

## Minnesota Department of Labor and Industry

### ORDER ADOPTING RULES

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

### BACKGROUND INFORMATION

1. The Minnesota Department of Labor and Industry ("Department") has complied with all notice and procedural requirements in Minnesota Statutes, chapter 14, Minnesota Rules, chapter 1400, and other applicable law.
2. The Dual Notice of Hearing was simultaneously published in the *State Register* on Monday, November 10, 2014, and on the Department's website. Additionally, the Dual Notice of Hearing was mailed to all persons on the Department's mailing list and to those listed on the Department's approved additional notice plan on Monday, November 10, 2014.
3. The Department received 29 timely written comments and submissions on the rules. Three persons requested a public hearing in a timely manner and one person submitted a request for hearing that was late. Therefore, there were not 25 or more requests for a public hearing. Additionally, the Department received no requests for notice of submission of the rules to the Office of Administrative Hearings. The Department is making several modifications to the proposed rule based on comments received during the comment period.

### PUBLIC COMMENTS RECEIVED

#### **Comments from the Fire Service Industry, the Minnesota Multi Housing Association, and the Minnesota Resort and Campground Association Concerning Automatic Fire Sprinkler Systems (Proposed Minnesota Rules, Part 1305.0903, Subpart 1a)**

*Background:* Minnesota Rules, part 1305.0903, Automatic Sprinkler Systems, was initially proposed to be amended by renumbering the referenced section number in subpart 1a to coordinate with numbering changes made in the 2012 International Building Code ("IBC"). Additionally, the content in that subpart was reformatted to incorporate and coordinate language in this rule with new language proposed in Minnesota Rules, Chapter 1309, Adoption of the 2012 International Residential Code ("IRC"). Specifically, in the exceptions to this subpart, Group R-3 and R-4 dwelling units with less than 4,500 square feet of building area, excluding garages, were excluded from the requirement for the installation of automatic sprinkler systems in Group R occupancies. This is the same threshold requirement that was proposed to be adopted into Minnesota Rules, Chapter 1309, Adoption of the 2012 IRC. The exception for Group R-1 (motel-type occupancies) and R-2 (apartment-type occupancies) occupancies with a fire area or combined fire area less than or equal to 9,250 square feet of building area was not proposed to change from the existing requirements, but was merely reformatted to accommodate the changes needed to coordinate with the requirements in Chapter 1309.

During the course of the IBC Advisory Committee meetings, discussions ensued about changing the threshold from 9,250 square feet for Group R-1 and R-2 occupancies. The fire industry suggested that the requirement should change to require an automatic sprinkler system throughout all buildings with a Group R fire area without regard to square footage, which is the requirement contained in both the 2012 IBC and the 2012 International Fire Code (“IFC”). Other committee members believed that the threshold should remain at 9,250 square feet because it had been safe in the past. However, when the IBC Advisory Committee completed their work on the proposed changes to the rule, the proposed changes to Minnesota Rules, Chapter 1309, Adoption of the 2012 IRC, were not final. The 1309 proposed rules contained changes to square footage thresholds for residential Group R occupancies. Since those proposed rules were not yet final, the Department decided to leave unchanged the 9,250 square foot threshold as written for R-1 and R-2 occupancies because of the uncertainty with the threshold requirements proposed in the amendments to the 2012 IRC.

During the comment period for this rulemaking, the Department learned that the fire service industry was planning to propose the threshold be changed to match the 2012 IBC and the 2012 IFC and was planning to request a hearing to do so. The Department also learned that other areas of the industry regulated by Chapter 1305 and the 2012 IBC, including the Minnesota Multi Housing Association (representing the part of the industry that build and manage apartment housing in R-1 and R-2 occupancies) and the Minnesota Resort & Campground Association (representing resorts and campgrounds in Minnesota) preferred that the square footage threshold remain at 9,250 square feet as written in the existing rule. Following several discussions between all of the affected parties, the parties agreed to a compromise. The compromise reduced the square footage threshold for exemption from the requirement to install automatic fire sprinklers from less than or equal to 9,250 square feet to less than 4,500 square feet for Group R-1 or R-2 fire areas or combined fire areas of building area. In addition, the resort industry requested that a new exception be added exempting Group R-1 multi-unit resort buildings with less than 9,250 square feet of building area, as defined in Minnesota Statutes, section 157.15, and licensed by the Minnesota Department of Health.

As will be seen in the Department’s responses to individual comments below, the Department believes that it is necessary and reasonable to incorporate a 4,500 square feet threshold for R-1 and R-2 occupancies into its proposed Chapter 1305 rulemaking. The threshold of 4,500 square feet is the threshold that is now required in Minnesota Rules, Chapter 1309, the Minnesota Residential Code, for residential sprinkler requirements. Incorporating a threshold of 4,500 square feet for similar residential occupancies into Chapter 1305 is both necessary and reasonable, as this change will promote uniformity and coordinate this Chapter with the residential sprinkle requirements found in the Minnesota Residential Code.

**A. Comments and proposal from the Minnesota Multi Housing Association (submitted by Todd Liljenquist), representing owners and managers of R-2 apartment buildings in Minnesota:**

The commenter represents the Minnesota Multi Housing Association and is concerned about the increased building costs associated with requiring all R-1 and R-2 occupancies to be sprinklered, regardless of square footage, as required by the 2012 IBC and as promoted by the Fire Service Personnel. The commenter also believes that requiring all R-1 and R-2

occupancies to be equipped with an automatic fire sprinkler system regardless of square footage will have a disproportionate impact on affordable housing in outstate Minnesota since it is more common for “smaller” apartment buildings (i.e., less than 9,250 square feet) to be built in rural areas of the state. Therefore, the commenter proposes that the current 9,250 square foot exemption for R-1 and R-2 occupancies under existing Minnesota Rules, chapter 1305, be continued without change. In the alternative, the commenter recognizes that coordination with the newly adopted 4,500 square foot threshold contained in Minnesota’s Residential Building Code is necessary and would accept, as a minimum, an exemption in the proposed rule for R-1 and R-2 occupancies of less than 4,500 square feet.

**B. Comments and proposal from the Minnesota Resort and Campground Association (submitted by Dan McElroy), representing owners and managers of campgrounds and resorts in Minnesota:**

The commenter represents owners and managers of campgrounds and resorts located in Minnesota. The commenter believes that resort structures are sufficiently different from other structures regulated by the IRC and IBC and that they should not be required to be equipped with automatic fire sprinkler systems because they have: limited seasonal occupancy, direct and easy egress, structural proximity to natural water sources, lack of basements, resident owner presence, and separate licensing by the Minnesota Department of Health. Therefore, the commenter proposes that resort structures should be exempt from new fire sprinkler requirements entirely or, at a minimum, be exempt for structures that are smaller than a threshold size of 4,500 square feet for single units and 9,250 square feet for multi-unit structures that meet the definitions contained in Minnesota Statutes, section 157.15, and that are licensed by the Minnesota Department of Health.

