### Part 4. Michigan Building Code Proposal Comparison

# **Current Language**

**407.4.4.6.1 Area.** *Care suites* of rooms, other than sleeping rooms, shall have an area not greater than 12,500 square feet (1161 m2).

Exception: *Care suites* not containing sleeping rooms shall be permitted to be not greater than 15,000 square feet (1394 m2) in area where an automatic smoke detection system is provided throughout the *care suite* in accordance with Section 907.

### **Proposed Language**

2015 MBC 407.4.4.6.1 Area. Care suites of rooms, other than sleeping rooms, shall have an area not greater than 12,500 square feet in accordance with 2012 NFPA 101 Section 18.2.5.7.3.3 sleeping suite maximum size.

#### **Current Language**

**407.4.4.5.1 Area.** *Care suites* containing sleeping rooms shall be not greater than 7,500 square feet (696 m2) in area.

Exception: *Care suites* containing sleeping rooms shall be permitted to be not greater than 10,000 square feet (929 m2) in area where an automatic smoke detection system is provided throughout the care suite and installed in accordance with NFPA 72.

#### **Proposed Language**

2015 MBC 407.4.4.5.1 Area. Care suites containing sleeping rooms shall be not greater than 7,500 square feet in area in accordance with 2012 NFPA 101 Section 18.2.5.7.2.3 sleeping suite maximum size.

#### **Current Language**

**407.5 Smoke Barriers.** *Smoke barriers* shall be provided to subdivide every *story* used by persons receiving care, treatment or sleeping and to divide other *stories* with an *occupant load* of 50 or more persons, into no fewer than *two smoke compartments*. Such stories shall be divided into *smoke compartments* with an area of not more than 22,500 square feet (2092 m2) in Group I-2, Condition 1, and not more than 40,000 square feet (3716 m2) in Group I-2, Condition 2, and the distance of travel from any point in a *smoke compartment* to a *smoke barrier* door shall be not greater than 200 feet (60 960 mm). The *smoke barrier* shall be in accordance with Section 709.

2015 MBC 407.5 Smoke Barriers. Smoke Barriers shall be provided into not fewer than two smoke compartments in accordance with 2012 NFPA 101 Section 18.3.7.

## **Current Language**

**422.3 Smoke compartments.** Where the aggregate area of one or more *ambulatory care facilities* is greater than 10,000 square feet (929 m2) on one *story*, the *story* shall be provided with a *smoke barrier* to subdivide the *story* into no fewer than two *smoke compartments*. The area of any one such *smoke compartment* shall be not greater than 22,500 square feet (2092 m2). The distance of travel from any point in a *smoke compartment* to a *smoke barrier* door shall be not greater than 200 feet (60 960mm), The *smoke barrier* shall be installed in accordance with Section 709 with the exception that *smoke barriers* shall be continuous from outside wall to an outside wall, a floor to a floor, or from a *smoke barrier* to a *smoke barrier* or a combination thereof.

## **Proposed Language**

2015 MBC 422.3 Smoke Compartments. Smoke compartments where the aggregate area shall not be greater than 200 feet. Smoke compartments shall be in accordance with 2012 NFPA 101 Sections 20.3.7.2 and 20.3.7.3.

## **Current Language**

2018 IBC 1107.5.4 group I-2 rehabilitation facilities. In hospitals and rehabilitation facilities of Group I-2 occupancies that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, 100 percent of the *dwelling units* and *sleeping units* shall be *Accessible* units.

#### **Proposed Language**

2018 IBC 1107.5.4 Group I-2 rehabilitation facilities. In hospitals and rehabilitation facilities of group I-2 occupancies that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, 100 percent of the *dwelling units* and *sleep units* shall be Accessible units.

#### **Exceptions:**

- 1) <u>In not more than 50 percent of the Accessible units, water closets shall not be required to comply with ICC A 117.1 where such water closets comply with Section 1109.2.2.</u>
- 2) <u>In not more than 50 percent of the Accessible units, roll-in-type showers shall not be required to comply with ICC A117.1</u> where roll-in-type showers comply with Section 1109.2.3.

**1107.5.1 Group I-1.** *Accessible units* and *Type B units* shall be provided in Group I-1 occupancies in accordance with Sections 1107.5.1.1 and 1107.5.1.2.

#### **Proposed Language**

IBC 1107.5.1 group I-1. Accessible units and Type B units shall be provided in Group I-1 occupancies in accordance with Sections 1107.5.1.1 and 1107.5.1.2. through 1107.5.1.3.

## **Current Language**

**1107.5.1.1** Accessible units. In Group I-1, Condition 1, at least 4 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*. In Group I-1, Condition 2, at least 10 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*.

