility" definition. That is, both definitions are based on the care recipients being rendered incapable of self-preservation.

In the past, the department amended the outpatient clinic definition so that building and fire officials would not classify kidney dialysis centers under the more restrictive Group I-2 occupancy classification, but instead considered them an "outpatient clinic." This was done at the request of the Minnesota Department of Health to insure that these facilities were not held to the higher standard of a Group I-2 occupancy including fire-resistive construction, smoke barriers, and a fire sprinkler system.

The group I-2 classification could discourage the construction of kidney dialysis centers in greater Minnesota because the cost of construction would make them economically infeasible. The lack of these facilities in greater Minnesota could create a hardship for individuals that require kidney dialysis because they would have to travel greater distances for kidney dialysis services. By providing the "ambulatory care facility" definition, kidney dialysis centers can now be classified as either an ambulatory care facility or an outpatient clinic, depending upon the level that the dialysis center is located within a building.

Roof covering. The amended definition for "roof covering" is being proposed to be relocated here without change because this definition is currently located in Minnesota Rules, part 1305.1502, but the 2012 IBC definition section has been relocated to Chapter 2 of the International Building Code. Therefore, it is reasonable and necessary to relocate this definition to the corresponding location in Minnesota Rules, now located in part 1305.0202. The definition remains unchanged.

Townhouse. This definition in the IBC is being deleted because townhouses will not be constructed under the 2012 IBC in Minnesota (*See* part 1305.0310 below for a full explanation of this change and statement of reasonableness).

Subp. 2. Added definitions. The title to this subpart is changed to provide the user with definitions used in this proposed rule chapter that have not been included in Chapter 2 of the 2012 IBC. Additionally, the definition for "Townhouse" is deleted and relocated alphabetically to subpart 1 of this rule section and revised as described in that section of the SONAR above.

Code. This definition is added to clarify that "the code" or "this code" as used in this rule chapter means Minnesota Rules, Chapter 1305.

Guest room. This definition is added to coordinate with the same term that has been added to the Minnesota State Fire Code, Minnesota Rules, chapter 7511, to prevent conflicts between the same terms utilized in both chapters 1305 and 7511 of the Minnesota Rules.

Room. This definition is being added here because the 2012 IBC does not define this term and it is used frequently in the proposed rule. The definition of "room" is currently located in Minnesota Rules, part 1305.1002, but is proposed to be relocated here because the 2012 IBC definition section has been relocated to Chapter 2 of the 2012 IBC. Therefore, it is reasonable and necessary to relocate this definition to the corresponding location in Minnesota Rules, now located in part 1305.0202. The definition remains unchanged.

Small Hose Connection. This definition is being added because of proposed changes to part 1305.0905, subp. 6a.The current rule requires Class III wet standpipes and hose connections in Group R-2 occupancies. This proposed rule requires the use of "small hose connections" in Group R-2 occupancies. This new terminology is necessary for firefighters to differentiate between a small hose connection and a Class III standpipe hose connection.

1305.0302 SECTION 302, CLASSIFICATION.

IBC Table 302.2, Care facilities. This is a new subpart that provides classifications for the various types of licensed, registered, and unlicensed care facilities for application and use of the 2012 IBC. Many of the care facilities identified in this table are licensed by the Minnesota Department of Health ("MDH"), the Minnesota Department of Human Services ("DHS"), or both. Building officials have struggled in the past with correctly classifying these facilities because the national model codes are not consistent with MDH or DHS licensing provisions. Proper occupancy classifications are based on the number of care recipients permitted by the classification, the capabilities of those care recipients to respond during emergencies (ambulatory vs. non-ambulatory), and permitted uses within a dwelling unit. As licensed care facilities, each may or may not be subject to additional construction requirements as determined by the appropriate licensing agency, which can be overlooked if code officials improperly classify the use of the building. Without clear guidance, building officials may place these facilities in a more restrictive occupancy classification than is intended by statute or rule. This improper classification can result in inconsistent code application and increased construction costs. After receiving numerous complaints about conflicts between the model code and agencies' licensing of these facilities, Department staff met with the appropriate staff of MDH, DHS, and the State Fire Marshal's Office ("SFM") in 2008, and developed a publication entitled "*Quick Reference Guide to Care Facilities in Minnesota.*" Since the guide's classification of these facilities can deviate from the 2012 IBC, it is therefore reasonable and necessary to incorporate the occupancy classification portion of this guide into the proposed rule. The proposed table also provides building officials with guidance about which licensed facilities should be treated similar to a "dwelling unit" for the purposes of fire suppression.

1305.0308 SECTION 308, INSTITUTIONAL GROUP I.

Subpart 1. IBC section 308.3, Institutional Group I-1. This subpart is amended by renumbering the IBC section references because the corresponding sections were renumbered in the 2012 IBC. The language in this subpart is also amended to match the 2012 IBC text, except that "Boarding care," "Housing with services," and "Supervised living facilities Class A-2" are added to the list of occupancy use groups. These use groups are added to the list of Group I-1 occupancies contained in in the 2012 IBC because these use groups are specific to the MDH and DHS licensing provisions and adding these to the list contained in the proposed rule will ensure

uniform use of the terms and uniform enforcement of the code by building officials. Additionally, the occupancy use group "Residential board and custodial care facilities," referenced in the 2012 IBC, is amended by deleting the term "custodial" because that term is already used in the opening paragraph to describe all I-1 occupancies and it is redundant to include the term in this location. In addition, the sentence in the current rule part that reads "The occupants are capable of responding to an emergency situation without physical assistance from staff" is deleted because the state-issued licenses for these uses dictate when assistance from staff is a requirement of the use. These modifications are reasonable and necessary to help eliminate misclassification of these facilities by designers and code officials.

Finally, the language in the existing subpart that states "A facility such as the above with five or fewer persons shall be classified as Group R-3. A facility such as above housing at least six and not more than 16 persons, shall be classified as Group R-4" is amended. That language is amended in the proposed rule by dividing the language into two separate section numbers, sections 308.3.1 and 308.3.2, respectively. This amendment is made to coordinate the proposed rule's format with the reformatted sections contained in the 2012 IBC.

Subp. 2. IBC section 308.4, Institutional Group I-2. This subpart is amended by renumbering the IBC section references because the corresponding sections were renumbered in the 2012 IBC. The first sentence in this subpart is further amended by deleting the phrases "surgical, psychiatric, nursing, or custodial" and "not capable," and by inserting the term "incapable," to also coordinate with language changes made to the 2012 IBC text. The list of occupancy uses is amended by adding "Detoxification facilities" and "Foster care facilities." The list is also amended by deleting "Mental" hospitals and replacing it with "Psychiatric" hospitals. The text "both intermediate-care facilities and skilled nursing facilities," following the phrase "Nursing homes," has also been deleted. All of these amendments to the list of examples of Institutional Group I-2 occupancies in this subpart are necessary to coordinate with textual changes made to the list in the 2012 IBC or to correlate with requirements from the MDH and the DHS because these agencies classify these uses into different classifications or they use different terminology. These changes are reasonable as they will coordinate with the corresponding sections of the 2012 IBC and will help prevent construction conflicts between building officials and other state agencies' licensing staff.

Subp. 3. IBC section 308.5, Institutional Group I-4, day care facilities. This subpart is repealed because the 2012 IBC now contains the same language. Therefore, this modification is no longer necessary.

Subp. 4. IBC section 308.6.4, Five or fewer persons receiving care in a dwelling unit. This subpart is new and modifies section 308.6.4 of the 2012 IBC by deleting the phrase "or shall comply with the International Residential Code" from the end of the section. This reference to the International Residential Code is deleted because licensed facilities in Minnesota are classified according to the IBC, not the IRC. Failure to delete that language may create confusion and conflicts with the licensing requirements of other state agencies that may be involved in regulating these facilities, such as MDH and the DHS.

1305.0310 SECTION 310, RESIDENTIAL GROUP R.

IBC sections 310.1 to 310.6. The existing rule part is amended by reformatting the rule part to correspond with reformatting changes made to section 310 of the 2012 IBC. Additionally, this part is amended to coordinate with the residential occupancy classifications contained in the rules of the Minnesota Department of Health and the Minnesota Department of Human Services.

IBC section 310.1, Residential Group R. The phrase "Residential occupancies shall include the following:" is deleted to coordinate with reformatting changes made to section 310 of the 2012 IBC. Additionally, the language of the existing rule part is amended by adding a phrase as follows: "This group shall not include buildings regulated by chapter 1309, the International Residential Code (IRC). However, the licensed uses specified in this part, section 310.5, and section 310.6 are applicable to a building constructed in accordance with the IRC that houses a use that is required to be licensed." This phrase is added because the ICC produces two model documents for the general regulation of building construction, the IBC and the IRC. If a jurisdiction adopts only the IBC, then the provisions for one-family dwellings, two-family dwellings and townhouses that are normally in the scope of the IRC must then be included in the IBC adopted by that jurisdiction.

However, Minnesota adopts both the IRC (Chapter 1309) and the IBC (Chapter 1305). There needs to be a clear distinction regarding when the IRC applies and when the IBC applies to certain buildings. Currently there is a path to use the IBC for the construction of one-family dwellings, two-family dwellings and townhouses. This is done by classifying these buildings as "R-3" occupancies in the IBC. This path needs to be closed because only Chapter 1309 contains the required durability-related provisions for these buildings that are mandated by Minnesota Statutes, section 326B.118. While the Minnesota Residential Energy Code (Chapter1322) contains the bulk of the durability-related provisions mandated by this statute, certain durability-related provisions required by this statute for one-family dwellings, two-family dwellings and townhouses are located in Chapter 1309. The mandatory provisions for these building types are not located in Chapter 1305, which is intended to regulate buildings other than those regulated by Chapter 1309.

Minnesota Statutes, section 326B.118, requires the Commissioner to "explore and review the availability and appropriateness of any model energy codes related to the construction of single one- and two-family residential buildings." Additionally, this statute requires the department to adopt an energy code for residential buildings that includes "research and analysis that addresses, at a minimum, air quality, building durability, moisture, enforcement, enforceability cost benefit, and liability."

As stated previously, most of the provisions that comply with Minnesota Statutes, section 326B.118's mandate are located in Minnesota rule chapter 1322. However, some of the mandatory provisions fit better into the IRC and were recently made part of Chapter 1309. For example, since the IRC is intended to be used for construction of one-family and two-family dwellings and townhouses, some of the required durability and moisture requirements for these structures have been located in the IRC during its recent adoption, not the IBC. In order to meet these durability-related requirements, it is essential that these structures be built according to the IRC, rather than the IBC. Therefore, the inclusion of the sentence "This group shall not include buildings regulated by chapter 1309, the International Residential Code (IRC)" in section 310.1

is reasonable and needed to clarify that one-family dwellings, two-family dwellings and townhouses must be constructed to the IRC, not the IBC.

In addition, the phrase "However, the licensed uses specified in this part, section 310.5, and section 310.6 are applicable to a building constructed in accordance with the IRC that houses a use that is required to be licensed" is added to clarify that one-family dwellings, two-family dwellings and townhouses built under the IRC are permitted to have applicable licensed uses in those buildings. It is reasonable to permit buildings built under the IRC to house applicable licensed uses because the licenses were permitted in the same buildings, however possibly built in accordance with the IBC.

IBC section 310.2, Definitions. This section is incorporated from the 2012 IBC without modification. The section lists common definitions used throughout Section 310 to let the user know that these terms are now defined in Section 202 of the 2012 IBC.

IBC section 310.3, Residential Group R-1. The language in this rule part is amended by adding occupancy uses for R-1 occupancies to the list of examples of Residential Group R-1 occupancies to coordinate with changes made to Section 310 of the 2012 IBC. The 2012 IBC changed by adding the words "with more than 10 occupants" to the end of the phrases "Boarding houses (transient)" and "Congregate living facilities (transient)." Additionally, the phrase "Bed and breakfast facilities with six or more guest rooms. A facility with less than six guest rooms shall be classified as a Group R-3 occupancy" is relocated within the proposed rule to place the phrase in alphabetical order in the 2012 IBC list.

IBC section 310.4, Residential Group R-2. The language in this rule part is further amended to coordinate with reformatting and other changes made to Section 310 of the 2012 IBC concerning Residential Group R-2 occupancies. Additionally, the reference to "Live/work units" contained in section 310.4 of the 2012 IBC is not being incorporated into this rule part because the Department is deleting this term entirely from its adoption of the 2012 IBC. This term must be deleted by the Department because the regulation of live/work units is considered a local zoning issue in Minnesota. This modification is reasonable and necessary as it will prevent conflicts between the proposed rule and local zoning regulations. Finally, the phrase "Congregate living facilities with 16 or fewer occupants are permitted to comply with construction that complies with the requirements for Group R-3" is deleted from the existing rule part because this requirement is now appropriately located in the Group R-3 section of the 2012 IBC, section 310.5, and is no longer needed.

IBC section 310.5, Residential Group R-3. The amendments to this rule part are necessary to coordinate with changes made to Section 310 of the 2012 IBC concerning Residential Group R-3 occupancies and to add certain uses to the list of examples of Residential Group R-3 occupancies contained in the proposed rule.

The phrase "Buildings that do not contain more than two dwelling units" is deleted because buildings that meet this description will be built to the requirements of Chapter 1309 (*See* Section 310.1, above). In addition, "Dwelling units in mixed occupancy buildings" is added to accommodate situations where a dwelling unit is attached to a building that is only regulated by the IBC and is termed a "mixed occupancy." This is needed because mixed occupancies are

not addressed in the IRC. It is reasonable to accommodate situations where a dwelling unit is attached to an occupancy other than a residential IBC occupancy.

A sentence is also added to the end of this part to require that new R-3 occupancies shall meet the durability provisions of Chapter 1309 to affect the intention of Minnesota Statutes Section 326B.118, which requires single one- and two-family residential buildings to meet energy and durability requirements. "Dwelling units in mixed occupancy buildings" are the same as one- family dwellings, therefore it is reasonable to require those dwelling units to meet the energy and durability requirements of Chapter 1309. The modifications to the list are reasonable and necessary to prevent confusion and conflict between this code and the regulations of other state agencies, such as the Minnesota Department of Health and the Minnesota Department of Human Services.

IBC section 310.5.1, Care facilities within a dwelling. This section of the 2012 IBC is being modified by deleting it in its entirety. This modification is necessary because *all* care facilities in Minnesota are regulated only by Minnesota Rules Chapter 1305, the IBC. This section of the IBC, as published, refers the user to the International Residential Code. This existing reference will therefore send the user to a code that has no applicability to care facilities in Minnesota. Therefore, it must be deleted to avoid potential confusion.

IBC section 310.6, Residential, Group R-4. This section of the 2012 IBC is modified by expanding the list of uses classified as residential Group R-4 occupancies. This list includes facilities licensed by other state agencies. Examples of these facilities include boarding care facilities, housing with services, and residential hospice facilities with 12 or fewer occupants. This modification is reasonable and necessary to prevent confusion or conflict between this code and the regulations of other state agencies such as the Minnesota Department of Health and the Minnesota Department of Human Services.

1305.0402 SECTION 402, COVERED MALL AND OPEN MALL BUILDINGS.

This existing rule part heading is amended by adding the phrase "and open mall" to the title to coordinate with changes made to the Section heading in the 2012 IBC.

Subpart 1. IBC section 402.4.2.2.2, Property lines. This subpart is amended by renumbering the section reference number and the section references in the body of the subpart to coordinate with renumbering changes made to the 2012 IBC.

Subp. 3. IBC section 402.7.2, Smoke control. This new subpart modifies section 402.7.2 of the 2012 IBC by adding a paragraph after the exception regarding covered mall buildings exceeding 50,000 square feet. The requirements for smoke control in covered mall buildings are currently located in Minnesota Rules, part 1305.0404, Section 404, Atriums. The Department has determined that the requirements for smoke control in covered mall buildings would be more appropriately located in Section 402 of the 2012 IBC, which addresses covered mall buildings. Therefore, the Department has determined that the existing requirements of Minnesota Rules, part 1305.0404, be repealed and relocated to Minnesota Rules, part 1305.0402, which addresses covered mall buildings.