**C. Comments and proposal from the Fire Industry (submitted by 21 individual commenters), representing municipal fire fighters and first responders, the State Fire Marshal’s Office, and the Fire Marshals Association of Minnesota:**

The 21 commenters are members of Minnesota’s fire service industry and include: Greg Malmquist, Lake Elmo Fire Department; Marilyn Armlund, Maple Grove Fire-Rescue Department; Bob Fiske, Blaine Fire Department; Perry Ebner, Minneapolis Fire Department; Bill Beumer, Maple Grove Fire Inspection; Kip LaMotte, Fire Marshals Association of Minnesota; Bruce Wightman, Forest Lake Fire Inspection; Robert Brown, Chisholm Fire Department; Connie Forster, Spring Lake Park-Blaine-Mounds View Fire Department; Scott Gerber, Excelsior Fire Department; Dennis Stark, Alexandria Fire Department; John Strongitharm, Duluth Fire Department; Jeff Schadeegg, Inver Grove Heights Fire Department; Tom Pitschneider, Shakopee Fire Department; Marvin Forgragd, Minneapolis Fire Inspection; Angie Wiese, Fire Marshals Association of Minnesota; Bill Mund, St. Cloud Fire Department; Jeff Anderson, Oakdale Fire Department; Judy Thill, Inver Grove Heights Fire Department; Terry Fischer, Mahtomedi Fire Department; and Kevin McGinty, Minnesota State Fire Marshal’s Office.

The commenters recognize the added value and effectiveness that automatic fire suppression systems serve in the protection of property and to the lives of building occupants and fire fighters. These commenters would like to see Minnesota adopt the 2012

IBC's requirement that all new structures built under that code be required to be equipped with automatic fire sprinkler systems regardless of square footage. Nevertheless, they are also cognizant of the need to coordinate Chapter 1305 with the 4,500 square foot sprinkler threshold recently established in the newly adopted Residential Building Code and recognize that failure to do so would lead to several inequities and unintended consequences when applying those provisions to different types of residential occupancies under Chapter 1305. Accordingly, the commenters agree and would not object to an exception in the proposed rule for R-1 and R-2 occupancies of less than 4,500 square feet in building area.

***Department Response.*** The Department discussed all the above concerns with the Minnesota Multi Housing Association, the Minnesota Resort and Campground Association, and the Fire Industry and agrees that an exception for R-1 and R-2 occupancies of less than 4,500 square feet is reasonable and needed to promote uniformity and coordinate the proposed rules with the recently adopted 4,500 square foot threshold contained in the Residential Building Code.

The Department further agrees that Group R-1 multiunit resort buildings, as defined in Minnesota Statutes, section 157.15, and licensed by the Minnesota Department of Health, should be exempt from automatic fire sprinkler system requirements when the floor area of the building is less than 9,250 square feet. In addition to the reasons provided by the commenter, the Department believes that a higher threshold for multiunit resort buildings is reasonable because unlike other group occupancies, these facilities are inspected on a regular basis as part of their Lodging Establishment license they are required to secure and maintain from the Minnesota Department of Health under Minnesota Statutes, section 157.16. As part of the lodging establishment inspection, Minnesota Rules, chapter 4625 requires that the facility meet multiple criteria for sanitation, lighting and ventilation, waste disposal, cleanliness of premises, egress routes, fire extinguishers, and fire alarms. Assurance of continued compliance of these building features with Department of Health safety regulations help to reduce or minimize the fire danger at these facilities. Although many of these features are also required in other group occupancies, the required inspection schedule for these resort occupancies assures that they will be maintained on a regular basis. Therefore, the Department agrees with the commenter that it is reasonable to maintain the existing 9,250 square foot threshold for these resort facilities.

The Department also wishes to modify this section by relocating the second sentence located in Exception 1 of the proposed rule to the main body of the subpart. This scoping provision was clearly meant to apply to all Group R occupancies in the proposed subpart, not just to Groups R-1 and R-2, and was erroneously relocated into the exception during the final drafting phase of these proposed rules.

As a result of the concerns and the proposals submitted by the various commenters, the Department proposes to modify this subpart of the proposed rules as follows (modified language is highlighted in yellow):

## **1305.0903, subpart 1a, IBC section 903.2.8**

**903.2.8 Group R.** An automatic sprinkler system installed in accordance with section 903.3 shall be provided throughout all buildings with a Group R fire area. For purposes of this provision, fire walls, party walls, or attached multiple fire-resistive exterior walls shall only create separate buildings where providing separation from occupancies other than Group R.

### **Exceptions:**

1. A Group R-1 or R-2 fire area or combined fire areas less than ~~or equal to 9,250~~ 4,500 square feet of building area. ~~For purposes of this provision, fire walls, party walls, or attached multiple fire-resistive exterior walls shall only create separate buildings where providing separation from occupancies other than Group R.~~
2. (Unchanged)
3. (Unchanged)
4. Group R-1 multiunit resort buildings, as defined in Minnesota Statute 157.15 and licensed by the Minnesota Department of Health, with less than 9,250 square feet of building area.

### **Comments from Elness Swenson Graham Architects Inc. (submitted by Craig Hess) and the Minnesota State Fire Marshals Office (submitted by Kevin McGinty) Concerning Emergency Escape and Rescue Openings (Proposed Minnesota Rules, Part 1305.1029)**

#### **1305.1029, IBC Section 1029.1, General.**

The commenters state that they believe the intent of the original IBC Section 1029.1 and the Minnesota proposed amendment to it is to only require emergency escape and rescue openings in certain R occupancies that are allowed by Section 1021 to have only one exit from the story and building. However, reading both the original text and the Minnesota proposed amendment, the commenters find the language confusing at best. The language contained in the first paragraph stating that openings are “in accordance with Tables 1021.2(1) and 1021.2(2)” is the confusing part. The commenters believe the language should state that emergency escape and rescue openings are required when these 2 tables permit a building or floor to have one exit only.

**Department Response.** The Department agrees with the commenters’ concern and suggested change. The Department is relocating the reference to Group R-2 occupancies (with the references to the tables) to exception 1 of this subpart. This change is necessary to coordinate the requirements in this section with the changes being made to the requirements in section 903.2.8 regarding sprinkler thresholds. The 2012 IBC as written assumes that all Group R occupancies are sprinkled. To coordinate the requirements in section 1029.1 with the changes being made to section 903.2.8, the Department must relocate the reference to Group R-2 occupancies and the table references to exception 1 to ensure that Group R-2 occupancies that have only one exit are provided with an approved egress window in case the door is blocked. Additionally, to provide more clarity, the

Department is adding titles to the Tables to clarify the content in the tables. These changes are necessary and reasonable as they coordinate the requirements in this section with the changes to the sprinkler requirements being made elsewhere in this rule and clarify emergency escape and rescue openings requirements. As a result of the concern and comments submitted, the Department proposes to modify this subpart of the proposed rules as follows (modified language is highlighted in yellow):

### **1305.1029, subpart 1, IBC section 1029.1**

**1029.1 General.** In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue openings in Group R as applicable in ~~Section 101.2 and Group I-1 openings in Group R-2 occupancies in accordance with Tables 1021.2(1) and 1021.2(2) and Group R-3 occupancies.~~ Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such opening openings shall open directly into a public way, public alley, or to a yard or court that opens to a public way.