The Department further determined that proposed rule part 1305.0402, subpart 3, be added to exempt covered mall buildings 50,000 square feet or less in floor area, excluding the anchor buildings, from the requirement for a "post fire exhaust system." The existing rule language of part 1305.0404 requires all covered mall buildings to be equipped with a post fire smoke exhaust system, regardless of size. The proposed language in this new subpart does not require a post fire smoke exhaust system in covered mall buildings that are 50,000 square feet or less in floor area, excluding anchor buildings, if they are provided with an approved smoke control system that complies with Section 909 of the IBC. This exception is reasonable because smaller malls that experience a fire incident can adequately clear the smoke by opening the structure's exterior doors. Post fire smoke exhaust systems are intended to allow the removal of smoke from a structure after a fire incident. In larger malls, it is not practical, nor efficient, to open exterior doors to remove smoke after a fire incident. Without a post fire smoke exhaust system, even a small fire incident may render a larger mall unable to resume operation in a timely matter. Exempting covered malls 50,000 square feet and smaller from the requirement for a post fire smoke exhaust system, if they are equipped with an approved smoke control system, is therefore reasonable as it will reduce costs for the building owner without any additional risk to the structure.

1305.0403 SECTION 403, HIGH-RISE BUILDINGS.

Subpart 1. IBC section 403.3.2, Shaft enclosures. This subpart is amended by renumbering section reference numbers to coordinate with renumbering changes made to the 2012 IBC.

Subp. 2. IBC section 403.15, Post fire smoke exhaust system. This subpart is being repealed because the 2012 IBC now contains requirements for post fire smoke exhaust systems in high-rise buildings. Therefore, this modification is no longer necessary.

Subp. 3. IBC section 403.4.8.2, Standby power loads. This subpart modifies section 403.4.8.2 of the 2012 IBC by revising the third classification item listed by deleting the word "elevators" and replacing it with language pertaining to passenger elevators serving occupied floors more than 75 feet above the lowest level of fire department access. Standby power is an alternate source of power that is used in the event of an interruption of the primary power source. This modification is necessary because freight elevators were not intended to comply with this requirement. Freight elevators are not used for the movement of people and are not allowed to be used in an emergency situation. Without this modification, the IBC's classification of standby power loads may be misapplied to freight elevators, which could increase costs to the building owner because installation of standby power would be required for elevators banks within a high-rise building, including freight elevators. This modification is reasonable as it provides clarity, ensures uniform enforcement, and reduces costs for building owners.

1305.0404 SECTION 404, ATRIUMS.

IBC section 404.5, Smoke control. This rule part is repealed because the requirements for smoke control in atriums are being relocated to Minnesota Rules, part 1305.0402, subpart 3. As a result, the amendment is no longer necessary.

1305.0406 SECTION 406, MOTOR VEHICLE-RELATED OCCUPANCIES.

Subpart 1. IBC section 406.4.5, Floor surface. IBC section 406.4.5 is modified by adding a new exception that exempts unoccupied portions of nonpublic parking garages from having to be made of concrete or similar noncombustible or nonabsorbent material. This exception is intended to reduce costs of vehicular storage buildings that are being constructed for security or general weather protection of vehicles. The exception is intended to apply to buildings like pole sheds or garages where an earth or gravel floor is adequate for the protection and preservation of the equipment.

Subp. 2. IBC section 406.5.7, Means of egress. This section of the 2012 IBC has been renumbered from 406.3.8 to 406.5.7 so the section reference number must be renumbered to coordinate with this change. Additionally, a new amendment is being added to section 406.4.5 of the 2012 IBC causing this language to be numerically formatted as subpart 2 to accommodate the new amendment, which will become subpart 1. The content of the amendment is unchanged.

1305.0407 SECTION 407, GROUP I-2.

IBC section 407.2.1, Spaces open to the corridor. This rule part is amended by revising the title of the rule part from "Spaces of unlimited area" to "Spaces open to the corridor." Section 407.2.1 in the 2012 IBC is entitled "407.2.1, Waiting and similar areas." Both the title in the existing rule part and the title in the 2012 IBC section are misleading regarding the actual content of the code requirement, which addresses spaces that are permitted to be open to corridors for Group I-2 occupancies. As a result, the title is changed to more reasonably correlate it with the actual content and intent of the rule part. This rule part is further modified by deleting the phrase "In an I-2 occupancy" because section 407 only addresses requirements pertaining to Group I-2 occupancies. Therefore, the phrase is redundant and not necessary. Condition number1 in Section 407.2.1 is modified to coordinate with changes made to the 2012 IBC. These modifications are reasonable to provide clarity and help ensure uniform enforcement of the 2012 IBC.

1305.0408 SECTION 408, GROUP I-3.

Subpart 1. IBC section 408.6, Smoke barrier [Repeal]. This subpart is being repealed because the same requirements are also contained in the Minnesota Department of Correction's rules for construction of sleeping cell areas. Section 408.6 of the 2012 IBC now requires a fire-resistive smoke barrier wall for the compartmentalization of any correctional facility, regardless of the size or number of sleeping cells. Unlike previous editions, the 2012 IBC language now coordinates with the Department of Correction's rule requirements, so this modification is no longer necessary and is being repealed.

Subp. 2. IBC section 408.7, Security glazing. This subpart is amended by renumbering the IBC section references because the section was renumbered in the 2012 IBC. The amended language for sections 408.9.1 and 408.9.2 of the 2012 IBC are also being incorporated into this newly amended language for Group I-3 occupancies and the existing language is deleted. The language in section 408.7 is modified by adding the phrase "2-hour fire barriers constructed in accordance with section 707 used for horizontal exits." This modification is needed to maintain

visual supervision in detention facilities when a 2-hour fire barrier is used as a horizontal exit. Additionally, an exception is added to condition number 2 that reads, "Exception: Fire partitions or smoke barriers with ¼-inch (6.4 mm) wire glass in a security assembly." Security laminated glazing is used instead of traditional glazing in detention facilities because the traditional glazing can be broken and used a weapon. A new condition number 5 is also added to the list of conditions that reads, "5. Security glazing in fire partitions, 1-hour fire barriers enclosing fire command centers, and smoke barriers, shall not be limited to 25 percent of the area of the common wall with any room."

The first modification described above is carried forward from existing language in sections 408.9 and 408.9.2. The exception in condition number 2 is added to allow sandwiching of rated ¼ wire-glass in the assembly instead of providing sprinkler wash of the glass. This exception addresses those instances where it is undesirable to place a sprinkler head in a position where an inmate may be able to access it, damage it, and then use it as a weapon. Additionally, visual observation of detainees is needed in addition to providing glazing material that cannot be readily broken and the pieces used as weapons. The historical problem with the national model codes is that where rated doors and windows were required, the code did not have an exception to permit the use of security laminated glazing. Beginning with the 1998 Minnesota State Building Code, Minnesota has included provisions that permit the use of security laminated glazing in fire-rated door and wall assemblies. The 2012 IBC now contains requirements for laminated security glazing; however, they do not address all the instances where the use of security laminated glazing is necessary.

The new condition number 5 is added to remove the limitation on size of security glazing in fire partitions, fire barriers enclosing fire command centers, and smoke barriers. These partition types are limited to a maximum of 25% of the common wall, in accordance with IBC section 716.6.7.2. It is reasonable to remove the 25 % area coverage size limitation on security glazing in detention facilities because visual observation of detainees is critical in a detention facility. Moreover, the proposed changes to this section are not more restrictive or more costly as compared to existing rule requirements.

IBC sections 408.9.1, Corridors and 408.9.2, Other. The existing rule amendments to IBC sections 408.9.1 and 408.9.2 are being deleted because the 2012 IBC, as amended, now addresses laminated security glazing installations in detention facility corridors. Therefore, the amendments are no longer necessary.

Subp. 3. IBC section 408.9, Windowless buildings. This is a new subpart that adds a modification to IBC section 408.9, Windowless buildings. The first sentence has been revised for clarity and the term "skylights" is added to the sentence. This section is also modified by adding the phrase "or exterior doors provided in all resident areas of the exit access with an occupant load greater than 50" to the end of the sentence. This modification is intended to clarify that the exit access for resident areas having more than 50 occupants shall have an exterior door, or an operable window or skylight, or a breakable window or skylight. This modification is necessary because the language in IBC section 408.9 does not provide specific parameters addressing when an opening or an engineered smoke control system is required. The modifications are reasonable because they establish clear parameters as to what constitutes a windowless building under this code.

1305.0413 SECTION 413, COMBUSTIBLE STORAGE.

IBC section 413.3, Fire protection of floors. This new rule part adds new subsection 413.3 to Section 413 of the 2012 IBC. This new subsection directs the user to section 420.6 of the 2012 IBC for floor protection requirements, in addition those discussed in Section 413. It is necessary that this amendment reference another proposed amendment located in Minnesota Rules, part 1305.0420, so that building designers do not miss the additional requirements when applying the combustible storage provisions of section 413. It is reasonable to add a provision to make the code easier and clearer for building designers to use.

1305.0419 SECTION 419, LIVE/WORK UNITS.

This is a new rule part that deletes section 419 of the 2012 IBC that pertains to live/work units, commonly referred to as "home occupations" in Minnesota. Deleting this requirement is needed and reasonable because regulation of live/work units in Minnesota is addressed by local zoning laws that could conflict with these requirements.

1305.0420 SECTION 420, GROUPS I-1, R-1, R-2, R-3.

Subpart 1. IBC section 420.1, General. This new subpart is added to modify Section 420 of the 2012 IBC. Section 420.1 of the IBC is modified by changing the section reference "420.1 through 420.5" to "420.1 through 420.6." This change is necessary because subpart 2 of this proposed new rule part adds new subsection 420.6, Fire protection of floors, to Section 420 to address floor assemblies that are not fire-resistance rated construction.

Subp. 2. IBC section 420.6, Fire protection of floors. This new subpart is added to incorporate fire-resistance protection for residential-type occupancies into the 2012 IBC. The proposed language is identical to the adopted language in Chapter 1309, the 2012 International Residential Code ("IRC").[4] Proposed section 420.6 is entitled "Fire protection of floors." As in the IRC adoption, the language in this proposed subpart is added to address floor assemblies that are not fire-resistance rated construction. The requirements of this section reasonably provide additional safety to the occupants, first responders, and fire fighters by protecting the floor assembly during a fire event when entering and exiting the structure. This subpart is necessary to provide consistency between the International Building Code and the International Residential Code for construction projects of similar construction.

1305.0421 SECTION 421, GROUP E OCCUPANCIES.

This existing rule part is repealed because Section 421 of the 2012 IBC was renumbered to Section 306. As a result, the existing rule language is being relocated to Minnesota Rules, part 1305.0425.

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[4] Minnesota Rules, Chapter 1309, was filed with the Secretary of State's Office and formally adopted on April 23, 2014. The Notice of Adoption was published in the State Register on July 28, 2014. The effective date for Chapter 1309 is January 24, 2015.

1305.0425 SECTION 425, GROUP E OCCUPANCIES.

This rule part contains language that is relocated from existing Minnesota Rules, part 1305.0421, because the section pertaining to this subject was renumbered in the 2012 IBC. The language includes some minor grammatical edits to provide clarity, but the requirements in this part remain unchanged.

1305.0507 SECTION 507, UNLIMITED AREA BUILDINGS.

Subpart 2. IBC section 507.3, Sprinkled, one-story. This subpart is amended by adding the phrase "above grade plane" following the phrase "one-story" in two places in the subpart. This modification is reasonable and necessary to coordinate the subpart with changes made to Section 507 in the 2012 IBC.

Subp. 3. IBC section 507.4, Two-story. This subpart is amended by adding the phrase "above grade plane" following the phrase "one-story" in the subpart. This modification is reasonable and necessary to coordinate with changes made to Section 507 in the 2012 IBC.

1305.0508 SECTION 508, MIXED USE AND OCCUPANCY

IBC section 508.3.3.4. This rule part is amended by deleting the current language pertaining to the exception for an occupancy separation between a child or adult daycare and a Group A-3 church building. This language is deleted because this section has been renumbered in the 2012 IBC. Additionally, this exception is no longer needed because section 308.6.2 of the 2012 IBC now applies to these occupancies and addresses such care being provided in places of worship. The existing rule amendment was included with the 2000 IBC code adoption to address problematic code applications that were occurring with these two occupancies. Since that time, however, a requirement for "Accessory Uses" has also been included in section 508.2 of the 2012 IBC which can now be used in these situations to eliminate problematic issues such as the requirement for fire resistive separation between mixed uses and occupancies.

IBC section 508.1. Additionally, the rule part is amended by adding language that deletes exception number 3 from section 508.1 of the 2012 IBC. Exception #3 states, "Uses within live/work units, complying with Section 419, are not considered separate occupancies." This exception must be deleted to maintain consistency with other modifications made throughout the 2012 IBC adoption process pertaining to requirements for "live/work units." References to "live/work units" are being deleted throughout the code because these uses are regulated by local zoning laws in Minnesota, not the State Building Code. This modification is reasonable and needed to prevent conflict between the code and local zoning laws and to maintain consistency with other amended sections of the 2012 IBC.

1305.0603 SECTION 603, COMBUSTIBLE MATERIALS IN TYPE I AND II CONSTRUCTION.

IBC section 603.1, Allowable materials. This new rule part modifies section 603.1 of the 2012 IBC by adding an exception number 26 to the list of other exceptions regarding permitted combustible materials that can be used in buildings of Type I or Type II construction.

Type I or Type II construction materials are generally restricted to materials that are non-combustible, such as steel or concrete. The new exception identifies that wood may be used for roof construction to support equipment, building and roof joint systems, skylight or mechanical equipment, curb, cants, blocking and backing, and parapet or roof edge construction. This modification is reasonable because permitting wood in the limited applications in this type of construction is standard practice in the industry in the locations described in this exception. Also, the limited amount of wood in this exception is needed to properly secure roofing materials at the intersection of the roof covering and parapets. This modification will provide consistent and uniform code administration relating to roof and related roofing construction practices in Type I or II building construction.

1305.0714 SECTION 714, PENETRATIONS.

IBC section 714.4.1.2, Membrane penetrations. This new rule part modifies exception number 7 of section 714.4.1.2 of the 2012 IBC by deleting "fire-resistance rated" from the first sentence pertaining to the required installation of a fire-resistance rated wall assembly when or if the top plate of a wall interrupts or penetrates the bottom side of the ceiling membrane, which is typically gypsum board, of a horizontal ceiling assembly. This modification is necessary because walls are typically framed with double top plates that are tight to the underside of the horizontal floor-ceiling framing members above. The finished ceiling system is then applied to the underside of the horizontal ceiling framing members up to and around the top plates of the wall. Top plates of walls are typically installed in this manner, which is considered to be a standard construction method in Minnesota. When installed in this manner and when the double top plates are properly sealed (fire caulked) at all penetrations, there is no need to use or install a fire rated wall assembly below it.

This section is further amended by deleting the last sentence from exception number 7 that states, "The fire resistance rating of the wall shall not be less than the rating of the horizontal assembly." This modification is necessary because without it, designers would be required to provide a fire-resistance rated wall at every location in the building that interrupts the horizontal ceiling membrane above. It would also add substantial cost to a building and deviate from conventional construction practices in Minnesota that are considered to achieve the same fire protection at less cost. Both modifications discussed above for section 714.4.1.2 are reasonable and needed to provide clarity, ensure uniform design and enforcement, and reduce construction costs for building owners.

1305.0716 SECTION 716, DUCTS AND AIR TRANSFER OPENINGS [Repeal].

This rule part is being repealed because Section 716 was renumbered to Section 717 in the 2012 IBC. As a result, the amendment is no longer applicable and needs to be repealed to correlate with changes made to the 2012 IBC.