#### **Exceptions:**

1. In other than Group R-2 occupancies in accordance with Tables 1021.2(1), Stories With One Exit or Access to One Exit for R-2 Occupancies, and 1021.2(2), Stories With One Exit or Access to One Exit For Other Occupancies, and Group R-3 occupancies as applicable in ~~Section 101.2,~~ buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
2. In other than Group R-3 occupancies ~~as applicable in Section 101.2,~~ sleeping rooms provided with a door to a fire-resistance-rated corridor having access to two remote exits in opposite directions.
3. The emergency escape and rescue opening is permitted to open onto a balcony within an atrium in accordance with the requirements of Section 404, provided the balcony provides access to an exit and the dwelling unit or sleeping unit has a means of egress that is not open to the atrium.
4. High-rise buildings in accordance with Section 403.
5. Emergency escape and rescue openings are not required from basements or sleeping rooms which have an exit door or exit access door that opens directly into a public way, or to a yard, court, or exterior exit balcony that opens to a public way.
6. Basements without habitable spaces and having no more than 200 square feet (18.6 m<sup>2</sup>) in floor area shall not be required to have emergency escape windows.
7. Basements or basement bedrooms in Group R-3 occupancies, when the building is protected by an automatic sprinkler system installed in accordance with section 903.3.
8. Basements in Group R-3 occupancies used only to house mechanical equipment that do not exceed a total floor area of 200 square feet (18.58 m<sup>2</sup>).

9. Basements or basement bedrooms in Group R-3 occupancies that comply with all of the following conditions:
- A. constructed prior to August 1, 2008;
  - B. undergoing an alteration or repair; and
  - C. the entire basement area is protected with an automatic sprinkler system in accordance with section 903.3 and all portions of the means of egress to the level of exit discharge, and all areas on the level of exit discharge that are open to the means of egress, are protected with an automatic sprinkler system in accordance with section 903.3.

**Comments from Cermak Rhoades Architects (submitted by Michelle Baltus Pribyl) and Elness Swenson Graham Architects Inc. (submitted by Craig Hess) Concerning Foam Plastic Insulation, IBC Section 2603.5.5, Exception 2 (Proposed Minnesota Rules, Part 1305.2603)**

**1305.2603, IBC Section 2603, Foam Plastic Insulation.**

The commenters express various concerns over the proposed exception from both building science and energy perspectives. Specifically, the commenters question the building science behind the requirements of the exception which, in their opinions, could lead to possible water penetration, mold and moisture problems, and reduced energy savings by compromising the insulation value of the added foam plastic insulation. They also identify possible conflicts between the proposed language and Minnesota's Commercial Energy Code, Chapter 1323. The commenters believe that further investigation and discussions with qualified building scientists and energy code committee members must occur before the proposed exception is adopted.

***Department Response:*** The Department agrees with the commenters and has determined that this amendment must be investigated further and vetted by the Commercial Energy Code Committee for chapter 1323 to address the identified concerns and conflicts before it can be included in this rule. As a result, the Department will withdraw its proposed amendment to this section of the 2012 IBC in its entirety at this time.

**Comments from the Minnesota State Fire Marshals Office (submitted by Kevin McGinty) Concerning Various Topics Within the Proposed Rule Chapter 1305**

**A. 1305.0302, Table 302.2, Care Facilities.**

The commenter requests that under the heading "Chemical Dependency Treatment Program-residential, <5 residents," the Department add "dwelling unit" under R-3 because treatment programs with <5 residents occur in (one family) dwelling units. The commenter states that this proposed change is submitted for improved clarity and consistency.

***Department Response.*** The Department created a new table in the proposed rules that describes building uses required to be licensed by the State of Minnesota. The table

identifies certain uses contained in dwelling units. A dwelling unit can be a single family dwelling, an apartment, or condominium. The commenter identifies one additional use in the table that can be located in a dwelling unit. The Department agrees that the table should be modified to add the phrase “dwelling unit” in the “Chemical Dependency Treatment Program-residential <5 residents” category because the commenter is correct in that this licensed use can be located in a dwelling unit. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

**1305.0302, Table 302.2, Care Facilities.**

IBC section 302 is amended by adding Table 302.2 to read as follows:

Table 302.2 Care facilities. Occupancies for care facilities shall be classified in accordance with the following table.

**Table 302.2 Care Facilities**

	<u>Type of Licensed Facility</u>	<u>Number or Type of Residents</u>	<u>IBC Occupancy Classification</u>
<u>Child Care (Day Care)</u>	<u>Family Child Care Home</u>	<u>10 occupants maximum with ≤ 6 below school age</u>	<u>R-3 dwelling unit</u>
	<u>Group Child Care Home &lt; 24 hours per day</u>	<u>11-14 occupants maximum</u>	<u>R-3 dwelling unit</u>
	<u>Child Care Center &lt; 24 hours per day</u>	<u>&gt; 5 but ≤ 100 children &lt; 2.5 years of age and each room at, and with, an exit at the level of exit discharge</u>	<u>E</u>
	<u>Child Care Center &lt; 24 hours per day</u>	<u>More than 5 children &gt; 2.5 years of age</u>	<u>E</u>
	<u>Child Care Center &lt; 24 hours per day</u>	<u>More than 5 children ≤ 2.5 years of age</u>	<u>I-4</u>
<u>Adult Day Care</u>	<u>Family Adult Day Services</u>	<u>≤ 8 impaired adults</u>	<u>R-3 Dwelling unit</u>
	<u>Adult Day Care Center &lt; 24 hours per day</u>	<u>6 or more occupants, all may or may not be capable of self-preservation</u>	<u>I-4</u>
	<u>Adult Day Care Center &lt; 24 hours per day</u>	<u>6 or more occupants, but having no more than 50</u>	<u>E</u>

		<u>percent of the occupants who are not capable of self-preservation</u>	
<u>Supervised Living Facilities</u>	<u>Class A-1</u>	<u>6 or fewer residents; all of whom are capable of self-preservation</u>	<u>R-3 dwelling unit</u>
	<u>Class A-2</u>	<u>7 to 16 residents; all of whom are capable of self-preservation</u>	<u>R-4</u>
	<u>Class A-2</u>	<u>More than 16 residents; all of whom are capable of self-preservation</u>	<u>I-1</u>
	<u>Class B-1</u>	<u>6 or fewer residents; all of whom may not be capable of self-preservation</u>	<u>R-3</u>
	<u>Class B-2</u>	<u>7 to 16 residents; all of whom may not be capable of self-preservation</u>	<u>R-4</u>
	<u>Class B-3</u>	<u>More than 16 residents, all of whom may not be capable of self-preservation</u>	<u>I-2</u>
<u>Hospice</u>	<u>Residential Hospice Facility</u>	<u>1-5 terminally ill persons</u>	<u>R-3</u>
	<u>Residential Hospice Facility</u>	<u>6-12 terminally ill persons</u>	<u>R-4</u>
<u>Adult Foster Care</u>	<u>Adult Foster Care Home</u>	<u>1-5 impaired adults</u>	<u>R-3 dwelling unit</u>
<u>Child Foster Care</u>	<u>Foster Care</u>	<u>1-6 foster children without severe disability or assisted medical technology</u>	<u>R-3 dwelling unit</u>
	<u>Foster Care</u>	<u>1-4 foster children with medical or special care services</u>	<u>R-3 dwelling unit</u>
<u>Housing with Services Facility</u>	<u>Housing with Services Establishment Housing with Services Establishment Providing Assisted Living Services</u>	<u>1-5 adult residents <math>\geq</math> 80 percent 55 years of age or older unless registered under MN Statutes, section 144D.025</u>	<u>R-3 dwelling unit</u>

	<u>Housing with Services Establishment</u>	<u>6-16 adult residents ≥ 80 percent 55 years of age or older unless registered under MN Statutes, section 144D.025</u>	<u>R-4</u>
	<u>Housing with Services Establishment Providing Assisted Living Services</u>	<u>6-16 adult residents ≥ 80 percent 55 years of age or older unless registered under MN Statutes, section 144D.025</u>	<u>R-4</u>
	<u>Housing with Services Establishment</u>	<u>16 adult residents ≥ 80 percent 55 years of age or older unless registered under MN Statutes, section 144D.025</u>	<u>I-1</u>
	<u>Housing with Services Establishment Providing Assisted Living Services</u>	<u>16 adult residents ≥ 80 percent 55 years of age or older unless registered under MN Statutes, section 144D.025</u>	<u>I-1</u>
<u>Boarding Care</u>	<u>Boarding Care Home</u>	<u>&lt; 5 residents</u>	<u>R-3 dwelling unit</u>
	<u>Boarding Care Home</u>	<u>6-16 residents</u>	<u>R-4</u>
	<u>Boarding Care Home</u>	<u>&gt; 16 residents</u>	<u>I-1</u>
<u>Boarding and Lodging</u> <u>R-3</u>	<u>Boarding and Lodging</u>	<u>≤ 16 residents in sleeping rooms or ≤ 2 dwelling units in one building</u>	
	<u>Boarding and Lodging</u>	<u>&gt; 16 residents in sleeping rooms or &gt; 2 dwelling units in one building</u>	<u>R-2</u>
	<u>Boarding and Lodging &lt; 30 days</u>	<u>Bed and Breakfast with 6 or more sleeping units</u> <u>Boarding houses &gt; 10 occupants</u>	<u>R-1</u>
	<u>Boarding and Lodging &lt; 30 days</u>	<u>Bed and Breakfast with 5 or fewer sleeping units</u> <u>Boarding house with ≤ 10 occupants</u>	<u>R-3 dwelling unit</u>
<u>Senior Housing</u>	<u>Senior Housing (See IBC 310)</u>	<u>More than 2 dwelling units in one building</u>	<u>R-2</u>
	<u>Senior Housing (See IBC 310)</u>	<u>2 dwelling units in one building</u>	<u>R-3</u>
	<u>Senior Housing (See IBC 310)</u>	<u>1 dwelling unit</u>	<u>R-3 dwelling unit</u>

<u>Congregate Residence</u>	<u>Congregate Residence</u>	<u>≤ 16 residents</u>	<u>R-3</u>
	<u>Congregate Residence</u>	<u>17 or more residents</u>	<u>R-2</u>
<u>Day Services</u>	<u>Day Services Facility</u>	<u>Adult (over 18)</u>	<u>I-4</u>
	<u>Day Services Facility</u>	<u>Ages 13-18</u>	<u>I-4</u>
<u>Chemical Dependency Treatment Programs</u>	<u>Chemical Dependency Treatment Program – Outpatient (&lt; 24 hrs.)</u>	<u>Not regulated</u>	<u>B</u>
	<u>Chemical Dependency Treatment Program – Residential</u>	<u>&lt; 5 residents</u>	<u>R-3 dwelling unit</u>
	<u>Chemical Dependency Treatment Program – Residential</u>	<u>6-16 residents</u>	<u>R-4</u>
	<u>Chemical Dependency Treatment Program – Residential</u>	<u>&gt; 16 residents</u>	<u>I-1</u>

**B. 1305.0308, subpart 1, section 308.3, Institutional Group I-1.**

The commenter requests that in the list of examples we change the phrase “assisted living facilities” to “assisted living services” because it is “services” that are being provided in these occupancies. Also, the commenter states that the phrase “Housing with services” should be changed to “Housing with services establishment” because this more fully describes the current way these services are provided. Typically, outside service companies provide “assisted living services” in buildings originally created as other occupancies.

**Department Response.** The rule contains the phrase “Assisted living facilities” to provide an example of a use in Institutional Group I-1 occupancies. Because this section of the rule part contains a sample list of facilities or uses, the Department believes that a “service” does not logically fit into the list of facilities or uses. The Department will delete the word “facilities” from the phrase “Assisted living facility” so that the phrase is all encompassing and will apply to anything associated with assisted living, including the use or the services provided to the use. Additionally, the Department agrees with the commenter that the phrase “Housing with services” should be changed to “Housing with services establishment” because the modified phrase better describes the way these services are provided and is also consistent with terminology used in proposed Table 302.2.

Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

### **1305.0308, Subpart 1, section 308.3, Institutional Group I-1.**

**Subpart 1. IBC section 308.2308.3.** IBC section ~~308.2308.3~~ is amended to read as follows:

~~308.2308.3~~ Institutional Group I-1. This occupancy ~~must~~shall include buildings, structures, or ~~parts~~ portions thereof housing for more than 16 persons; who reside on a 24-hour basis, ~~who~~ because of age, mental disability, or other reasons, live in a supervised residential environment that ~~provides personal and receive~~ custodial care services. ~~The occupants are capable of responding to an emergency situation without physical assistance from staff.~~ Examples of this group shall include, but not be limited to, the following:

~~residential board and care facilities~~ Alcohol and drug centers  
~~Assisted living facilities~~  
Boarding care  
~~halfway houses~~  
Congregate care facilities  
Convalescent facilities  
~~Group homes~~  
~~congregate care facilities~~  
Halfway houses  
Housing with services establishment  
Residential board and care facilities  
~~Social rehabilitation facilities~~  
Supervised living facilities Class A-2  
~~alcohol and drug centers~~  
~~convalescent facilities~~

**308.3.1 Five or fewer persons receiving care.** A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3.

**308.3.2 Six to 16 persons receiving care.** A facility such as above, housing at least not fewer than six and not more than 16 persons receiving such care, shall be classified as Group R-4.