1305.0717 SECTION 717, DUCTS AND AIR TRANSFER OPENINGS.

Subpart 1. IBC section 717.5.3, Shaft enclosures. The language in this new subpart was previously located in Minnesota Rules, part 1305.0716, Ducts and Air Transfer Openings. The amendment modified section 716.5.3 by adding an exception number 5 pertaining to shaft

enclosures. The language remains unchanged from that in the existing amendment, but the section reference numbers and the exception number are changed to correlate with new section and exception numbers found in the 2012 IBC.

Subp. 2. IBC section 717.6.1, Through penetrations. This is a new subpart that modifies section 717.6.1 of the 2012 IBC. The modification renumbers the existing exception and its list of requirements as exception number 1, subitems a through e. The modification also amends the first subitem of the existing exception by permitting another option to protect the duct and adds a new exception number 2 that addresses duct openings connecting adjacent floors in Group I occupancies. The rest of the content remains unchanged from the 2012 IBC.

The modification to the first subitem of the existing exception is made to allow the use of a listed through penetration firestop system that has an F and T rating as an option to the non-listed 26-gage duct assembly enclosed within a wall. Items that penetrate fire-resistive assemblies (walls, floors, roofs) are traditionally required to be tested to ensure that the penetrating item (conduit, pipe, duct, and plumbing) does not negatively affect the fire-resistive assembly that is being penetrated. The testing agency assigns an F and T rating to the penetrating item. An F rating designates the time frame used to determine the acceptance (1, 2 or 3 hour fire-resistivity) and the T rating determines whether the temperature of the penetrating item gets so hot that it is likely to ignite something combustible that it may be in contact with on the non-fire side of the assembly. Rather than requiring an F and T rating, the exception includes a prescriptive requirement on how to protect the ductwork where it penetrates the floor and deals with the temperature concerns by requiring that the duct be within the cavity of a wall so that no combustibles can come in contact with it.

This modification is reasonable because fire and life safety precautions are increased when installing a listed and tested through penetration firestop system having a T rating which ensures that the penetrating item's temperature on the non-fire side does not increase to a point that it would ignite combustibles. This practice is proven and already used in wood framed multi-family construction as an alternative to strict application of the code and is now considered a standard construction practice in Minnesota. This modification is also reasonable because it reduces the cost for duct installation conditions at walls that intersect with floor-ceilings by allowing walls to terminate at the ceiling line of the floor-ceiling or roof-ceiling assemblies.

Finally, exception number 2 is added to address duct openings connecting adjacent floors in Group I occupancies. The exception addresses the many instances where a hospital, nursing home, or detention facility is only two stories in height. Without the modification, a duct penetration to a single floor that connects the two stories would be required to be protected by a fire-resistive shaft and a smoke/fire damper installed both at the point where the duct enters and leaves the shaft.

The primary purpose of a shaft is to protect the building from the vertical movement of smoke and fire in multi-story buildings. For occupancies other than Group I-2 and I-3, a shaft would not be required unless connecting three stories in fire rated construction and four stories in non-fire rated construction.

The typical construction associated with Group I-2 and I-3 occupancies is fire-rated non-combustible construction, such as precast or poured in place concrete floors or bar joist with metal deck and concrete topping. It is not practical to construct a shaft and install two smoke/fire dampers in these typical construction assemblies, as the length of the shaft would be a mere 8 to 24 inches and would not provide sufficient clearance for the proper operation and required access to the smoke/fire dampers. The amendment recognizes this, and instead reasonably permits a single smoke/fire damper. Because Group I-2 and I-3 occupancies already require the most restrictive NFPA 13 fire sprinkler systems, fire alarms, and smoke detection, very little is lost from a fire and life safety standpoint by allowing this construction practice. This proposed exception is also consistent with the Minnesota Department of Health's requirements pursuant to the NFPA 101 Life Safety Code, which that agency enforces.

1305.0901 SECTION 901, GENERAL.

IBC [F] section 901.6.2, Fire alarm systems. This rule part is amended by adding the name of the2012 IBC section to the part to provide clarity for the user. The remaining language is unchanged.

1305.0903 SECTION 903, AUTOMATIC SPRINKLER SYSTEMS.

Subpart 1. IBC [F] section 903.1, Scope [Repeal]. This subpart is being repealed because it contains language that was erroneously included in the original rule part. The format of the 1305 Rule is incorrect; therefore, it is being repealed.

Subp. 1a. IBC [F] section 903.2.8, Group R. The existing language in this subpart pertaining to section 903.2.7 of the 2006 IBC is deleted because that section has been reformatted and renumbered to 903.2.8 in the 2012 IBC. As a result, it is necessary to delete the IBC section reference number and language in this subpart and add revised language under the new IBC section number. The new language in exception number 1 modifies section 903.2.8 of the 2012 IBC to maintain the effect of the existing provision of section 903.2.7, item number 1 that requires R-1 and R-2 occupancies to be equipped with an automatic fire sprinkler system when the floor area exceeds 9,250 square feet. The new language in exception number 2 of this subpart modifies section 903.2.8 of the 2012 IBC to coordinate R-3 and R-4 occupancies in the IBC with the revised residential fire sprinkler installation requirements of recently adopted Minnesota Rules, chapter 1309, the Residential Building Code, and proposed Minnesota Rules, chapter 7511, the State Fire Code. The language in section 903.2.8 of the 2012 IBC is also being reformatted to coordinate with the changes made to the parallel rule part found in the recently adopted Chapter 1309.

Specifically, IBC Section 903.2.8 is modified by adding three exceptions to the requirement to install an automatic fire sprinkler system in all buildings with a Group R fire area. The first exception excludes Group R-1or R-2 fire areas or combined fire areas with less than or equal to 9,250 square feet of building area to maintain the current effect of the provisions of 903.2.7.

The second exception excludes dwelling units that are classified as a Group R-3 or R-4 occupancy with less than 4,500 square feet of building area, excluding garages. This exception

is necessary to coordinate these requirements with the one-family dwelling sprinkler threshold requirement recently adopted in Minnesota Rules, Chapter 1309.

The third exception excludes additions or alterations made to existing Group R-3 or R-4 buildings or portions thereof that do not have an automatic fire sprinkler system installed, unless required by a Minnesota license. This exception is necessary to coordinate this part with the identical exception recently adopted in Minnesota Rules, Chapter 1309.

IBC [F] section 903.2.8.1, Group R-3 or R-4 congregate residences. This section of the 2012 IBC is included for context to assist the user, but is unchanged from the 2012 IBC language.

IBC [F] section 903.2.8.2, State licensed facilities. This section of the 2012 IBC is modified to clarify that state licensed facilities located within Group R occupancies must meet the fire sprinkler requirements of the licensing authority or this code, whichever is more restrictive. In many cases, the licensing authority (e.g., MDH, DHS, DOC) have fire sprinkler system design requirements for licensed facilities that are more restrictive than this code. In those cases, the fire sprinkler system must be installed to the more restrictive requirements of the respective state licensing authority. This proposed rule will help prevent conflicts between other agencies' requirements and this code.

IBC [F] section 903.2.8.3, Residential hospice facilities. This is a new section that is being added to the2012 IBC to require the installation of an automatic sprinkler system in accordance with NFPA 13 throughout all buildings with a Group R-3 or R-4 fire area containing a residential hospice facility when they are located in dwelling units. Because residential hospice facilities are required to be licensed by the Minnesota Department of Health ("MDH"), they are required to provide fire sprinkler protection in accordance with their rules, which require the installation of a fire sprinkler system meeting the installation standards of NFPA 13, a fire sprinkler standard designed for structures other than one-family dwellings. This requirement coordinates with a similar MDH requirement, which also requires that the entire building is fully sprinkled. This additional requirement will help prevent confusion, provide better guidance to code users, and will coordinate the requirements of this proposed rule with those of other state licensing agencies. Parallel language has been proposed in Minnesota Rules, chapter 7511, the Minnesota Sate Fire Code.

Subp. 1b. IBC [F] section 903.2.11.4, Fire protection for exhaust systems. This section of the 2012 IBC has been renumbered from 903.2.12.1 in the 2006 IBC to 903.2.11.4 in the 2012 IBC. This 2012 IBC section is also modified by deleting the title and the language from the section and replacing it with parallel proposed language located in Minnesota Rules, chapter 1346, the Minnesota Mechanical and Fuel Gas Codes, to coordinate the requirements between the codes and to provide more uniform application and enforcement of the requirement. In addition, the word "process" has been replaced with "appliances, equipment, machinery or any apparatus." This change is needed to clarify that a "process" includes appliances, equipment, machinery or any apparatus that will present a serious life or fire hazard if water from a sprinkler system is permitted to flow back to the appliance, equipment, machinery or apparatus of any sort.

Subp. 2a. IBC [F] section 903.3.1, Standards. This new subpart modifies IBC section 903.3.1 by adding a sentence to the end of the IBC section pertaining to fire sprinklers and State of Minnesota licensed or registered facilities. Facilities licensed by the State of Minnesota may have more restrictive requirements for the installation of sprinkler systems than those required by the national standards referenced in the building code (NFPA 13, NFPA 13R or NFPA 13D). This modification is necessary to provide direction to designers regarding possible additional fire sprinkler installation requirements mandated by other state licensing agencies.

Subp. 2b. IBC [F] section 903.3.1.1, Exempt locations. This new subpart modifies IBC section 903.3.1.1.1 by adding an exempt location for elevator shafts, elevator pits, or elevator machine rooms to the list of locations in the 2012 IBC. These locations must be exempt from sprinkler protection requirements because elevators, including the elevator pit and machine rooms, are used by the fire service for evacuating people from a building in an emergency. Elevator shafts are also used to vent the products of combustion after a fire, so it would render that function useless since the vented products of combustion will activate a sprinkler, which would cool the products of combustion and not vent from the building. Additionally, this new exempt location contains an exception for healthcare occupancies that are licensed by the Minnesota Department of Health or that participate with Medicare or Medicaid. These occupancies must be excluded from the exemption because federal law requires these spaces to be sprinkled.

Subp. 3a. IBC [F] section 903.3.1.3, NFPA 13D sprinkler systems. This subpart is amended by deleting the existing language pertaining to the protection of decks and balconies. This amended language is no longer necessary because the requirements are now included in the 2012 IBC.

The language in this subpart permits sprinkler systems for R-3 and R-4 occupancies to be installed in accordance with NFPA 13D. This added language parallels the language with the same requirements contained in the recently adopted Minnesota Rules Chapter 1309. This change is needed to coordinate the requirements between the IBC and IRC to provide uniform application and enforcement of the requirements.

Subp. 4. IBC [F] section 903.3.1.4, Buildings of undetermined use. The section reference number in this subpart is renumbered from 903.3.1 to 903.3.1.4 to provide a more specific reference to the section being amended. The rule language remains unchanged.

Subp. 5. IBC [F] section 903.3.1.5, Special sprinkler design criteria. The section reference number in this subpart is renumbered from 903.3.1 to 903.3.1.5 to provide a more specific reference to the section being amended. The rule language remains unchanged.

Subp. 5a. IBC [F] section 903.3.1.6, Modifications to sprinkler standards. The section reference number in this subpart is renumbered from 903.3.1 to 903.3.1.6 to provide a more specific reference to the section being amended.

The amendment for subsection 903.3.1.6.2, Elevator shafts and equipment, is deleted because the requirement is being relocated to Subpart 2b in this rule part. It is necessary to

relocate this requirement to 903.3.1.1.1 because IBC section 903.3.1.6.2 has been renumbered to section 903.3.1.1.1.

Subsection 903.3.1.6.5, Vestibules, is added to the subpart to exempt sprinkler protection from certain building entrance vestibules. The requirements to qualify for this exemption are reasonably stringent because the vestibule must be 225 square feet or less, is required to be of very limited combustible construction, is only to be used for ingress and egress, is required to have glazing to prevent hidden problems, and there are no fuel sources and no fuel present. These conditions control the likelihood of any fire incident to a reasonable minimum. This exemption can be reasonably controlled in commercial buildings through fire inspections, unlike sprinkler protection required for covered patios, covered decks and covered porches over 40 square feet that are attached to two-family dwellings and townhouses. The restrictions that apply to vestibules cannot be applied to dwellings and townhouses due to the combustible construction that is prevalent in those structures. This exemption is further needed to protect sprinkler heads from freezing during cold climate months. Although dry sprinkler heads could be used, their use would be cost prohibitive and maintenance intensive for this particular application.

Subp. 6a. IBC [F] section 907.3.3.7, Sprinkler system design pressure safety margin. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

Subp. 7. IBC [F] section 903.4, Sprinkler system supervision and alarms. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

Subp. 8. IBC [F] section 904.4.4, Valve security. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered from 903.4 to 903.4.4 to provide a more specific reference to the section being amended.

1305.0905 SECTION 905, STANDPIPE SYSTEMS.

Subpart 1, IBC [F] section 905.2.1, Modifications to standards, Subp. 2, IBC [F] section 905.3.2.1, Group A exhibition, and Subp. 3, IBC [F] section 905.3.4, Stages. The section reference numbers in these subparts are renumbered to provide more specific references to the sections being amended. These subparts also contain grammatical and formatting changes, but the requirements remain unchanged.

Subpart 6. IBC [F] section 905.3.9, Detention and correctional facilities. This subpart is amended by modifying the section reference numbers from section 905.3.8 to 905.3.9 because the sections were renumbered in the 2012 IBC. The content of the subpart remains unchanged.

Subp. 6a. IBC [F] section 903.3.10, Group R-2 occupancies small hose connections. This subpart is amended by modifying the section reference numbers from section 905.3.9 to 905.3.10 because the sections were renumbered in the 2012 IBC. The section title has been modified by adding the phrase "small hose connections" to the title and changing references

from "Class III wet standpipes" or "standpipes" to "small hose connections." This subpart is also amended by adding a list of specific requirements pertaining to small hose connections.

The modification from "Class III wet standpipes" or "standpipes" to "small hose connections" is being made because it is not necessary to utilize the Class III wet standpipe for the purposes of "mop up" operations, which is the purpose of the small hose connection. The requirements in this section are intended to provide reduced requirements for these hose connections, to provide a water supply for "mop-up" operations. Class III wet standpipes are used for interior firefighting, which requires minimum water flow and pressure requirements of 500 gallons per minute of water flowing at 100 pounds per square inch. The pipe supplying water to Class III standpipes must be a minimum of 4 inches in diameter.

On the other hand, "mop up" operations consist of the final fire extinguishment of any hot spots and clean-up of any fire debris that may exist. "Mop-up" operations do not require the same water flow and pressure requirements as that of Class III wet standpipes used for interior firefighting. As a result, the requirements for the small hose connections are being reduced from those of the Class III wet standpipe requirements. The amendments to this subpart will reduce the hose connection requirements for small hose connections and in turn, will reduce costs associated with the sprinkler systems.

A list of requirements for small hose connections is added to the subpart. These requirements are less restrictive and less costly than the requirements for Class III wet standpipe connections. The first item in the list requires a 1 ½-inch hose valve at each floor level or intermediate stair landing in each required or enclosed stairway. This requirement is also located in NFPA 13, section 8.17.5.1.4, item 1. Class III wet standpipes require a 2 ½ inch hose connection. This will reduce the amount of water flow required and will reduce the cost of the materials and equipment needed for this system.

The second item in the list for small hose connections requires that water be supplied for those connections separately from the sprinkler system protecting the area. This requirement is located in NFPA 13, section 8.17.5.1.3, items 3 and 4, and will ensure that the supply of water to the small hose connections do not interfere with the water required for the sprinkler system and that water will still be available to the small hose connections if the sprinkler system is shut down.

The third item in the list requires that a minimum pipe size of 1 ½ inches be installed. This requirement is located in NFPA 13, section 8.17.5.1.4, item 1. Class III wet standpipe systems require a 2 ½ inch hose connection. Therefore, the reduced pipe size will reduce the cost of materials.

The fourth item requires that the connections attach only to a wet pipe system. This requirement will ensure that the system used for "mop up" operations is always accessible to deliver water for firefighters' use.

The fifth item in the list requires metallic piping and hose valve connections. This requirement is necessary because hose valve connections must be very durable to remain in service for the life of the building.