#### **C. 1305.0310, subsection 310.5, Residential Group R-3.**

The commenter requests that in the list of examples of these occupancies, the Department change the phrase “assisted living facilities” to “assisted living services” because it is services that are provided in these occupancies. Also the commenter states that the phrase “Housing with services” should be changed to “Housing with services establishment” because this more fully describes the current way these services are provided. Typically,

outside services companies provide “assisted living services” in buildings originally created as other occupancies.

**Department Response:** The rule contains the phrase “Assisted living facilities” to provide an example of a use in Residential Group R-3 occupancies. Because this section of the rule part contains a sample list of facilities or uses, the Department believes that a “service” does not logically fit into the list of facilities or uses. The Department will delete the word “facilities” from the phrase “Assisted living facility” so that the phrase is all encompassing and will apply to anything associated with assisted living, including the use or the services provided to the use. Additionally, the Department agrees with the commenter that the phrase “Housing with services” should be changed to “Housing with services establishment” because the modified phrase better describes the way these services are provided and is also consistent with terminology used in proposed Table 302.2. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

### **1305.0310, Subsection 310.5, Residential Group R-3.**

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

Assisted living facilities

~~Buildings that do not contain more than two dwelling units~~

Boarding care homes

Boarding houses (nontransient) with 16 or fewer occupants

Boarding houses (transient) with 10 or fewer occupants

~~adult Care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours receiving care~~

~~child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours~~

Congregate living facilities (nontransient) with 16 or fewer persons occupants

~~adult and child care facilities~~

Congregate living facilities (transient) with ten or fewer occupants

Dwelling units in mixed occupancy buildings

Family adult foster homes

Foster care

Housing with services establishment

Residential hospice with five or fewer occupants

In new construction, Group R-3 occupancies shall meet the requirements for building durability of chapter 1309, the International Residential Building Code, parts 1309.0402; 1309.0406, subpart 2; 1309.0702, subpart 2; 1309.0703, subpart 2a; 1309.0703, subpart 9, items A, B, and C; 1309.0903; and 2012 IRC section R703.8.1.

**D. 1305.0310, subsection 310.6, Residential Group R-4.**

The commenter requests that in the list of examples of these occupancies, the Department add “Assisted Living Services” to the list of examples of these types of occupancies because this type of service. This phrase needs to be added to the Group R-4 occupancy list because “services” are also provided in this occupancy classification.

Also, the commenter proposes to change the phrase “Housing with services (including those that provide assisted living services)” to “Housing with services establishment,” because this this more phrase more fully describes the current way these services are provided. Typically, outside service companies provide “assisted living services” in buildings originally created as other occupancies.

**Department Response:** The rule contains the phrase “Assisted living facilities” to provide an example of a use in Residential Group R-4 occupancies. Because this section of the rule part contains a sample list of facilities or uses, the Department believes that a “service” does not logically fit into the list of facilities or uses. The Department will delete the word “facilities” from the phrase “Assisted living facility” so that the phrase is all encompassing and will apply to anything associated with assisted living, including the use or the services provided to the use. Additionally, the Department agrees with the commenter that the phrase “Housing with services” should be changed to “Housing with services establishment” because the modified phrase better describes the way these services are provided and is also consistent with terminology used in proposed Table 302.2. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

**1305.0310, subsection 310.6, Residential Group R-4.**

**310.6 Residential Group R-4.** This occupancy shall include buildings, structures, or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. The persons receiving care are capable of self-preservation. This group shall include the following:

Alcohol and drug centers

Assisted living

Boarding care homes

Congregate care facilities

Group homes

Halfway houses

Housing with services establishment (including those that provide assisted living services)

Residential board and care facilities

Residential hospice with 12 or fewer occupants

Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

**E. 1305.0903, subpart 5a, subsection 903.3.1.6.5, Vestibules.**

The commenter requests that the Department add a sentence to the end of item 5 that reads, "Incidental combustible storage in the vestibule is limited to 5 ft.<sup>3</sup> of material." This change is needed to allow some reasonable storage of incidental combustibles in a vestibule while limiting the size of a potential fire by restricting the amount of combustible material stored in a vestibule when fire sprinklers have been omitted, as permitted by this section. Examples of incidental combustibles commonly stored in vestibules include newspaper and magazine racks, travel brochures and maps, and cleaning materials and supplies.

*Department Response.* The Department agrees with the commenter's proposal permitting incidental combustible storage in a non-sprinklered vestibule if storage is limited to 5 ft<sup>3</sup> of material. Fire sprinkler heads are not required in all vestibules because of concerns with exterior sprinkler heads in Minnesota's winter climate. Currently, there is no limitation on the amount of combustibles permitted to be stored in a vestibule when an automatic sprinkler system has been omitted from the building's design. The Department recognizes that it is difficult and impracticable to completely prohibit all incidental combustible storage in a vestibule, but if space for the combustible materials is reasonable and limited, then the potential fire hazard posed by those materials is greatly reduced. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

**1305.0903, subpart 5a, subsection 903.3.1.6.5, Vestibules**

**903.3.1.6.5 Vestibules.** Sprinkler protection is not required in vestibules that meet all of the following conditions:

1. the vestibule is 225 square feet or less in floor area;
2. the vestibule is of noncombustible or limited combustible construction;
3. the vestibule has glazing allowing vision into vestibule;
4. the vestibule's only purpose is ingress and egress; and
5. the vestibule contains no fueled equipment, flammable or combustible liquids, or furniture. Incidental combustible storage in the vestibule is limited to 5 ft.<sup>3</sup> of material.

**F. Minnesota Rules, part 1305.0907, subpart 2a, section 907.2.1, Group A, general.**

The commenter requests to change exception 2 by adding the phrase "in buildings with an occupant load of less than 1,000" after "a fire alarm system is not required." The commenter states this change is necessary for the requirement to be consistent with section 907.2.1.3, which requires a fire alarm system in Group A occupancies with an occupant

load of 1,000. According to the commenter, this change will also avoid confusion and provide needed clarity for both the design professional and the code official.

**Department Response.** The Department agrees with the commenter's proposed change. This change is necessary and reasonable as it will help prevent confusion since the Department's language, as proposed, could be interpreted to mean that no Group A occupancies are required to have a fire alarm system if an automatic fire sprinkler system is installed in the building. However, a fire alarm system is required by IBC section 907.2.1.3 if the occupant load is 1,000 or more, regardless of whether an automated sprinkler system is installed. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

### **1305.0907, subpart 2a, section 907.2.1, Group A, general**

**Subp. 2a. IBC [F] section 907.2.1.** IBC [F] section 907.2.1 is amended to read as follows:

**907.2.1 Group A, general.** A fire alarm system shall be installed in accordance with sections 907.2.1 through 907.2.1.3 in Group A occupancies having an occupant load of 300 or more.