Finally, new language is added at the end of the subpart requiring that permanent signage be installed that reads "Fire Department Overhaul Hose Connection" at each connection in the building. A sign must also be provided at the exterior Fire Department connection if a separate standpipe system is provided. This signage is necessary to clearly identify to the Fire Department personnel the type of system that exists in the building.

Subp. 7. IBC [F] section 905.5.1, Groups A-1 and A-2. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

1305.0906 SECTION 906, PORTABLE FIRE EXTINGUISHERS.

Subpart 1. IBC [F] section 906.1, General. The language in section 906 of the 2012 IBC is being deleted and replaced with language that directs the code user to the Minnesota State Fire Code for requirements relating to the installation of portable fire extinguishers. Because fire extinguishers are portable equipment, the building code does not regulate the requirements for fire extinguishers. Moreover, regulation of fire extinguishers has always been located in the fire code and enforced by fire officials. This modification is necessary to coordinate the requirements for fire extinguishers between these codes and ensure that the requirements are enforced by the fire official.

1305.0907 SECTION 907, FIRE ALARM AND DETECTION SYSTEMS.

Subpart 1. IBC [F] section 907.1.3, Protection of control units [Repeal]. This subpart is being repealed because it contains an exception for sprinkler-protected buildings. However, because the 2010 edition of NFPA 72 no longer allows sprinkler protection in lieu of smoke detection, this subpart is being repealed to avoid a conflict with NFPA 72.

Subp. 1a. IBC [F] section 907.2, Where required--new buildings and structures. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. This subpart is also amended by revising a code reference in the third sentence from 508.3.3 to 508.4 for mixed occupancies. This modification is necessary to coordinate the subpart with changes in the 2012 IBC. The remainder of the subpart is unchanged.

Subp. 2a. IBC [F] section 907.2.1, Group A, general. This new subpart is added to the proposed rule because it was inadvertently excluded from the proposed rule during the adoption of the 2006 IBC. This language was included in Minnesota Rules, chapter 7511, during the adoption of the 2006 International Fire Code and should have been included in this rule to coordinate the requirements so they could be properly enforced.

Subp. 3. IBC [F] section 907.2.1.1, Initiation. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

Subp. 4. IBC [F] section 907.2.1.2, Notification. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

Subp. 5. IBC [F] section 907.2.1.3, System initiation in Group A occupancies with an occupant load of 1,000 or more. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference numbers in this subpart are renumbered to provide more specific references to the sections being amended. The content of the subpart remains unchanged.

Subp. 6. IBC [F] section 907.2.2, Group B, general. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. This subpart contains grammatical changes for clarity. Additionally, the subpart is amended by deleting the phrase "outpatient clinic" and replacing it with the phrase "ambulatory care facility" to coordinate the terminology with changes that have been made elsewhere within the 2012 IBC. The term "ambulatory care facility" is also included in the definition section located in IBC Chapter 2. There are no technical changes to the requirements.

Subp. 7. IBC [F] section 907.2.2.1, Initiation. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference numbers in this subpart are renumbered to provide more specific references to the section being amended. This subpart is also amended by deleting the phrase "outpatient clinic" and replacing it with the phrase "ambulatory care facility" to coordinate the terminology with changes that have been made elsewhere in the 2012 IBC. The new term "ambulatory care facility" is also included in the definition section located in IBC Chapter 2. There are no technical changes to the requirements.

Subp. 8. IBC [F] section 907.2.2.2, Notification. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference numbers in this subpart are renumbered to provide more specific references to the section being amended.

Subp. 9. IBC [F] section 907.2.2.3, Ambulatory care facilities. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference numbers in this subpart are renumbered to provide more specific references to the section being amended. This subpart is also modified by deleting the phrase "outpatient clinic" and replacing it with the phrase "ambulatory care facility" in the title and in the body to coordinate terminology changes that have been made elsewhere within the 2012 IBC. The new term "ambulatory care facility" is also included in the definition section located in Chapter 2 of the 2012 IBC. Finally, the sentence was revised grammatically to provide better clarity to the requirement.

Subp. 10. IBC [F] section 907.2.3, Group E, General. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

Subp. 11. IBC [F] section 907.2.3.1, Initiation. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered to provide more specific references to the section being amended. This subpart also amended by deleting the word "supervised" in the first exception. The requirement for a sprinkler system to be supervised is covered elsewhere in this rule chapter, so it is not necessary to duplicate the requirement. The remainder of the subpart is unchanged.

Subp. 12. IBC [F] section 907.2.3.2, Travel through adjoining rooms. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered to provide more specific references to the section being amended. The remainder of the subpart is unchanged.

Subp. 13. IBC [F] section 907.2.3.3, Notification. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered to provide more specific references to the section being amended. The remainder of the subpart is unchanged.

Subp. 14. IBC [F] section 907.2.4, Group F, general. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

Subp. 15. IBC [F] section 907.2.4.1, Initiation. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered to provide more specific references to the section being amended. The remainder of the subpart is unchanged.

Subp. 16. IBC [F] section 907.2.4.2, Notification. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered to provide more specific references to the section being amended. The remainder of the subpart is unchanged.

Subp. 17. IBC [F] section 907.2.5, Group H, general. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, this subpart is amended by deleting the reference chapters "37, 39, and 40" and replacing them with chapters "60, 62, and 63 of the 2012 IFC." This amendment is necessary to coordinate this code with Minnesota Rules, chapter 7511, the State Fire Code, and other International Code Council codes. The remainder of the subpart is unchanged.

Subp. 18. IBC [F] section 907.2.5.1, Initiation. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered to provide more specific references to the section being amended. This subpart is also amended by deleting

the reference chapters "37, 39, and 40" and replacing them with chapters "60, 62, and 63 of the 2012 IFC." This amendment is necessary to coordinate this code with Minnesota Rules, chapter 7511, the State Fire Code, and other International Code Council codes. The remainder of the subpart is unchanged.

Subp. 19. IBC [F] section 907.2.5.2, Notification. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered to provide more specific references to the section being amended. The remainder of the subpart is unchanged.

Subp. 22. IBC [F] section 907.2.6, Group I-1, general. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. This provision is also amended by changing the section reference "907.2.6 through 907.2.6.4.3" to "907.2.6 through 907.2.6.4.2" to coordinate with numbering changes made to the 2012 IBC. Additionally, the existing rule language is deleted and replaced with similar language. The new language is formatted to coordinate with the format of other alarm requirements contained in the proposed language for sections 907.2.6.2, 907.2.6.3, and 907.2.8, for example. The requirements are the same, but the requirements for I-1 occupancies are subdivided into general requirements, alarm initiation requirements, and alarm notification requirements. This new format will clarify the requirements for the user. The existing rule language does not contain general group I-1 alarm requirements. This omission caused confusion because the existing language contains specific alarm requirements for group I-2 and I-3 occupancies, but not for group I-1 occupancies. These amendments also coordinate alarm installation requirements with those contained in Minnesota Rules, Chapter 7511, the Minnesota State Fire Code, for the same occupancy groups.

Subp. 23. IBC [F] section 907.2.7, Group M, and Subp. 24, IBC [F] section 907.2.7.1, Occupant notification. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in these subparts. Additionally, both subparts are amended by adding a phrase to read: "in its entirety" following the word "deleted" to provide clarity to the subparts.

Subp. 25. IBC [F] section 907.2.8, Group R-1, general. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, this subpart is amended by revising exception numbers 1 and 2 by replacing the term "guest room" with "sleeping room." This change coordinates with language changes made to the 2012 IBC. Exception number 2 is also amended by replacing the section reference "907.2.10" with "907.2.11" to coordinate with numbering changes made in the 2012 IBC.

Subsection 907.2.8.1, Initiation. This subsection is amended by deleting the phrase "throughout the building and manual activation" and replacing it with "in accordance with section 903.3.1.1 or 903.3.1.2." The subsection is also amended by adding a sentence to the end of the exception that reads, "When a constantly attended location is not provided, the manual fire alarm box shall be provided at the main exit." The new references to sections 903.3.1.1 and 903.3.1.2 will help clarify the requirements that pertain to the exception. The addition to the

exception requiring manual fire alarm boxes at the main exits when a constantly attended location is not provided is necessary to provide consistency with other parts of the proposed rule pertaining to occupancies with the same exception. The addition to this exception will help reduce costs to the owner for a fire alarm system by permitting a manual fire alarm box at the main entrance instead of requiring a constantly attended location. This exception has been common practice in the construction industry and the amendment coordinates this exception with similar exceptions found in the Minnesota State Fire Code.

Subsection 907.2.8.2, Notification, remains unchanged.

Subsection 907.2.8.3, Sleeping unit smoke alarms. This subsection is amended by revising the title from "Guest room detectors" to "Sleeping unit smoke alarms." This modification is needed to coordinate with changes made to these terms in the 2012 IBC. The first sentence contains changes that replace the term "guest room" with "sleeping unit" and replaces the word "detectors" with "alarms." This subpart is also amended by replacing the section reference number from "907.2.10" to "907.2.11." These terminology changes and section reference changes are necessary to coordinate the language in this subpart with changes made to the 2012 IBC. This change is also consistent with a national trend to more accurately identify smoke detectors versus smoke alarms.

Subp. 26. IBC [F] section 907.2.9, Group R-2, general. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. This requirement applies to apartments, condominiums, and similar types of buildings or uses. The changes in this subpart clarify that an alarm system is not required until the building height is at least 3 stories above grade. The existing language caused confusion because some building officials required alarm system installations in 2-½ story garden style apartments, which was not the intent of the code.

This subpart is amended by deleting the term "guest rooms" and replacing it with the term "sleeping unit" in several places. This terminology change is necessary to coordinate the language in the rule with changes made to the 2012 IBC.

Item 1 of this section is modified by deleting the phrase "the story containing the lowest level of exit discharge" and replacing it with the phrase "the grade plane." This modification is necessary because "grade plane" is defined in the code, whereas "the story containing the lowest level of exit discharge" is not defined, vague, and subject to differing interpretations.

Item 2 of this section is modified by deleting the phrase "the highest level of exit discharge of exits serving the dwelling unit" and replacing it with the phrase "the grade plane." This modification is necessary because "grade plane" is defined in the code, whereas "the highest level of exit discharge of exits serving the dwelling unit" is not defined, vague, and subject to differing interpretations.

Item 4 of this section is modified by adding the phrases "congregate living facility" and "group home or shelter" to the list of structural uses in the item. Older editions of the Minnesota State Building Code used the term "congregate residences." Congregate residences are facilities such as dormitories, fraternities, sororities, and similar facilities where there are often three or

more persons sleeping in a single room. Previous code editions required fire alarm systems within congregate residences with 20 or more occupants. This amendment adds "congregate living facility" and "group home or shelter" to the list of uses that are required to have a fire alarm system when the occupant load exceeds 20 people. The requirements for the uses remain the same, but the uses are added to the list to clarify that they are classified as Group R-2 uses for the purposes of alarm system requirements in the code.

Subsections 907.2.9.1, Initiation, and 907.2.9.2, Notification, remain unchanged.

Subsection 907.2.9.3, Dwelling unit smoke alarms. This subsection is amended by replacing the section reference number "907.2.10" to 907.2.11" to coordinate with numbering changes made to the 2012 IBC. This subsection is also amended by deleting the word "detectors" and replacing it with the word "alarms." This change is consistent with a national trend to more accurately identify smoke detectors versus smoke alarms. Smoke alarms contain integral detection and alerting functions, which may be self-contained units, while smoke detectors are detection devices that only detect smoke but are typically connected to a larger smoke detection and alert system in a building. The device in this section is considered a smoke alarm because it is meant to both detect smoke and provide an alert from the same device, but is not permitted to be connected to a building's fire alarm system. This subsection is also amended by renumbering the section reference number to coordinate with changes made to the 2012 IBC.

Subp. 26a. IBC [F] section 907.2.10.1.4, Fire station and emergency medical quarters [Repeal]. This subpart is being repealed in its entirety. This subpart requires smoke alarms in the sleeping areas of fire stations and emergency medical quarters. These occupancies are considered mixed occupancies in the 2012 codes. As a result, any sleeping areas are now considered Group R occupancies in the 2012 IBC and must comply with the requirements for smoke detection and alarms for that occupancy. As a result, this amendment is no longer necessary and is being repealed.

Subp. 26b. IBC [F] section 907.2.10, Group R-4, general. This is a new subpart that modifies section 907.2.10 of the 2012 IBC to require fire alarm systems in Group R-4 occupancies. This section and its subparts are completely revised from the section in the 2012 IBC. This modification is necessary to coordinate with the language and format for the same requirements located in the Minnesota State Fire Code.

Exception number 1 is added to this section to exempt fire alarm systems in rooms that are separated with walls and floors consisting of fire-rated construction, when the building is limited to two stories in height (maximum), and where each sleeping room has an exit directly to the exterior of the building. This type of building is similar to the older "motor hotel" style buildings (also known as "motels") where guests enter their rooms from a parking lot or yard, not though an interior corridor or lobby. Since these units are fire separated, limited in height, and have exit doors leading directly to the outside, the fire risk to occupants is greatly reduced. As a result, an exception for a building fire alarm system is allowed by this code. Based on the design prerequisites, this exception will decrease costs for buildings of this type.

Exception number 2 is added to this section to exempt buildings containing five or fewer sleeping units with smoke alarms installed, which are required for one and two-family dwellings.

When smoke alarms are provided according to the requirements for one or two-family homes, a complete building fire alarm system is not required. Smaller buildings of this type are similar in design to that of a one or two-family dwelling (in appearance and function), so this exception is a reasonable alternative compared to the requirements of a more expensive building fire alarm system. A smoke detection system meeting the code requirements for a one or two-family dwelling also provides adequate life-safety features when installed in smaller buildings of this type. Based on the requirements of this section, this modification will decrease costs for buildings of this type.

Subsection 907.2.10.1, Initiation. This subsection is added to clarify that automatic detection is required when a fire alarm system is installed. These requirements are the same as the requirements for Group R-1 and R-2 occupancies. An exception has been added to this subsection pertaining to the automatic detection device requirement for buildings that are sprinkled. This exception is necessary because the 2006 IBC did not contain specific requirements for alarms in Group R-4 occupancies, but the 2012 IBC now does. However, the new IBC alarm language does not follow the same format as the State Fire Code. This requirement therefore incorporates the format from the State Fire Code to maintain consistency between this rule part and Minnesota Rules, Chapter 7511. This requirement will reduce the cost to owners by eliminating the requirement for manual fire alarm boxes.

Subsection 907.2.10.2, Notification. This language is added to the subsection to clarify that activation of the sprinkler system or fire alarm system must also activate a general evacuation signal. This clarification is needed to ensure consistency between the IBC and the State Fire Code, Chapter 7511, and to assist in uniform enforcement of those provisions.

Subsection 907.2.10.3, Smoke Alarms. This language is added to the subsection to provide standards for smoke alarm installation and to ensure uniform enforcement of both the IBC and the State Fire Code, Chapter 7511. The amendment is proposed by the SFM to deal with an oversight in the previous 2007 State Fire Code and the companion amendment to the IBC. The currently adopted 2006 International Fire Code does not have any fire alarm requirements for Group R-4 occupancies, only smoke detector requirements. This creates confusion among code officials as virtually every other occupancy group was represented in the alarm section. Group R-4 occupancies are usually associated with group I-1 health care related occupancies that, due to the number of care recipients being 16 or fewer, can be classified into the less restrictive group R-4 occupancy. Although the installation of a sprinkler system eliminates most of the alarm requirements, it was felt that there needs to be a specific section for Group R-4 occupancies to instruct the user. The amendment is in keeping with the format for all other occupancy alarm requirements, and mirrors the following order of appearance in the rule: General (scoping), Activation (manual or automatic) and Notification (who is notified in the event of an alarm).

Subp. 27. IBC [F] section 907.2.11.4, Power source. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, this subpart is amended by modifying the section reference numbers from "907.2.10.2" to "907.2.11.4" to coordinate with changes made to the 2012 IBC.

Subp. 27a. IBC [F] section 907.2.10.5, Smoke alarms in arc fault protected circuits [Repeal]. This subpart is repealed because the requirement is now contained in the 2012 IBC; therefore, the modification is no longer necessary.

Subp. 28. IBC [F] section 907.2.28, Residential hospices. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered from "907.2" to "907.2.24" to provide more specific references to the section being amended.

Subp. 30. IBC [F] section 907.9.2, Audible alarms [Repeal]. This subpart is being repealed because the requirement it is now contained in the 2012 IBC; therefore, the modification is no longer necessary.

Subp. 31. IBC [F] section 907.3, Fire safety functions. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. This subpart is also modified by renumbering the section reference numbers to coordinate with changes made to the 2012 IBC. Additionally, section reference numbers in the body of this subpart are changed to coordinate with the numbering changes in the 2012 IBC. Finally, several grammatical changes are made to provide clarity.

Subp. 31a. IBC [F] section 907.6.5, Monitoring. This subpart adds language to delete section 907.6.5 from the 2012 IBC. The language in this section of the 2012 IBC requires fire alarm systems to be monitored by an approved supervising station. This same requirement exists in the 2006 IBC, but the section was renumbered between editions. This requirement was deleted in the 2006 IBC adoption by Minnesota amendment, which is currently located in subpart 33 of this rule part. The Department is carrying forward its deletion of this requirement, but the amendment must be renumbered and relocated because the requirement was renumbered in the 2012 IBC. As a result, subpart 33 is being repealed and this new subpart is added here due to the renumbering of the section in the 2012 IBC.

Subp. 32. IBC [F] section 907.11, Duct smoke detectors [Repeal]. This subpart is repealed because this section of the IBC was deleted in the 2012 edition of the code. Therefore, the amendment is no longer applicable and is being repealed.

Subp. 33. IBC [F] section 907.14, Monitoring [Repeal]. This subpart is repealed because this section was renumbered to 907.6.5 in the 2012 IBC. As a result, this amendment is being relocated to Subpart 31a, so it is no longer applicable to this section number and is being repealed.

1305.0908 SECTION 908, EMERGENCY ALARM SYSTEMS.

IBC [F] section 908.7, Carbon monoxide alarms. This new rule part modifies the 2012 IBC requirements for carbon monoxide alarms. This requirement is included in the proposed rule to coordinate with the statutory requirements for carbon monoxide detectors in Minnesota Statutes, section 299F.51, and with the requirements in the recently adopted Minnesota Rules, Chapter 1309, the Minnesota Residential Code.

1305.0909 SECTION 909, SMOKE CONTROL SYSTEMS.

Subpart 1. IBC [F] section 909.4.7, Door opening force [Repeal]. This subpart is repealed because the language in this subpart is being relocated to subpart 1c in this same rule part. This language is being relocated to coordinate it with numbering changes made in the 2012.

Subp. 1a. IBC [F] section 909.1, Scope and purpose. This new subpart is added to modify section 909.1 of the 2012 IBC by changing the first sentence to clarify that the mechanical or passive smoke control systems regulated by this section apply only to new buildings or portions of new buildings. This subpart also modifies this IBC section by deleting the last two sentences in the section pertaining to purpose of smoke control systems in this section of the IBC. Smoke control systems are intended to provide a tenable atmosphere while occupants are evacuating the area or building during a fire, and for firefighters while engaged in fire suppression and overhaul activities. The fire service needs smoke control for fire suppression so they can approach and attack the fire faster and for "overhaul" after the fire suppression is complete. Overhaul is considered one of the most hazardous jobs for firefighters because the building structural members may have been compromised, the atmosphere can be toxic, and piles of debris can be trip-and-fall hazards. The reduction of smoke will make overhaul operations safer. The requirements in this section are intended to provide "life-safety," and are not intended to be installed for the purpose of removing all the smoke, to preserve the contents, or to get the property back in operation quickly. These changes are needed because individuals have mistakenly interpreted these requirements to be *additional* requirements for the purposes listed above. If the requirements are enforced in this manner, it adds unnecessary cost to a building's mechanical system and creates additional system maintenance for the building owners. These changes will therefore clarify the intended application of the requirements and result in lower construction costs.

Subp. 1b. IBC [F] section 909.4.6, Duration of operation. This new subpart is added to modify this section of the 2012 IBC by deleting the phrase "or 1.5 times the calculated egress time, whichever is less" and replacing it with "System design shall be for 20 minutes; however, fans shall continue to operate after 20 minutes and shall continue to operate automatically for smoke removal during fire suppression and overhaul efforts for a minimum of 5 minutes for every 10 feet vertically of protected space." This modification is needed to clarify minimum system operating timelines when the system is in alarm/operating mode for firefighting and overhaul operations. This clarification will simplify the operating prerequisites for smoke control systems and assist system designers by not having to engage the services of a fire protection engineer in every design project. Egress time calculations involve hiring a fire protection engineer. Smoke control system installation is typically performed by a mechanical engineer who is not familiar with egress time calculations. Without this change, a fire protection engineer's assistance would be required for every smoke control system design. While fire protection engineers are necessary for complex fire protection designs, they are not necessary for every smoke control system installation.

Subp. 1c. IBC [F] section 909.4.7, Door opening force. This new subpart relocates the requirement for door opening force that is currently located in Subpart 1 in this rule part to

Subpart 1c. In addition, the code section reference numbers in the existing rule text are changed from "1008.1.2" to "1008.1.3" to coordinate with numbering changes in the 2012 IBC. The remaining rule language is unchanged.

Subp. 2. IBC [F] section 909.21, High rise and covered mall smoke exhaust systems [Repeal]. This subpart is repealed because the 2012 IBC now contains requirements for smoke exhaust and removal in high-rise buildings in IBC Section 403.4.7. Smoke exhaust and removal system requirements for covered and open mall buildings are also addressed in proposed Minnesota Rules, part 1305.0402; therefore, this subpart is no longer necessary.

1305.0910 SECTION 910, SMOKE AND HEAT REMOVAL.

Subpart 1. IBC [F] section 910.1.1, Required venting method. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the word "VENTS" in the title is deleted and replaced with the word "REMOVAL" in two locations. This amendment is necessary to coordinate with language changes made to the 2012 IBC. Exception number 3 is also amended by replacing the term "code" with "building" before the word "official." This modification clarifies that it is specifically the building official who can approve smoke and heat vents that comply with IBC Section 910.3 in sprinkled buildings.

Subp. 2. IBC [F] section 910.4, Mechanical smoke exhaust. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart.

Subp. 3. IBC [F] section 910.4.3, Operation. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, this subpart is amended by deleting the word "automatically" and replacing it with the word "manually." The remainder of the sentence and the next sentence are deleted ("...upon sprinkler system water flow. A 5 to 10 minute delay shall be provided between the sprinkler water flow signal and activation of the exhaust fans"). This amendment reflects a change in the way the system is required to be activated. Smoke and heat vents will now be required to be manually activated, as opposed to automatically activated, in a fire/heat condition. The subpart is further amended by deleting the exception, which permits manual activation when approved by the building official.

There is no reasonable basis to require the installation of expensive automatic operating capabilities because it is the fire commander's function at the scene of a fire is to determine when or if a system needs to be activated. Most smoke and heat exhaust and venting systems are already designed to be manually activated, and because these systems are intended to be used solely by fire department personnel, control and operation of the system would commence only if or when necessary. Moreover, automatic systems can experience a premature activation of the mechanical smoke control, which can negatively affect the efficiency of the fire suppression system. These modifications will not reduce minimum levels of life-safety or fire-fighting capabilities. The requirement will decrease costs related to the design and installation of the system. These modifications will also reduce associated long-term maintenance requirements and related fees.

Subp. 4. IBC [F] section 910.4, Supply air. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the fifth sentence deletes the word "four" and replaces it with the number "4" to grammatically correct the reference. The remaining language is unchanged.

Subp. 5. IBC [F] section 910.5, Calculated engineering design of mechanical smoke exhaust. Refer to the "General" statement at the beginning of the Rule by Rule Analysis section for an explanation to the proposed changes in this subpart. Additionally, the section reference number in this subpart is renumbered from "910" to "910.5" to provide more specific references to the section being amended. Subsection 901.5.3 Operation, is also being amended by deleting the word "automatically" and changing it to the word "manually." The remainder of the sentence is then deleted ("...upon sprinkler system water flow. A 5 to 10 minute delay shall be provided between the sprinkler water flow signal and activation of the exhaust fans."). This amendment reflects a change in the way the system is required to be activated. Smoke and heat vents are now be required to be manually activated, as opposed to automatically activated, in a fire or heat condition. The subpart is further amended by deleting the exception, which permits manual activation when approved by the building official.

There is no reasonable basis to require the installation of expensive automatic operating capabilities because it is the fire commander's function at the scene of a fire to determine when or if a system needs to be activated. Most smoke and heat exhaust and venting systems are already designed to be manually activated, and because these systems are intended to be used solely by fire department personnel, control and operation of the system would commence only if or when necessary. Moreover, automatic systems can experience a premature activation of the mechanical smoke control, which can negatively affect the efficiency of the fire suppression system. These modifications will not reduce minimum levels of life-safety or fire-fighting capabilities. The requirement will decrease costs related to the design and installation of the system. These modifications will also reduce associated long-term maintenance requirements and related fees.

Finally, Subsection 910.6.1, Acceptance testing, is amended by renumbering the section reference numbers from "909.18.2 through 909.18.5" to "909.18.1 through 909.18.7" to coordinate with numbering changes made to the 2012 IBC.

1305.0913 SECTION 913, POST FIRE EXHAUST SYSTEM [Repeal].

The language in this rule part is being relocated to proposed Minnesota Rules, part 1305.0916, because the section was renumbered in the 2012 IBC. The language in the rule part will remain unchanged, but will be relocated. As a result, this rule part is repealed because it is no longer applicable.

1305.0916 SECTION 916, POST FIRE EXHAUST SYSTEM.

The language in this rule part is relocated from Minnesota Rules, part 1305.0913, because the section was renumbered in the 2012 IBC. The language in the rule part is unchanged.

1305.1002 SECTION 1002, DEFINITIONS [Repeal].

This rule part is being repealed because formatting changes made to the 2012 IBC moved the definitions section to chapter 2. As a result, the content of Minnesota Rules, part 1305.1002, is also relocated to Minnesota Rules, part 1305.0202, to coordinate with the changes made to the 2012 IBC. The terms and definitions in the existing rule remain unchanged.

1305.1008 SECTION 1008, DOORS, GATES, AND TURNSTILES.

Subpart 4. IBC section 1008.1.3.6, Special egress control devices [Repeal]. This subpart is repealed because the 2012 IBC now contains requirements for special locking arrangements in Group I-2, IBC section 1008.1.9.6, where it previously had none. However, since IBC section 1008.1.9.6 does not contain all of the requirements that are contained in the current rule language, portions of this subpart are being relocated to subpart 7a of this rule part. This is necessary to ensure that all relevant content of this subpart will be maintained.

Subp. 5. IBC section 1008.1.5, Floor elevation. This subpart is amended by renumbering the section reference numbers because the sections were renumbered in the 2012 IBC. Section 1008.1.4 has been renumbered to Section 1008.5.1 in the 2012 IBC. The modification for exception number 5 remains as written in the existing rule without change. This amendment is needed to correlate with changes made to the 2012 IBC and to maintain the current modified language for use with the 2012 IBC.

Subp. 6. IBC section 1008.1.9.3, Locks and latches. This subpart is amended by renumbering the current section reference numbers 1008.1.8.3 to 1008.1.9.3 because the section was renumbered in the 2012 IBC. The subpart is also modified, conditions renumbered, and new conditions added, as follows:

Condition numbers 1, 2.1, 2.2, 2.3, 3, and 4 remain as written in the current rule language and are consistent with the 2012 IBC.

Condition number 2 is amended by modifying the term "churches" to "places of religious worship" to be consistent with the code language as written in the 2012 IBC.

Condition number 5 is added to the subpart as written in the 2012 IBC.

Condition number 5 of the existing subpart is renumbered to condition number 6 without change to the existing language.

Condition number 6 of the existing subpart is renumbered to condition number 7 with some changes to the existing language. The term "egress control devices" is replaced with the term "locking arrangements" to coordinate with terminology used elsewhere in the rule and the 2012 IBC. The term "in conformance with" is replaced with the term "in accordance with" to be consistent with language used throughout the IBC mode codes. Section reference "1008.1.3.6" is replaced with "1008.1.9.6" to coordinate with the renumbering of the 2012 IBC.

Condition number 8 is new language added to the subpart regarding electromagnetically locked egress doors. This addition is needed to coordinate with an existing requirement located in the Minnesota State Fire Code, Minnesota Rules, part 7511.1008, subpart 1. This locking method is also added here because, although referenced as an approved locking/latching method in section 1008.1.9.9, it was inadvertently omitted from section 1008.1.9.3 of the 2012 IBC. Therefore, the addition of electromagnetically locked egress doors as condition 8 of this rule part is reasonable and also needed to correct that omission.

Condition number 7 of the existing rule subpart is renumbered to condition number 9 with some changes to the existing language. The existing term "special locking" is replaced with the term "special detention." Chapter 1305 has contained two amendments to allow the locking of egress doors in buildings since 2003. The first is used in health care occupancies and is entitled "special egress control devices" (*see* Minnesota Rules, part 1305.1008, subpart 4). The second is used in school seclusion rooms and is entitled "special locking arrangements" (*see* Minnesota Rules, part 1305.1008, subpart 8). The 2012 IBC has added a new provision for locking in health care occupancies similar to the existing Minnesota amendment found in Minnesota Rules, part 1305.1008, subpart 4, but it is titled as "special locking arrangements." This new 2012 IBC term now conflicts with the existing Minnesota term for locking requirements in school seclusion rooms found in Minnesota Rules, part 1305.1008, subpart 8. Therefore, in an effort to be consistent with the 2012 IBC, "special egress control devices" is re-titled to "special locking arrangements" and "special locking arrangements" is re-titled to "special detention." This change is reasonable and needed to prevent confusion with terminology that is now used elsewhere within the code.

The rule part is also amended by replacing the word "which" with "that" and by changing the section reference from "1008.1.10" to "1008.1.11" to coordinate with the section renumbering that occurred in the 2012 IBC.

The amendments throughout this subpart are reasonable and needed to maintain consistency between the rule language and the 2012 IBC, as well as coordination of requirements with the Minnesota State Fire Code.

Subp. 6a. IBC section 1008.1.9.6, Special door locking arrangements in Group I-1, I-2, R-3 or R-4 occupancies. This is a new subpart that incorporates the language from Minnesota Rules, part 1305.1008, subpart 4, into the special locking arrangement requirements that are now contained in section 1008.1.9.6 of the 2012 IBC. This modification is necessary to carry forward those parts of existing rule language that are not included in the requirements of this section in the 2012 IBC. The 2012 IBC language is limited to Group I-2 occupancies (hospitals and nursing home/health care uses), but the existing rule language being carried forward here also addresses special locking arrangements for Group I-1, R-3, and R-4 occupancies (group homes or apartments, foster care facilities, half-way houses, boarding houses, and/or other smaller types of congregate living facilities). These are facilities licensed by the Minnesota Department of Health or the Minnesota Department of Human Services and provide specialized care for their residents. They are also facilities that typically install special locking to assure the safety and security needs of their residents. To ensure that the requirements

are comprehensive, the existing rule language is being combined with the IBC language so that all occupancies that provide the same type of care can install special locking when the needs of a care facility demand it.

The list of requirements for locking doors in this section is also expanded from that of the 2012 IBC to include additional safeguards for residents. These additional safeguards are part of existing rule language and are being carried forward into this IBC section to ensure that the level of safety and security is unchanged from the existing rule requirements.

Subp. 7. IBC section 1008.1.9.7, Delayed egress door locks. This subpart is amended by renumbering the section reference numbers because the sections were renumbered in the 2012 IBC. This subpart has also been amended to use the complete title of the occupancies where delayed egress locks must not be installed. The reorganization also clarifies that items 1-4 apply to the door locks. Items 5 and 6 are renumbered to 1 and 2 under the requirements that apply to items other than the locking devices. Item 3 is new and is needed to ensure that the locking devices will continue to function properly.