#### **Exceptions:**

1. Assembly areas used solely for worship purposes.
2. A fire alarm system is not required in buildings with an occupant load less than 1,000 when an approved automatic fire extinguishing system is installed throughout the building.
3. Assembly uses within Group E occupancies shall have alarms as required for the Group E occupancy.
4. Group A-5 occupancies. See also section 907.2.11.

#### **G. 1305.0907, subpart 22, subsection 907.2.6.2.3, Patient room smoke detectors.**

The commenter proposes that the Department remove the comma after the phrase "part of the facility," located in the fourth sentence within the proposed paragraph, to make the sentence more grammatically correct. Also, the commenter believes that an incorrect reference to IBC section number "907.2.6.3.1" is contained within the fifth sentence of the proposed paragraph and proposes to correct that error by inserting the word "this" before the word "section" and to delete the referenced section number.

**Department Response.** The Department agrees with the commenter's suggested change because the comma was incorrectly incorporated and changes the meaning of the sentence. The Department is also changing the phrase to read "part of the facility's fire alarm system,..." to provide further clarity. The Department also agrees with the commenter's request to delete the section reference to "907.2.6.3.1" because it was included erroneously in the draft of the proposed rule. However, the Department disagrees with the commenter's proposed change referencing "this section" because it does not completely clarify the intent of the sentence. Instead, the Department created a new subsection to this

section to set this sentence apart as an additional option in the requirement. This new subsection will help clarify that integral smoke detectors for automatic door closing devices can be installed only if the devices meet all of the other requirements listed in the main section 907.2.6.3 for patient room smoke detectors. The Department believes this modification is needed and reasonable as it better clarifies the intent of the requirement by including this option in a separate subsection without changing the requirement itself. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

### **1307.0907, subpart 22, subsection 907.6.2.3, patient room smoke detectors**

**Subp. 22. IBC [F] section 907.2.6.** IBC [F] section 907.2.6 and all subsections are deleted in their entirety and replaced with the following:

**907.2.6.2.3 Patient room smoke detectors.** Smoke detectors shall be installed in patient sleeping rooms of hospitals and nursing homes. Such detectors' primary power shall be other than battery power. Actuation of such detectors shall cause a visual display on the corridor side of the room where the detector is located and shall cause a distinct audible and visual alarm at the nurses' station attending the room. Such detectors may be part the facility ;'s fire alarm system, nurses' call system, or a standalone system. Integral smoke detectors for automatic door-closing devices on sleeping room doors can meet this requirement if they also cause all the items in section 907.2.6.3.1 to occur.

**907.2.6.2.3.1 Integral smoke detectors for automatic door-closing devices.** Integral smoke detectors for automatic door-closing devices on sleeping room doors can be installed only if they also meet all of the requirements in section 907.2.6.2.3.

#### **H. 1305.0907, subpart 22, subsection 907.2.6.4.2, Notification.**

The commenter requests to add a sentence to the end of the subsection that reads, "In addition, activation of the fire alarm system shall immediately transmit an alarm signal to an approved central station or remote station service." The commenter believes this change is necessary to correct an error or omission made by the Department in the reformatting of the subsection during the draft of the proposed rule since proper notification of an activated alarm to an occupied location is obviously necessary and has been a requirement in the code for many years.

**Department Response.** The Department agrees with the commenter's proposed change to include this sentence in the subsection. The addition of this sentence is reasonable and necessary since it is vital for a fire alarm system to not only initiate a signal, but to also have that signal reach a location staffed or monitored by individuals who can notify fire department personnel that the fire alarm system has been activated. This modification does not change the existing requirement and merely corrects a drafting error made by the Department in the language of the proposed rule. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

**1305.0907, subpart 22, subsection 907.2.6.4.2, Notification.**

**907.2.6.4 Group I-4 occupancies-general.** A manual and automatic fire alarm system shall be installed in Group I-4 occupancies in accordance with sections 907.2.6.4.1 through 907.2.6.4.2.

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

**907.2.6.4.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal. In addition, activation of the fire alarm system shall immediately transmit an alarm signal to an approved central station or remote station service.

**I. 1305.0907, subpart 25, subsection 907.2.8, Group R-1, general, exception 2.**

The commenter requests that this subpart be modified by replacing the word "less" with the word "fewer" in the first sentence of the exception to coordinate this language with other similar language in the code.

*Department's Response.* The Department agrees with the commenter that similar language should be consistent throughout the proposed rule. The Department will delete the word "less" and replace it with the word "fewer" for consistency and uniformity within the proposed rule. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

**1305.0907, subpart 25, subsection 907.2.8, Group R-1, general, exception 2.**

**Subp. 25. IBC [F] section 907.2.8.** IBC [F] section 907.2.8 is amended to read as follows:

**907.2.8 Group R-1, general.**

2. Buildings containing five or less fewer guest rooms sleeping units shall be allowed to be equipped with approved multiple-station smoke detectors installed as required for Group R-3 Occupancies. Installation shall be in accordance with section ~~907.2.10~~ 907.2.11.

**J. 1305.0907, subpart 25, subsection 907.2.8.1, Initiation, the exception.**

The commenter requests to add the phrase “and a manual fire alarm box” after the section number “903.3.1.2” within the exception to correct an apparent error in drafting of the proposed rule.

*Department Response.* The Department agrees that the addition of the language helps to clarify the meaning and intent of the requirement. Without the added phrase, the sentence is confusing because it is unclear what is being provided in the constantly attended location. The Department will add the phrase “and a manual fire alarm box” after the section number “903.3.1.2” in the exception. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

**1305.0907, subpart 25, subsection 907.2.8.1, Initiation, the exception.**

**Subp. 25. IBC [F] section 907.2.8** IBC [F] section 907.2.8 is amended to read as follows:

**907.2.8.1 Initiation.**

**Exception:** System fire and smoked detectors are not required when an approved automatic fire extinguishing system is installed throughout the building and manual activation in accordance with section 903.3.1.1 or 903.3.1.2 and a manual fire alarm box is provided at a constantly attended location. When a constantly attended location is not provided, the manual fire alarm box shall be provided at the main exit.

**K. 1305.0907, subpart 26, subsection 907.2.9, Group R-2, general, subitems 1 and 2.**

The commenter requests that the Department revert back to the existing rule language in these subitems. The commenter believes that this change is needed because the “level of exit discharge” is readily understood and distinguished during the plan review phase of a new building and readily understood and distinguished on field inspections, whereas the use of the “grade plane” definition in the IBC is both cumbersome and confusing.

*Department Response.* The Department agrees with the commenter that the proposed language, which incorporates the phrase “grade plane” is more problematic than the existing language in each subitem. The IBC defines the phrase “grade plane,” but the definition is cumbersome and vague. The IBC defines “grade plane” as follows:

“A reference plane representing the average of finished ground level adjoining the building at exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line, or, where the lot line is more than 6 feet (1829 mm) from the building, between the building and a point 6 feet (1829 mm) from the building.”