This subpart is also amended by adding the phrase "and assembly uses within Group E occupancies" to the first sentence. This language is being added because of a change in the 2012 IBC where "assembly uses" connected to an educational occupancy (e.g., school gymnasiums, cafeterias, multi-purpose rooms, auditoriums, theaters, etc.) are now classified as an educational occupancy classification (Group E), instead of an assembly (Group A) occupancy classification. Assembly occupancies must not have delayed locking mechanisms on doors because in the event of an emergency, large groups of people must be able to evacuate quickly and cannot be locked in for an additional 15 or 30 seconds, risking being crushed by a crowd trying to evacuate. Several descriptive terms are added to better define Group A and H occupancies. The phrase "Delayed egress locks shall be installed only" before the phrase "in buildings that" to provide clarity to the sentence.

This subpart is also amended by deleting the language "or an approved automatic smoke detection system installed in accordance with section 907" and replacing it with the language "and an approved smoke detection system installed in means of egress system serving the locked area." This change is reasonable and needed because the State Fire Marshal has experienced problems in schools where the delay mechanism identified in condition number 4 of the requirement ("not more than15 second latch release when a 15 pound force is applied") has been overridden. The delay devices can be overridden because these unlocking systems can be controlled by facility staff using a computer program. The 1305 Advisory Committee recommended this language as a compromise to eliminating the subpart entirely, which would have then left schools (public and private) with few options to maintain building security.

The subpart is also amended by requiring early warning fire/smoke detection devices to be installed within the means of egress system (i.e., building corridor system), as opposed to throughout the entire building, as part of this same condition. This is reasonable as the 2012 IBC only requires early warning protection by detectors located within the exit system of the building.

Subp. 7a. IBC section 1008.1.9.11, Stairway doors. This new subpart modifies exception number 3 of section 1008.1.9.11 of the 2012 IBC by deleting the requirement for an electronic monitoring system for locked doors. This modification is necessary because these signaling methods are considered to be unreliable, ineffective, and costly. This deletion is reasonable because there is no way to ensure that the service is properly functioning or will always be staffed and monitored. This proposal was submitted and supported by the Minnesota State Fire Marshal's Division.

Exception number 3 is also modified to clarify that the "exit discharge door" can be locked, but must be operable from the egress (inside) side of the door so that people can exit. Otherwise people could be locked in the stairway which is an unsafe situation.

Subp. 8. IBC section 1008.1.11, Special detention arrangements. This subpart is amended by renumbering the section reference number from 1008.1.10 to 1008.1.11 and retitling the section from "Special locking arrangements" to "Special detention arrangements." The sections are renumbered to coordinate with changes made to the 2012 IBC and the section is retitled to better explain the intent of the requirement for use with the 2012 IBC. This amendment adds a section to the IBC.

Subsection 1008.1.10.4, entitled "Construction," is retitled to "Door swing." The subsection is also renumbered to 1008.1.11.4 to coordinate with numbering changes made to the 2012 IBC. This section is modified by deleting the current language pertaining to rooms with special locking arrangements, door separating rooms, and interior finishes and replacing it with new language that pertains only to door swing. The requirement regarding the door swing coordinates with language that is also being added to Minnesota Rules, chapter 7511, the Minnesota State Fire Code.

The language in existing section 1008.1.10.4 regarding construction requirements for rooms with special locking requirements and existing section 1008.1.10.5, Location, are being deleted at the recommendation of the State Fire Marshal Division. Locked areas are already required to be equipped with quick response sprinkler heads and smoke detection and there is no documented history of fire related problems relative to locked rooms with quick response sprinkler heads and smoke detection. As a result, the existing requirements provide no additional value to life-safety and add an unnecessary expense. Since the rooms with special locking are required to have quick response sprinklers which will extinguish a fire quickly, the fire resistivity of the room or location of the room will not be a significant factor for the life safety of the room occupant. In addition, smoke detection connected to the building fire alarm will notify facility personnel that there is a smoke or fire in the room. The existing sprinkler and smoke alarm requirements outweigh the need for unnecessary and expensive fire-resistive construction and is not needed to protect the room occupant. Therefore, it is reasonable to delete these requirements because they unnecessarily increase construction costs and are not needed to protect detention occupants.

Finally, the word "detention" has been added to section 1008.1.11.4, Door swing, to clarify that the door swing must be in the direction of exiting from the detention room.

1305.1009 SECTION 1009, STAIRWAYS AND HANDRAILS.

Subpart 1. IBC section 1009.13, Alternating tread devices. This subpart is amended by renumbering the section reference numbers to coordinate with numbering changes made in the 2012 IBC. Additionally, a statement is provided to alert users of the code that sections 1009.13.1, 1009.13.2, and the exception still apply.

Subp. 2. IBC section 1009.14, Ships ladders. This new subpart modifies section 1009.14 of the 2012 IBC. The modified language permits the use of ships ladders, constructed as required for permanent stairs, for access to and egress from raised or recessed floor areas with limited access and occupant load. Ships ladders, also referred to as fixed industrial ladders by Federal OSHA, have a history of providing a safe alternative to a traditional stairway when used in spaces having small occupant loads and by those who are familiar with their surroundings (non-public access).

1305.1013 SECTION 1013, GUARDS.

Subpart 1. IBC section 1013.2, Where required. This subpart is amended by renumbering the section reference numbers from section 1013.1 to section 1013.2 in the 2012 IBC because the sections were renumbered in the 2012 IBC.

Subp. 2. IBC section 1013.3, Height. This subpart is amended by renumbering the section reference numbers from section 1013.2 to section 1013.3 to coordinate with renumbering changes made to the 2012 IBC. This subpart is also amended by renumbering the current exception from number "2" to number "4," also to coordinate with renumbering changes made to the 2012 IBC. This exception is further modified by adding the word "guard" immediately preceding the word "height" to provide better clarity to the exception. Finally, the section reference of 1025.14 is being changed to section 1028.14 to coordinate with changes made in the 2012 IBC.

Subp. 3. IBC section 1013.8, Window sills. This new subpart is added to modify section 1013.8 of the 2012 IBC to provide consistent regulation and enforcement between this code, Chapter 1309 (Minnesota Residential Code), and Chapter 7511 (Minnesota State Fire Code).

A new exception number 5 is added to address window replacement criteria. This exception specifically exempts replacement windows from the window fall protection requirements in this section. The exemption of replacement windows from these requirements is reasonable and necessary so the requirements will not apply retroactively to existing buildings which may otherwise discourage the replacement of old windows that may be unsafe, inoperable or energy inefficient.

Subsection 1013.8.1, Window opening control devices, is included in the subpart for context, but is not modified from the language contained in this section of the 2012 IBC.

There will be an increase in the overall cost of windows because these requirements will now require window fall protection devices to be installed on operable widows that are located within 36 inches of the finished floor. Double-hung windows are currently the dominant type of

window on the market. Adding a window fall protection device would cost approximately $30.00 per window for double-hung windows. On casement windows, which currently have a smaller market share, window fall protection devices would increase the cost by approximately $100.00 per window. Nevertheless, the cost increase is needed and reasonable as these requirements are incorporated into the proposed rule to increase the life safety of occupants as required by Minnesota Statutes, section 326B.106, subdivision 7, which directs the Commissioner of Labor and Industry to adopt window fall protection rules.

1305.1014 SECTION 1014, EXIT ACCESS [Renumbered].

This rule part is being renumbered and relocated to Minnesota Rules, part 1305.1017 because this section in the 2012 IBC was renumbered. As a result, this rule part is no longer applicable.

1305.1015 SECTION 1015, EXIT AND EXIT ACCESS DOORWAYS.

The title of section 1015.1 in this rule part is amended by adding the phrase "from spaces" to the end of the title to coordinate with changes made to the 2012 IBC.

The existing exception for condition number1 is amended to create exceptions (a) and (b) to incorporate the exceptions included in a similar manner to that of the 2012 IBC. In exception (a), the maximum occupant load of "16" is changed to "20" to coordinate with changes made in the 2012 IBC. The new exception "b" is also added to coordinate with the language in the 2012 IBC.

Existing condition number 3 is amended by adding a fourth section reference to the references listed to coordinate with changes made to the 2012 IBC.

The existing exception in condition #4 is deleted because it was incorporated into condition number 1 in the 2012 IBC, so it is no longer needed in this location of the rule part.

Finally, new language is added at the end of this rule part to coordinate with changes made to the 2012 IBC.

1305.1017 SECTION 1017, AISLES.

This rule part is being renumbered and relocated because this section was renumbered from Section 1014 to Section 1017 in the 2012 IBC. This is a new rule part that carries forward existing language from Minnesota Rules, part 1305.1014. The title and two section reference numbers are amended to coordinate with changes made to the 2012 IBC. Additionally, grammatical changes are made in several sections of this rule part to provide for improved clarity. The remaining content is unchanged.

1305.1018 SECTION 1018, CORRIDORS.

Subpart 1. IBC Table 1018.1. This new subpart is added to modify table 1018.1 in the 2012 IBC. The table is modified by replacing the phrase "Not Permitted" with a number "1" in

the group R occupancy (residential occupancies) row. The 2012 IBC, as published, requires all Group R occupancies to be equipped with an automatic fire sprinkler system. However, Minnesota modifies the sprinkler installation requirements in proposed Minnesota Rules, part 1305.0903, subpart 1a, to exempt certain occupancies from that requirement if the building corridors have a 1-hour fire-resistance rating. The change to Table 1018.1 is therefore reasonable and needed to recognize that not all group R occupancies in Minnesota are required to be sprinkled and that buildings that are not equipped with an automatic sprinkler system must have a 1-hour fire-resistive corridor system to protect the exit system from smoke and fire.

Subp. 2. IBC section 1018.6, Corridor continuity. This new rule subpart modifies section 1018.6 of the 2012 IBC by adding language to the first exception and by adding a second exception. The exception in this section of the IBC is modified by adding the phrase "if the aggregate area of these spaces does not exceed 1,000 square feet per floor." This language is added because the IBC requirement does not allow rooms or spaces to be open to a fire-resistive rated corridor, other than those identified in the exception (foyers, lobbies, and reception rooms). However, those rooms identified in the exception have no size limitations and may pose a hazard to life and safety during a fire due to the potential for combustible loading of these larger room areas. Therefore, the added language limits the size of the allowable spaces listed in the exception to permit them to be open to the fire-resistive rated corridor without additional requirements to be met to ensure occupant safety such as automatic smoke detection systems or automatic fire sprinkler systems.

The second exception allows other rooms, including lobbies, foyers and reception areas, to be open to the fire-resistive rated corridor without size limitations if additional criteria are met to ensure occupant safety. Therefore, the 1000 square foot limitation of exception number 1 can be exceeded by meeting the additional requirements of exception number 2 which ensure the early warning of building occupants to begin exiting because of the presence of smoke or fire in the exit way.

The modifications in this subpart are needed and reasonable because they incorporate "alternate" designs or methods that are accepted and proven effective over the years. This will provide more uniform application and enforcement of the requirements, while maintaining a level of safety for occupants that use these fire-resistance rated corridors during a fire event.

1305.1019 SECTION 1019, NUMBER OF EXITS AND CONTINUITY [Repeal].

This rule part is being repealed because the 2012 IBC now contains similar provisions. Therefore, this rule part is no longer necessary.

1305.1022 SECTION 1022, INTERIOR EXIT STAIRWAYS AND RAMPS.

IBC section 1022.5, Penetrations. This new rule part modifies section 1022.5 of the 2012 IBC by deleting the exception listed in this section that permits miscellaneous membrane penetrations in the outside membrane material of interior exit stairway enclosure walls when they are protected according to IBC section 714.3.2. The 2006 IBC did not include this exception, which would permit miscellaneous penetrations for items such as electrical pipes, plumbing pipes, outlets, or mechanical ducts. These penetrations may cause oversized holes

around the items penetrating the wall and could potentially allow fire or smoke to enter the protective enclosure, thus jeopardizing fire protection for occupants while exiting downward in an exit enclosure during a fire. This modification carries forward the 2006 IBC code language, which will provide consistent application and uniform enforcement while maintaining current life safety requirements for interior exit stairways and ramps.

1305.1023 SECTION 1023, EXIT PASSAGEWAYS.

IBC section 1023.6, Penetrations. This new rule part modifies section 1023.6 of the 2012 IBC by deleting the exception listed in this section that permits miscellaneous membrane penetrations in the outside membrane material of an exit passageway wall when it is protected according to IBC section 714.3.2. An exit passageway is a fire-resistive rated "tunnel," used only for the purposes of exiting, that runs from the interior of a building to a safe exterior exit discharge area. The 2006 IBC did not include this exception. These miscellaneous membrane penetrations potentially allow fire or smoke to enter the exit passageway wall cavity and may jeopardize fire protection for occupants while they are exiting through the exit passageway to an exit or exit discharge area in the event of a fire. This modification carries forward the 2006 IBC code language, which will provide consistent application and uniform enforcement while maintaining current life safety requirements for exit passageways.

1305.1025 SECTION 1025, ASSEMBLY [Repeal].

This rule part is being repealed because this section in the 2012 IBC was renumbered from Section 1025 in the 2006 IBC to Section 1028 in the 2012 IBC. As a result, this rule part is being repealed and relocated to Minnesota Rules, part 1305.1028.

1305.1026 SECTION 1026, EMERGENCY ESCAPE AND RESCUE [Renumbered].

This rule part is being renumbered and relocated because this section in the 2012 IBC was renumbered from Section 1026 in the 2006 IBC to Section 1029 in the 2012 IBC. As a result, the content of this rule part is being relocated to Minnesota Rules, part 1305.1029, so this rule part is no longer applicable.

1305.1028 SECTION 1028, ASSEMBLY.

This new rule part is added because this section in the 2012 IBC was renumbered from Section 1025 in the 2006 IBC to Section 1028 in the 2012 IBC. The content in this part is relocated from Minnesota Rules, part 1305.1025.

The first sentence of the rule part is amended to add "that are not building elements" to coordinate with language changes made in this section of the 2012 IBC. The existing language (currently located in Minnesota Rules, part 1305.1025) for International Code Council ("ICC") 300, Section 405.1, Aisles, number 8 (d), item 1, is amended by adding a new exception pertaining to tiered seating that is located adjacent to a wall. This new exception does not require a guard if the space between the wall and tired seating is less than 4-inches. The remaining language is unchanged from the existing language currently contained in Minnesota Rules, part 1305.1025. These amendments are reasonable and necessary to coordinate the

language in this rule part with changes made in the 2012 IBC and to clarify guard requirements for tiered seating in Minnesota.

1305.1029 SECTION 1029, EMERGENCY ESCAPE AND RESCUE.

This rule part is renumbered from the existing Minnesota Rules, part 1305.1026, to coordinate with numbering changes made to the 2012 IBC. The content from the existing rule is being carried forward into this rule part, but with amendments.

Subpart 1. IBC section 1029.1, General. This subpart is amended to coordinate with changes made to the 2012 IBC regarding emergency escape and rescue openings (windows) in basements and sleeping rooms of Group R-2 and R-3 occupancies. In addition, this subpart is amended by revising exceptions 1 and 2, and by adding exceptions number 7, 8, and 9. This subpart is amended by deleting the phrase "in Group R as applicable in Section 101.2 and Group I-1" and replacing it with the phrase "openings in Group R-2 occupancies in accordance with Tables 1021.2(1) and 1021.2(2) and Group R-3." This amendment is needed to coordinate the rule language with changes made to the 2012 IBC. This subpart is also amended by deleting the phrase "as applicable in Section 101.2" from exceptions 1 and 2 because these are outdated references from the 2000 IBC, which no longer exist in the 2012 IBC.

This subpart adds new exceptions 7, 8, and 9 pertaining to basements in the 2012 IBC.