This definition does not establish a definitive measurement point to determine exactly where the ground level is and it invites interpretation. Additionally, by applying this

definition, the determination of a “ground level” can differ by almost one story for buildings on sloped building sites.

Therefore, the Department agrees with the commenter and will withdraw its proposed change to the existing language in subitems 1 and 2 because the existing language is clearer than the language that is proposed. Accordingly, the Department agrees to modify the proposed subitems as follows (modified language is highlighted in yellow):

**1305.0907, subpart 26, subsection 907.2.9, Group R-2, general, subitems 1 and 2.**

**1305.0907, subpart 26, subsection 907.2.9, Group R-2, general, subitem 1.**

1. Any sleeping unit or dwelling unit is located three or more stories above the grade plane story containing the lowest level of exit discharge;

**1305.0907, subpart 26, subsection 907.2.9, Group R-2, general, subitem 2.**

2. Any sleeping unit or dwelling unit is located more than one story below the grade plane highest level of exit discharge of exits serving the dwelling unit;

**L. 1305.1008, subpart 7, section 1008.1.9.7, Delayed egress door locks.**

The commenter requests that in the second sentence in this subpart, the word “and” should be replaced with the word “or” after the section number “903.3.1.1.” The commenter believes this was most likely a typographical error made during the drafting of the proposed rule since it obviously would be difficult or impossible for an owner of an existing building to add a fire sprinkler system after the building was completed. Additionally, the commenter believes that this change is necessary for uniformity between the Building and Fire Codes.

*Department Response.* The Department agrees with the commenter’s proposed change. The Department acknowledges that this was, in fact, a typographical error. This requirement exists in the current building and fire codes with the word “or” incorporated in the section instead of the word “and.” Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

**1305.1008, subpart 7, section 1008.1.9.7, Delayed egress door locks.**

**Subp. 7. IBC section ~~1008.1.8.6~~ 1008.1.9.7.** IBC section ~~1008.1.8.6~~ 1008.1.9.7 is amended to read as follows:

**~~1008.1.8.6~~ 1008.1.9.7 Delayed egress door locks.** Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Assembly Group A occupancies and High Hazard Group H occupancies, and assembly uses within Educational Group E occupancies. Delayed egress locks shall be installed only in buildings that are equipped throughout with an automatic sprinkler system in accordance with section 903.3.1.1 or an

~~approved automatic smoke detection system installed in accordance with Section 907 and an~~ approved smoke detection system installed in a means of egress system serving the locked area, provided that the doors unlock in accordance with Items 1 through 6-4 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center.
4. The ~~initiation of~~ door locks shall include an irreversible process ~~which~~ that will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for one second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

**Exception:** Where approved, a delay of not more than 30 seconds is permitted.

Doors that have been equipped with delayed egress locks shall also comply with items 1 to 3 below.

- ~~5.~~ 1. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.
- ~~6.~~ 2. Emergency lighting shall be provided at the door.
3. Delayed egress locks shall be maintained and tested in accordance with the Minnesota State Fire Code.

**M. 1305.1008, subpart 8, subsection 1008.1.11.1, Locking hardware.**

The commenter requests that in the last paragraph, a period should be added after the phrase “open position” and to capitalize the “f” in the word “following.” The commenter also requests that a period should be replaced with a comma after the phrase “conditions specified above” and make the “r” in the word “Relocking” a lower case. The commenter believes that this change is needed because, as written, the rule requires that locking devices need to fail in the open position only if they are released pursuant to one of the six conditions, rather than after any release. The proposed language does not accomplish the intent that the locks must always fail in the open position, regardless of other unlocking conditions that are triggered by items 1-6 in this subsection, to prevent occupants from being trapped in the locked structure during an emergency.

**Department Response.** The Department agrees with the commenter’s suggested modifications because they provide more clarity to the requirement. The rule language, as written, only requires locking devices to be designed to fail in the open position only if the conditions listed in items 1-6 occur. However, there are conditions other than those listed in items 1-6 that could cause a lock to fail, such as the failure or breakage of the locking

mechanism itself. In that case, the locking device must still fail in the open position to prevent people from being trapped in the locked area of the building. The commenter's proposed language is reasonable and consistent with the rule's underlying intent and clarifies that regardless of the circumstance, locking devices must always be designed to fail in the open position to prevent people from being unintentionally locked in a structure during an emergency or some other unexpected event. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

**1305.1008, subpart 8, subsection 1008.1.11.1, Locking hardware.**

**Subp. 8. IBC section 1008.1.** IBC section 1008.1 is amended by adding subsections as follows:

~~1008.1.10.1~~ 1008.1.11.1 Locking hardware. Locking devices shall release upon any of the following conditions:

1. Activation of the automatic sprinkler system.
2. Activation of any automatic fire detection device.
3. Activation of any automatic fire alarm system.
4. Loss of electrical power to the locking device or the fire alarm system.
5. Activation of the fire alarm trouble signal.
6. Operation of a manual switch located in an approved location.

All locking devices shall be designed to fail in the open position. Following the release of the locking devices for any of the conditions specified above, rRelocking of the devices shall be by manual means only at the door.

**Comments from the Association of Minnesota Building Officials (submitted by Tim Manz)  
Concerning Shaft Enclosures, IBC Section 717.5.3 (Proposed Minnesota Rules, Part  
1305.0717, Subpart 1)**

The commenter requests that proposed Minnesota Rule, part 1305.0717, subpart 1, which amends IBC section 717.5.3 by adding exception 6 concerning laboratory ventilation systems installed in accordance with NFPA 45, be modified to specify the applicable chapters of NFPA 45 which necessarily apply to these systems in order for them to meet the exception (NFPA 45 Chapters 1-4, 7 and 8). As correctly noted by the commenter, the proposed rule as written does not specify which chapters of NFPA 45 are necessary to comply with in the design and installation of the system in order for it to meet the exception; instead, as written the proposed language may be interpreted as requiring that all chapters of NFPA 45 be complied with in order to meet the exception, whether those chapters are relevant or not. The commenter further notes that requiring compliance with NFPA 45 in its entirety could result in several unintended consequences and conflicts with other portions of the IBC and the International Fire Code. Therefore, the commenter proposes that the proposed rule be further modified to clearly identify which chapters of

NFPA 45 the design and installation of the laboratory ventilation system must comply with in order to meet the exception.

**Department Response.** The Department agrees that the commenter's suggested change is necessary and reasonable. The Department does not wish to include chapters of the NFPA 45 standard that are not appropriate, that will cause conflict with other portions of the IBC, or that may render the code difficult or impossible to comply with. Moreover, this modification will assist in clarifying the intent of the requirement without changing the requirement itself. Accordingly, the Department agrees to modify the proposed rule as follows (modified language is highlighted in yellow):

### **1305.0717, subpart 1, section 717.5.3, Shaft enclosures.**

**Subpart 1. IBC section 717.5.3.** IBC section 717.5.3 is amended by adding exception 6 as follows:

6. Fire dampers, smoke dampers, and combination fire/smoke dampers are not required in laboratory hood exhaust duct penetrations of shaft enclosures where laboratory ventilation systems are installed in accordance with chapters 1-4, 7 and 8 of NFPA 45.