Exception 7 is added to provide an option for new or existing basements or basement bedrooms if the building is protected with an automatic sprinkler system. In some cases, it may be less costly to install a fire sprinkler system in lieu of emergency escape and rescue openings due to the building's foundation design, soil type, or water table. This amendment is needed and reasonable because it will allow buildings to omit emergency escape and rescue openings when the building has a fire sprinkler system installed throughout. This option may be a cost savings in cases where an emergency escape and rescue opening would be more expensive to install than a fire sprinkler system. The existing rule permitted this exception only for apartment buildings, but with this modification the option will extend to all basements or basement bedrooms. Similar requirements are also included in the amendments to the 2012 IRC.

Exception 8 exempts emergency escape and rescue openings from basements in Group R-3 occupancies that only house mechanical equipment that does not exceed 200 square feet in area. This also coordinates with similar requirements in the amendments to the 2012 IRC.

Exception 9 is added to provide another option for emergency escape and rescue opening requirements in basements or basement bedrooms in Group R-3 occupancies that must comply with all the conditions listed in the exception. The first condition applies to buildings constructed prior to August 1, 2008. Buildings in "non-code" enforcement areas constructed prior to that date were not mandated to comply with the Minnesota State Building Code requirements. Therefore, buildings with basements or basement bedrooms constructed prior to that date would be exempt. The second condition requires that the building must be undergoing an alteration or repair. The third conditon identifies specific requirements under which a fire sprinkler system may be installed in lieu of the required emergency escape and rescue opening. This condition requires that an automatic fire sprinkler system be installed in accordance with

section 903.3 throughout the entire basement area and installed in all portions of the means of egress to the level of exit discharge, including all the areas on the level of exit discharge that are open to the means of egress. The installation of an emergency escape and rescue opening can become expensive and complex, and in certain cases, could involve altering the foundation and soils surrounding the home due to the building's foundation design, soil type, or water table. Exceptions 7 and 9 provide needed and reasonable alternatives to installing emergency escape and rescue openings for basements or basement bedrooms in difficult circumstances.

Subp. 2. IBC section 1029.4, Operational constraints. The language in this new subpart modifies section 1029.4 of the 2012 IBC by adding an exception to permit the installation of window opening control devices that do not require the use of keys or tools to operate if the device is installed in accordance with ASTM F 2090. This requirement is needed to coordinate with the same requirement in other parts of this rule and Minnesota Rules, chapter 1309.

Subp. 3. IBC section 1029.6, Replacement windows. The language in this new subpart adds requirements for replacement windows to this section of the 2012 IBC. This modification exempts replacement windows from maximum sill height, minimum opening area, minimum opening width, and minimum opening height requirements if they meet the conditions listed in this rule part. This change is reasonable and needed because most existing windows do not meet current building code requirements for minimum size, height, and opening area. For replacement windows to meet these minimum requirements, window opening sizes would generally need to be increased, which can require extensive remodeling and increased construction costs. This change will allow replacement windows to be the same or different style as the original window, so long as the area of the new window opening is the same size or larger than that of the original opening. This change not only offers more flexibility in determining what type and style of window can be used, it also ensures that a minimum level of life-safety is maintained in each space where the window is replaced.

IBC section 1029.6.1, Licensed facilities. This new subpart modifies section 1029.6 by adding new subsection 1029.6.1, Licensed facilities, which states that rooms used for foster care or daycare which are licensed by or registered with the State of Minnesota must comply with conditions "a" through "d" or section 1029.6, whichever is more restrictive. This language is based on a current policy enforced by the Minnesota State Fire Marshal Division and is also proposed for adoption in the 2012 IFC. The State Fire Marshal Division has had problems concerning replacement windows. Individuals have replaced windows, sought foster care or daycare licensing or registration, and subsequently learned that the windows that were replaced do not comply with the requirements for foster care or daycare licensing or registration requirements. This amended language will inform code users and stakeholders that foster care or licensed or registered daycare in the State of Minnesota must comply with section 1029.6 or 1029.6.1, whichever is more restrictive. This is reasonable and needed because it clarifies window replacement requirements for rooms used for foster care or day care and will provide uniform enforcement of the code for both building officials and between state agencies.

1305.1203 SECTION 1203, VENTILATION.

IBC section 1203.1, General. This existing rule part is amended to add a reference to Minnesota Rules, chapters 1322 and 1323. The references are needed to remind users that there are specific ventilation requirements for buildings in chapters 1322 (Minnesota Residential Energy Code) and 1323 (Minnesota Energy Code for all other buildings). It is reasonable to assist code users by providing references to other applicable codes. The remaining content is unchanged.

1305.1209 SECTION 1209, ACCESS TO UNOCCUPIED SPACES.

IBC section 1209.3.1, Mechanical equipment and appliance access. This rule part is modified by adding the term "and appliances" after the word "equipment" in the exception to section 1209.3.1. This additional language is necessary because the references to "equipment" was changed to "equipment and appliances" in the 2012 International Mechanical Code and to the amendments. This change will provide consistent language between the two rules. The remaining modifications made to sections 1209.3.1 and 1209.3.1.1 are grammatical to provide better clarity to the section.

1305.1210 SECTION 1210, SURROUNDING MATERIALS.

IBC section 1210.2.1, Floors and wall bases. This rule part is amended by renumbering the section reference numbers from section 1210.1 in the 2006 IBC to section 1210.2.1 because the sections were renumbered in the 2012 IBC. The rule part is also amended by changing the title and some of the language in the body of the rule part to coordinate with changes made to the 2012 IBC.

1305.1403 SECTION 1403, PERFORMANCE REQUIREMENTS.

This is a new rule part that deletes 2012 IBC section 1403.5, Vertical and lateral flame propagation, entirely. Section 1403.5 is new to the 2012 IBC. This section requires walls to be covered with a combustible weather resistive barrier and, when constructed over 40-feet in height, to meet the acceptance criteria of the 2011 edition of National Fire Protection Association ("NFPA") standard number 285, entitled "Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Nonload-Bearing Wall Assemblies Containing Combustible Components." The 2006 IBC required this standard in section 2603.5.5 for exterior wall assemblies containing foam plastics. The 2012 IBC now requires all exterior wall assemblies to be tested and listed to this standard.

This standard was originally developed as a test for vertical and lateral fire propagation for exterior curtain wall assemblies. However, most exterior building wall assemblies in Minnesota are not designed as curtain walls. Therefore, design options for using wall types that have been tested or listed to this standard are very limited. Moreover, most exterior wall configurations have never been tested to any standard. As a result, this new IBC requirement places an additional burden on a designer or building owner to prove compliance with the standard, which will be impractical and costly. As recommended by the Chapter 1305 Advisory Committee, this IBC provision is deleted in its entirety and the existing requirements for vertical

and lateral fire propagation in Minnesota Rules, part 1305.2603, subpart 2, shall apply instead. It is reasonable to modify section 1403.5 by deletion and rely upon existing code requirements where application of that code section in Minnesota will be impractical and tend to raise the costs of construction without added benefit to life-safety requirements.

1305.1405 SECTION 1405, INSTALLATION OF WALL COVERINGS.

Subpart 1. IBC section 1405.4.2, Masonry. This subpart is amended by renumbering IBC section 1405.3.2 to section 1405.4.2 to coordinate with renumbering changes made to the 2012 IBC. Additionally, the phrase "in anchored veneer" is added to the language in this subpart to reflect the addition of this clarifying language made to the 2012 IBC and the reference to IBC section 1405.5 is changed to section 1405.4.6 to coordinate with renumbering changes made to the 2012 IBC.

Subpart 3. IBC section 1405.12.2. This subpart is being repealed because the referenced section has been renumbered in the 2012 IBC to section 1013.8. This section was deleted in the 2006 IBC because the subject was "window sills," which regulated widow fall prevention devices. The provisions for window fall prevention are located in Minnesota Rule, part 1303.2320.

1305.1502 SECTION 1502, DEFINITIONS [Repeal].

A formatting change was made to the 2012 IBC wherein all definitions were moved to chapter 2 of the IBC. Because of this change, this existing rule part is being repealed and the definition of "Roof Covering" relocated to Minnesota Rules, part 1305.0202, Definitions, to maintain consistency with the reformatting of the 2012 IBC and the proposed Minnesota Rules, chapter 1305.

1305.1509 SECTION 1509, ROOFTOP STRUCTURES.

IBC section 1509.2.3, Use limitations. This rule part is amended by changing the existing rule language to coordinate with reformatting changes made to the 2012 IBC. The current rule part 1305.1509, Section 1509.2, referenced in the existing rule part is renumbered, retitled, and amended to coordinate with changes made in the 2012 IBC. The first and second sentences of the current language are deleted in their entirety. The third sentence is amended to coordinate with the language of the 2012 IBC and the exception remains as written in the existing rule part. The last paragraph in the existing rule language regarding protection of the mechanical equipment is deleted to coordinate with changes made in the 2012 IBC. The amendments to the existing rule part are reasonable and needed to coordinate this rule with the 2012 IBC.

1305.1511 SECTION 1511, SOLAR PHOTOVOLTAIC PANELS/MODULES.

IBC section 1511.1, Solar photovoltaic panels/modules. This is a new rule part that modifies section 1511.1 by deleting the reference to the International Fire Code ("IFC"). This modification is necessary because the solar photovoltaic system power requirements in the 2012 IFC, which include references to "panels/modules" in sections 605.11 through 605.11.4, are

being modified and adopted into the IBC. Therefore, the reference is not needed (*See* part 1305.3113 below for a detailed explanation as to the need and reason for this change).

1305.1607 SECTION 1607, LIVE LOADS.

Subpart 2. IBC section 1607.13.2, Vertical impact force. This subpart is amended by renumbering the section reference number because the section was renumbered from 1607.12.3 in the 2006 IBC to 1607.13.2 in the 2012 IBC. The content and text of the existing rule remain unchanged, but the subpart is divided into two sections to assist in and improve readability.

Subp. 3. IBC section 1607.13.3m Lateral force. This subpart is amended by renumbering the section reference numbers because the sections were renumbered from 1607.12.3 in the 2006 IBC to 1607.13.3 in the 2012 IBC. The content and text of the existing rule remain unchanged, but the subpart is divided into two sections to assist in and improve readability.

1305.1702 SECTION 1702, DEFINITIONS [Repeal].

This rule part is being repealed because the 2012 IBC now contains a definition for "Approved Agency" in Section 202, Definitions. Therefore, this rule part is no longer necessary.

1305.1704 SECTION 1704, SPECIAL INSPECTIONS [Repeal].

This rule part is being repealed because the sections and table were renumbered and relocated within the 2012 IBC. Some of the requirements in this section will be carried forward into Minnesota Rules, part 1305.1705, subpart 1, with modifications, to coordinate with new Table 1705.2.2 in the 2012 IBC.

1305.1705 SECTION 1705, REQUIRED VERIFICATION AND INSPECTION.

Subpart 1. IBC Table 1705.3, Required verification and inspection of concrete construction. This is a new subpart that modifies Table 1705.3 in the 2012 IBC. The content in this subpart is relocated from Minnesota Rules, part 1305.1704, but is modified to coordinate with previous changes made in subpart 4 of that existing rule part. The modifications include changing the section reference numbers, footnote references, and column numbers. Additionally, the language contained in the existing exception is amended by deleting the phrase "Inspection can be periodic when acceptable to the structural engineer of record and the building official" and replacing it with "Periodic verification and inspection is permitted, upon approval of the structural engineer of record and the building official." This amendment is reasonable and needed to carry forward the current requirements for Table 1704.4 of the 2006 IBC, as amended. The modifications do not change the requirements of the table and will not add costs to special inspection requirements or to the inspection of concrete construction.

Subp. 2. IBC section 1705.4, Masonry construction. The language in section 1705.4 of the 2012 IBC refers the user to separate documents that contain quality assurance requirements for masonry construction. However, it is necessary to provide a more direct method of compliance. Therefore, the modification to this section of the 2012 IBC carries

forward the special inspection requirements for the placement of grout in masonry that were incorporated into Table 1704.5.1 of the 2006 IBC, as amended. This modification is reasonable and needed to provide uniform application and enforcement of the requirements for masonry construction in the State of Minnesota.

1305.1805 SECTION 1805, DAMPROOFING AND WATERPROOFING.

Subpart 4. IBC section 1805.2, Depth of footings [Repeal]. This subpart is repealed because section 1805.2 was renumbered and reorganized in the 2012 IBC. Therefore, this existing subpart is no longer applicable.

Subp. 5. IBC section 1805.2.1, Frost protection [Repeal]. This subpart is repealed because section 1805.2.1 was renumbered and reorganized in the 2012 IBC. Therefore, this existing subpart is no longer applicable.

Subp. 6. IBC section 1805.4.3, Drain discharge. This requirement is currently located in Minnesota Rules, part 1305.1807, but is being relocated here to coordinate with a renumbering of the 2012 IBC.

1305.1807 SECTION 1807, DAMPROOFING AND WATERPROOFING [Repeal].

This rule part is being repealed because section 1807 was renumbered in the 2012 IBC. Therefore, this amendment is no longer applicable.

1305.1809 SECTION 1809, SHALLOW FOUNDATIONS.

This new rule part is added because this section in the 2012 IBC was renumbered. The content in this section was previously located in Minnesota Rules, part 1305.1805, subpart 5, which amended 2006 IBC section 1805.5.2.1, Frost protection. The content is being carried forward to this rule part and modified. The last sentence in the section is modified by deleting the phrase "unless such frozen condition is of a permanent character." This deletion is reasonable and necessary because Minnesota does not experience "permafrost" conditions. The remaining content is necessary to coordinate with both the requirements in section 1809 of the 2012 IBC and similar requirements located in Minnesota Rules, part 1303.1600, subpart 2.

1305.1907 SECTION 1907, DETAILS OF REINFORCEMENT [Repeal].

This rule part is being repealed because section 1907 of the 2006 IBC no longer exists in the 2012 IBC and it is not necessary to amend Minnesota Rules, chapter 1305, to retain it.

1305.2109 SECTION 2109, EMPIRICAL DESIGN OF MASONRY [Repeal].

This rule part is being repealed because the language modified in Table 2109.4.1 of the 2006 IBC is no longer included in the 2012 IBC. Therefore, the amendment is no longer applicable.

1305.2510 SECTION 2510, LATHING AND FURRING FOR CEMENT PLASTER.

This new rule part is added to modify language in section 2510.6, Water resistive barriers, of the 2012 IBC. Specifically, the second sentence of section 2510.6, which contains a new prescriptive requirement for installation of two layers of Grade D paper as a water resistive barrier, is deleted. It is reasonable and necessary to delete this new requirement because it deviates from standard acceptable installation practices in Minnesota and would result in increased labor and material costs without any added life-safety benefit.

1305.2603 SECTION 2603, FOAM PLASTIC INSULATION.

Subpart 1. IBC section 2603.4.1.13, Type V construction. [Repeal]. This subpart is being repealed because the amended language is now incorporated in section 2603.4.1.13 of the 2012 IBC. The same language is also included in Minnesota Rules, chapter 1309, the 2012 International Residential Code ("IRC"). It is necessary and reasonable to repeal existing amended model code language when the language no longer requires modification and the same language is also adopted and used in both the 2012 IRC and IBC for uniformity and consistency.

Subp. 2. IBC section 2603.5.5, Vertical and lateral fire propagation. Subpart 2 is being added to include another exception to section 2603.5.5 of the 2012 IBC. This exception was developed by a sub-committee of the 1305 Advisory Committee to address foam plastic on the exterior of buildings. This new exception coordinates with another rule part, Minnesota Rules, part 1305.1403, which eliminates IBC section 1403.5 that requires all exterior walls to have a combustible weather resistive barrier complying with the NFPA 285 acceptance criteria. Instead, this new subpart establishes requirements to address vertical and lateral fire propagation from foam plastic in exterior walls of buildings. NFPA 285 is still the standard for acceptance, but the requirements in this subpart add a second exception that allows installation of fireblocking (materials used to subdivide concealed/void spaces into small areas so fire cannot easily spread), a process that further prevents the spread of fire. This expanded exception is both needed and reasonable because it provides the building designer and building owner with a safe and cost effective option for compliance and tends to reduce construction costs.

1305.2902 SECTION 2902, MINIMUM PLUMBING FACILITIES.

Subpart 1a. IBC section 2902.1.2, Family or assisted-use toilet and bath fixtures. This subpart is amended by renumbering the section reference number because the section was renumbered in the 2012 IBC. The title is also changed to coordinate with the title change made to section 2902.1.2 in the 2012 IBC. The subpart is further amended by deleting the word "unisex" and replacing it with the phrase "family or assisted-use" to coordinate the existing rule language with changes made to the 2012 IBC. Finally, the end of the sentence is amended to add the phrase "for either the male or female occupants" to coordinate with the addition of this language in the 2012 IBC. This added language clarifies that family or assisted-use toilet and bath fixtures can be used toward the total plumbing fixture count required by Table 2902.1 and count for either male fixtures or female fixtures, but not both. The proposed amendments do not otherwise change the intent or requirements of the section.

Subp. 2. IBC Table 2902.1, Minimum number of required plumbing fixtures. This subpart is amended by re-lettering some of the footnotes because the 2006 IBC had four

footnotes, whereas the 2012 IBC has seven footnotes. The amended footnotes "e", "g" and "h" were re-lettered to "h", "i" and "j," respectively, to coordinate with changes made to the 2012 IBC. The existing modification of footnote "f" remains unchanged. In footnote "b," the word "patients" is being replaced with the term "care recipients." This change is made to coordinate with terminology changes made to the 2012 IBC. The proposed amendments do not otherwise change the requirements of Table 2902.1.

Subp. 3. IBC section 2902.2, Separate facilities. This subpart amends exceptions number 2 and 3, and deletes exception number 4 in its entirety. Exception number 2 is modified by deleting the occupant load factor of "15" and replacing it with "20." This modification is needed because the Department is proposing to delete exception number 4 in its entirety. Since exception number 4 allowed for a unisex restroom to be used for up to 20 occupants, it is reasonable and necessary to increase the number of occupants served by a unisex restroom in exception number 2 from 15 to 20 occupants to compensate for elimination of exception number 4. This will result in lower cost to business owners as restrooms are one of the most expensive spaces per square foot in a building due to furnishings.

Exception number 3 is amended by replacing the current occupant load factor of "50" and replacing it with "100," as provided for in the 2012 IBC. This change is needed to coordinate this rule subpart with changes made to the 2012 IBC.

Existing exception number 4 is being deleted because the occupant load factor that the 2012 IBC specifies for use in determining the number of occupants (*see* IBC Table 1004.1.2) for a business space of 2000 gross square foot equates to 20 persons (1 occupant per 100 sf of floor area). Therefore, amended exception 2 discussed above replaces the requirement in exception number 4. In addition, this change also modifies the requirement in exception number 4 for an additional urinal within a family or assisted-use restroom to respond to several complaints received from the public over the years concerning the presence of a male urinal in unisex or family use facilities. By deleting the requirement for a urinal, the change permits a family or assisted-use restroom to contain only a water closet and sink. This deletion is reasonable because the water closet already accommodates the purpose of a urinal and this change will tend to reduce both facility user complaints and construction costs.

Subp. 4. IBC section 2902.6, Controlled access to required facilities. This subpart is amended by changing the section reference number from 2902 to 2902.6 to coordinate with the subsection heading number contained in the body of the rule subpart. The remainder of the subpart remains as written in the current rule and applicable for use in the 2012 IBC.

1305.3109 SECTION 3109, SWIMMING POOL ENCLOSURES AND SAFETY DEVICES.

This rule part is modified by changing the title to coordinate with the title change of section 3109 in the 2012 IBC and adds the title in the body of the rule, clarifying that IBC section 3109 is entirely deleted. In Minnesota, public swimming pool requirements are administered and regulated by the Minnesota Department of Health under Minnesota Rules, chapter 4717, not this code. Similarly, residential swimming pool requirements are administered

and regulated by municipalities under their zoning regulations, not this code. Therefore, it is reasonable and necessary to delete section 3109 in its entirety.

1305.3111 SECTION 3111, SOLAR PHOTOVOLTAIC PANELS/MODULES.

IBC section 3111.1, General. This is a new rule part that modifies section 3111.1 by deleting the reference to the International Fire Code ("IFC"). This modification is necessary because the solar photovoltaic power system requirements in the 2012 IFC, which include references to "panels/modules" in sections 605.11 through 605.11.4, are being modified and adopted into the IBC. Therefore, the reference is not needed (*See* part 1305.3113 below for a detailed explanation for the need and reason for this change).

1305.3112 SECTION 3112, WINDOW CLEANING BUILDING ANCHORS.

This new rule part modifies chapter 31 of the 2012 IBC by adding new Section 3112, Window cleaning anchors. This modification is reasonable and necessary because Minnesota Statutes, section 326B.106, subdivision 4 (N) (2012), requires installation of safety and protection devices in Minnesota for use by window washing companies when a building is four or more stories in height. These buildings typically require window washing personnel to suspend from ropes temporarily tied off at the roof of buildings. This new rule part incorporates language that requires the installation of permanent anchors on a building's roof to permit window washers to tie-off to a safe apparatus during window washing operations. This new part is reasonable and needed to comply with statutory requirements.

1305.3302 SECTION 3302, CONSTRUCTION SAFEGUARDS.

This existing rule part is amended by renumbering the section reference numbers to coordinate with formatting changes made to the 2012 IBC. The existing rule language is being carried forward without change.

1305.3113 SECTION 3113, SOLAR PHOTOVOLTAIC POWER SYSTEMS

Introduction.[5] IBC section 1305.3113 is modified to add a section regarding "Solar Photovoltaic Power Systems." This rule proposal is taken from the 2012 International Fire Code ("IFC") sections 605.11 through 605.11.4, and modified herein. Section 1305.3113 is being added to the 2012 IBC because the Department believes that locating these provisions in the IBC is the most appropriate code chapter for enforcement of the provisions. As noted in the background section of the ICC's 2012 International Building Code, Coordination between the International Building and Fire Codes:

The model codes can also be adopted as a family of complementary codes. When adopted together there should be no conflict of any of the technical provisions. When multiple model codes are adopted in a jurisdiction it is important for the adopting authority to evaluate the provisions in each code document and determine how and by which agency or agencies they will be enforced. It is important, therefore, to understand that where technical provisions are

[5] All parts of this rule part renumber companion sections in the 2012 International Fire Code.

duplicated in multiple model documents that enforcement duties must be clearly assigned by the local adopting jurisdiction.

Id. at p. vii (emphasis added).

The Department has evaluated the provisions for "Solar Photovoltaic Power Systems" in the 2012 IFC and believes that the provisions properly belong in the IBC, as modified, for the following reasons:

1. The Commissioner of Labor and Industry has sole authority to adopt regulations concerning structural loads that are applied from the installation of these systems on the roof of a building under Minnesota Statutes, section 326B.106. The Minnesota Board of Electricity has sole authority to adopt regulations for electrical installations under Minnesota Statutes, section 326B.32, subdivision 2(a)(3);

2. The provisions apply to buildings regulated by the 2012 IBC;

3. The designated building official in each municipality is already responsible to enforce structural provisions for alterations to buildings that will increase the structural load (weight) added to new and existing structures, such as solar panels. Under Minnesota Rules, Part 1300.0130, subpart 1, the building official also has authority to require that plans and specifications for these installations be prepared by a Minnesota licensed professional engineer; and

4. The electrical portions of the provisions in Sections 605.11 through 605.11.1.4 and 605.11.2 of the 2012 IFC are not coordinated with the National Electrical Code (NFPA 70) adopted by the Minnesota Board of Electricity. In addition, IFC section 605.11 exempts the application of the electrical code to certain structures, which is in direct conflict with the Minnesota Electrical Code as adopted by the Minnesota Board of Electricity.

For the above stated reasons, it is necessary and reasonable to add Section 3113 to proposed Chapter 1305 to regulate solar photovoltaic power systems in Minnesota. This modification is needed so that the regulations can be applied by designated municipal building officials who have the specific training and experience in building and structural loads to effectively enforce the Code and regulate these systems. It is also reasonable that the adoption of provisions regulating the electrical installation of solar photovoltaic power systems be made by the Minnesota Board of Electricity, pursuant to that board's statutory mandate.

Finally, it should be noted that certain provisions in this proposed rule refer to the "fire department," so that their expertise will be included in solar photovoltaic power system installation decisions that are made, which directly affect fire service personnel and their safety.

IBC section 3113 (IFC section 605.11), Solar photovoltaic power systems; general. The exception is modified to clarify that the Minnesota Electrical Code applies to the structures in the exception. IFC section 605.7 conflicts with the Minnesota Electrical Code because the electrical code does not exempt these structures from electrical installation safety requirements.

IFC sections 605.11.1 through 605.11.1.4 and IFC section 605.11.2 are not needed because the Minnesota State Board of Electricity has sole authority to adopt provisions regulating electrical installations. Currently, Article 690 of the 2014 National Electrical Code ("NEC") contains regulations for Solar Photovoltaic Power Systems, as follows: Section 690.31(G)(3) "Marking and Labeling Required," Section 690.31(G)(4) "Marking and Labeling Methods and Locations," and Section 690.17(E) "Interrupting Rating" are similar to the requirements in the 2012 IFC, Sections 605.11.1 through 605.11.1.4. Also, Sections 690.31 (A) "Methods Permitted," 690.31 (G) "Direct-Current Photovoltaic Source and Direct-Current Output Circuits on or Inside a Building," and 690.35 (D) "Conductors" are similar to the requirements in the 2012 IFC, Section 605.11.2.

IBC section 3113.1 (IFC 605.11.3), Access and pathways. Exception number 2 is modified by changing the term "fire chief" to "fire department." This modification is reasonable and needed to recognize that approval for the exception to the general requirement can come from authorized fire department personnel, other than the fire chief.

IBC section 3113.1.1. (IFC 605.11.3.1), Roof access points. The term "fire department" is added before the words "ground ladders" to clarify that the location of roof access points are dependent upon ground ladder placement for fire department personnel, not upon placement of any or all ground ladders.

IBC section 3113.1.2 (IFC 605.11.3.2) Residential systems for dwelling units. The title of this section is modified to read, "IBC section 3113.1.2 (IFC 605.11.3.2) Residential systems for dwelling units." This change is needed because the IBC does not regulate two-family dwellings (*See* Section 310.1, above).

Also, the language of the requirement of this section needs to be changed from, "Access to residential systems for one-and-two family dwellings shall be provided in accordance with sections 3113.1.2.1 through 3113.1.2.4" to "Access to residential systems for dwelling units shall be provided in accordance with sections 3113.1.2.1 through 3113.1.2.4" because the IBC does not regulate two-family dwellings.

IBC section 3113.1.2.1. (IFC 605.11.3.2.1), Residential buildings with hip roof layouts. The words "structurally strong" have been deleted from the last sentence because the words are redundant since the remainder of the sentence details that the access pathway shall be located at a "location on the building capable of supporting the live load of fire fighters accessing the roof."

IBC section 3113.1.2.2. (IFC 605.11.3.2.2), Residential buildings with a single ridge, IBC section 3113.1.2.3. (IFC 605.11.3.2.3), Residential buildings with roof hips and valleys, and IBC section 3113.1.2.4. (IFC 605.11.3.2.4), Residential building smoke ventilation. These sections are adopted without change from the language in the 2012 IFC and are needed to provide complete rules for solar photovoltaic systems within this section.

IBC section 3113.2 (IFC 605.11.3.3.), Other than residential buildings. The phrase "one-and two-family dwellings" is being changed to "dwelling units" because the IBC does not regulate two-family dwellings.

The exception is further modified by replacing the term "fire code official" with the term "fire department" in the exception. This modification is reasonable and needed to recognize that the determination that approval for the exception to the general requirement can come from authorized fire department personnel, other than the fire chief.

Also in the exception, the phrase "one-or two-family dwelling" is being changed to "dwelling unit" because the IBC does not regulate two-family dwellings.

IBC section 3113.2.1. (IFC 605.11.3.3.1), Access, IBC section 3113.2.1.2. (IFC 605.11.3.3.2), Pathways, IBC section 3113.3. (IFC 605.11.3.3.3), Smoke ventilation, and IBC section 3113.4 (IFC 605.11.4), Ground-mounted photovoltaic arrays. These sections are adopted without change from the language in the 2012 IFC and are needed to provide complete rules for solar photovoltaic systems within this section.

1305.3302 SECTION 3302, CONSTRUCTION SAFEGUARDS.

IBC section 3302.3, Fire safety during construction. This section is renumbered to 3302.4 because a new 3302.3 was added to the 2012 IBC. The term "IBC" is added to clarify that the section number that follows is part of the IBC. The reference to IBC section 717.3.1 is changed to IBC section 718.3.1 because the section in the 2012 IBC that addresses draftstopping changed to 718.3.1. These changes are needed to direct code users to the correct section in the IBC.

1305.3500 CHAPTER 35, REFERENCED STANDARDS.

Subpart 1. Modifications to Chapter 35. [Repeal]. This subpart is being repealed because the standards identified in this subpart are now contained in Chapter 35 of the 2012 IBC. Therefore, modification of Chapter 35 to identify these referenced standards is no longer needed.

Subp. 2. Supplemental standards. This subpart is amended by updating the edition of NFPA Standard 45 from 2004 to 2011, which is the most current edition of that NFPA standard. This amendment is reasonable and needed to enhance life-safety requirements by referencing the most current standard for application and enforcement.

This subpart is also amended by adding the ANSI/IWCA I-14.1 2011- Standard for Window Cleaning. The addition of this standard is reasonable and necessary because it is referenced in proposed Minnesota Rules, part 1305.3112, which provides new window cleaning anchor requirements.

EFFECTIVE DATE.

In accordance with Minnesota Statutes, section 326B.13, subdivision 8, the Commissioner has determined that it is necessary to establish January 24, 2015, as the effective date of the proposed Minnesota International Building Code. The Commissioner has found and determined that an earlier effective date for this proposed Code is necessary to protect public health and safety:

Because the new Minnesota Residential Building Code and other important, newly adopted Chapters of the Minnesota State Building Code are scheduled to have an effective date of January 24, 2015, it is necessary that Minnesota's International Building Code provisions become effective at the same time to alleviate any potential confusion, conflicts or misapplication of specific and interrelated Code requirements by industry members, code officials, and members of the public. A common effective date for all of the newly adopted State Building Code chapters is essential because many of these chapters reference one another and are designed to work together to provide the user with a complete and current reference for building specifications and requirements. Additionally, adequate time for compliance and enforcement training is available as the ICC's International Building Code's model text and provisions have been available to the public since 2011, and Minnesota's proposed changes to that model code were publically reviewed by the IBC Advisory Committee in 2012. Moreover, various formal and informal training opportunities on the 2012 IBC code provisions for industry members and code officials have already commenced and will be made continually available through February of 2015.

CONCLUSION

Based on the foregoing, the proposed rules are both needed and reasonable.

10/30/14
Date

Ken B. Peterson, Commissioner
Department of Labor and Industry

EXHIBIT A

1305 - Members

Jerry Norman, Committee Chair, DLI
Paul Heimkes, Committee Co-Chair, DLI
C Scott Anderson, American Institute of Architects-Minnesota
Roger Larson, American Institute of Architects-Minnesota
Vince DiGiorno, American Institute of Architects-Minnesota
Dave Vogel, Minnesota Building Owners and Managers Association
Paul Dahlberg, Minnesota Building Owners and Managers Association
Todd Liljenquist, Minnesota Multi-Housing Association
Kevin Mcginty, State Fire Marshal Division
Jon Nisja, State Fire Marshal Division
Luke Stemmer, State Fire Chiefs Association
Gerhard Guth, Minnesota Construction Codes Advisory Council
Pat Higgins, Association of Minnesota Building Officials
Jim Williamette, Association of Minnesota Building Officials
Frank Martin, Association of Minnesota Building Officials
Rick Breeze, Association of Minnesota Building Officials