**Comments from Dryvit Systems, Inc. (submitted by William Preston), Hughes Associates + RJA (submitted by Jesse Beitel), and Dakota Wall Systems (submitted by Eric Garrow) Concerning Foam Plastic Insulation Requirements and Vertical/Lateral Flame and Fire Propagation, IBC Sections 1403.5 and 2603.5.5, Exception 2 (Proposed Minnesota Rules, Parts 1305.1403 and 1305.2603)**

**A. 1305.1403, section 1403.5, Vertical and lateral flame propagation.**

The commenters request that the proposed amendment to Minnesota Rules, part 1305.1403 be deleted and instead incorporate the language from the 2015 IBC and add three new exceptions. The new proposed language would read as follows:

**“1403.5 Vertical and lateral flame propagation.** Exterior walls on buildings of Type I, II, III, or IV construction that are greater than 40 feet (12,192 mm) in height above grade plane and contain a combustible water resistive barrier shall be tested in accordance with and comply with the acceptance criteria of NFPA 285.

**Exceptions:**

- “1. Walls in which the water-resistive barrier is the only combustible component and the exterior wall has a wall covering of brick, concrete, stone, terra cotta, stucco, or steel with minimum thicknesses in accordance with Table 1405.2.
2. Walls in which the water-resistive barrier is the only combustible component and the water-resistive barrier has a Peak Heat Release Rate of less than 150

kW/m<sup>2</sup>, a Total Heat Release Rate of less than 20MJ/m<sup>2</sup>, and an Effective Heat of Combustion of less than 18 MJ/kg as determined in accordance with ASTM E 1354 and has a flame spread index of 25 or less and a smoke developed index of 450 or less as determined in accordance with ASTM E 84 or UL 723. The ASTM E 1354 test shall be conducted on specimens in the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 KW/m<sup>2</sup>.

3. Windows and doors and flashing for windows and doors shall not be considered to be part of a water-resistive barrier for purposes of this section.”

**Department Response.** The Department disagrees with the commenters’ proposed change. The language in this section of the 2012 IBC and the language in the 2015 IBC differ in that the 2015 IBC added the three exceptions. The language in the main body of the section is the same in both the 2012 and 2015 editions. It is the main body of the section that the Department amended out from the 2012 IBC in the proposed rule. The following is the Department’s stated reason for deleting this section from the 2012 IBC (reproduced from the Department’s October 30, 2014 SONAR for this proposed rule):

“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 combustibile 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. [Note: Curtain walls are outer coverings of buildings, sometimes made of glass, that keep the weather elements out of the building.] 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.”

The commenters’ proposed change incorporates three exceptions to the body of the 2012 IBC section (this is the new requirement contained in the 2015 edition of the IBC).

However, the Department believes that not every exterior wall poses the same hazard as walls containing exterior foam. Therefore, not every exterior wall requires testing to the same standard (in accordance with NFPA 285) as walls that contain exterior foam insulation, which is the most hazardous of the insulating materials. Exterior foam is already regulated by chapter 26 of the 2012 IBC. Chapter 26 adequately addresses the hazards related to exterior foam, so there is no need to duplicate requirements in this section. With regard to the exceptions proposed by the commenters, the Department believes these exceptions are not comprehensive enough to cover all the possible scenarios that would need to be exempt from this type of a requirement.

Additionally, the Department is adopting the *2012 edition* of the IBC, not the *2015 edition*. The 2015 edition was not available when the 1305 Advisory Committee and the Department prepared the amendments to the 2012 edition of the code, so neither the Committee nor the Department had the opportunity to review the 2015 edition at that time. It would be very difficult for the Department to try to incorporate provisions from newer codes throughout the adoption process of a current code cycle which can take years to implement under the comprehensive rulemaking requirements of the Minnesota Administrative Procedures Act. Further, the Department believes that incorporating provisions from newer editions of the ICC model codes would cause confusion for users by mixing code requirements from two different editions and code cycles. Accordingly, the Department does not agree with the changes suggested by the commenters for proposed Minnesota Rule, part 1305.1403, and respectfully declines to adopt their proposal.

**B. 1305.2603, Section 2603.5.5, Vertical and lateral fire propagation, exception 2, subitems (a -e).**

Similar to the comments received by Cermak Rhoades Architects (submitted by Michelle Baltus Pribyl) and Elness Swenson Graham Architects, Inc. (submitted by Craig Hess) and discussed above, the commenters also question the validity of the Department's proposed rules and amendments concerning IBC section 2603.5.5, Vertical and lateral fire propagation, and express various concerns over the proposed exception from both building science and energy perspectives. Also similar to the comments received from the architectural firms above, the commenters seek several clarifications of the proposed requirements and submit several different proposals to address their concerns.

***Department Response:*** The Department agrees with many of the commenters' concerns and has determined that the proposed rule amendments must be investigated further and vetted by the Commercial Energy Code Committee for chapter 1323 to address the identified concerns and conflicts before it can be included in this rule. As a result, the Department will withdraw its proposed amendment to this section of the 2012 IBC in its entirety at this time.

4. A copy of the proposed rules with the modifications incorporated into the draft is attached as Exhibit A.

5. The modifications to the proposed rules do not make the rules substantially different from the proposed rules. While the Department recognizes that several modifications were made to the proposed rules, all of the modifications are clearly within the scope of adopting the Minnesota State Building Code by incorporating by reference, with amendments, the 2012 edition of the International Building Code as announced in the Request for Comments and the Dual Notice for Hearing as published in the *State Register*. These modifications include several corrections, clarifications and improvements that are based solely on comments submitted to the Department by various stakeholders after their review of the Department's publications and notices. Further, all of the modifications are a logical outgrowth of the contents of the Request for Comments and Dual Notice and to the comments submitted in response to those notices. Accordingly, adoption of the modifications discussed above does not render the rules substantially different from the rules as proposed by the Department.

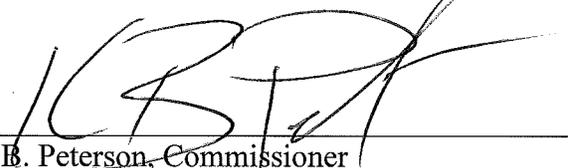
6. The rules are needed and reasonable.

### ORDER

The above-named rules, in the form published in the State Register on November 10, 2014, with the modifications as indicated in the Revisor's draft, file number AR4142, dated 03/09/15, are adopted under my authority in Minnesota Statutes, sections 326B.02, subdivision 5, 326B.101, and 326B.106, subdivision 1.

Date

March 25, 2015

  
Ken B. Peterson, Commissioner  
Department of Labor and Industry