#### **Proposed Language**

**IBC 1107.5.1.1.** Accessible units. units in Group I-1, Condition 1. In Group I-1, Condition 1, at least 4 percent, but not less than one, of the dwelling units and sleeping units shall be Accessible units. In Group I-1, condition 2, at least 10 percent, but not less than one, of the dwelling units and sleeping units shall be Accessible units.

# **Exceptions:**

- 1) In not more than 50 percent of the Accessible units, water closets shall not be required to comply with ICC A117.1 where such water closets comply with Section 1109.2.2.
- 2) In not more than 50 percent of the Accessible units, roll-in-type showers shall not be required to comply with ICC A117.1 where roll-in-type showers comply with Section 1109.2.3.

## **Current Language**

**1107.5.1.2 Type B units.** In structures with four or more *dwelling units* or *sleeping units* intended to be occupied as a residence, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

# **Proposed Language**

<u>1107.5.1.2. Accessible units in Group I-1, Condition 2.</u> In Group I-1, Condition 2, at least 10 percent, but not less than one, of the dwelling units and sleeping units shall be Accessible units.

#### **Exceptions:**

1) In not more than 50 percent of the Accessible units, water closets shall not be required to comply with ICC A117.1 where such water closets comply with Section 1109.2.2.

2) In not more than 50 percent of the Accessible units, roll-in-type showers shall not be required to comply with ICC A 117.1 where roll-in-type showers comply with Section 1109.3.

#### **Current Language**

**1107.5.1.2 Type B units**. In structures with four or more *dwelling units* or *sleeping units intended to be occupied as a residence*, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a Type B unit.

**Exceptions:** The number of Type B units is permitted to be reduced in accordance with Section 1107.7.

# **Proposed Language**

1107.5.1.2 1107.5.1.3 Type B units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling and sleeping unit intended to be occupied as a residence shall be a Type B unit.

**Exceptions:** The number of Type B units is permitted to be reduced in accordance with Section 1107.7.

## **Current Language**

**1109.2 Toilet and bathing faculties.** Each toilet room and bathing room shall be *accessible*. Where a floor level is not required to be connected by an *accessible route*, the only toilet rooms or bathing rooms provided within the facility shall no be located on the inaccessible floor. Except as provided for in section 1109.2.2 and 1109.2.3, at least one of each type of fixture, element, control or dispenser in each accessible toilet room and bathing room shall be *accessible*.

### **Exceptions:**

- 1. Toilet rooms or bathing rooms accessed only through private office, not for *common* or *public use* and intended for use by a single occupant, shall be permitted to comply with the specific expectations in ICC A117.1.
- 2. This section is not applicable to toilet and bathing rooms that serve *dwelling units* or *sleeping units* that are not required to be *accessible* by Section 1107.
- 3. Where multiple single- user toilet rooms or bathing rooms are clustered at a single location, at least 50 percent but not less than one room for each use at each cluster shall be *accessible*.
- 4. Where no more than one urinal is provided in a toilet room or bathing room, the urinal is not required to be *accessible*.
- 5. Toilet rooms or bathing rooms that are part of critical care or intensive care patient sleeping rooms serving *Accessible units* are not required to be *accessible*.
- 6. Toilet rooms or bathing rooms designed for bariatrics patients are not required to comply with the toilet room and bathing room requirements in ICC A117.1. The *sleeping units* served by bariatrics toilet or bathing rooms shall not count toward the required number of *Accessible sleeping units*.
- Where toilet facilities are primarily for children's use, required accessible water closets, toilet compartments and lavatories shall be permitted to comply with children's provision of ICC A117.1.

IBC 1109.2 **Toilet and bathing facilities.** Each toilet room and bathing room shall be *accessible*. Where a floor level is not required to be connected by an *accessible* route, the only toilet rooms or bathing rooms provided within the facility shall not be located on the inaccessible floor. Except as provided for in Section 1109.2.2 1109.2.3 and 1109.2.3 1109.2.4 at least one of each type of fixture, element, control or dispenser in each accessible toilet room and bathing room shall be *accessible*.

# **Exceptions:**

- 1) Toilet rooms or bathing rooms accessed only through a private office, not for common or *public use* and intended for use by a single occupant, shall be permitted to comply with the specific exceptions in ICC A117.1
- 2) This section is not applicable to toilet and bathing rooms that serve *dwelling units* or *sleeping units* that are not required to be *accessible* by Section 1107.
- 3) Where multiple single- user toilet rooms or bathing rooms are clustered at a single location, at least 50 percent but not less than one room for each use at each cluster shall be *accessible*.
- 4) Where no more than one urinal is provided in a toilet room or bathing room, the urinal is not required to be *accessible*.
- 5) Toilet rooms or bathing rooms that are part of critical care or intensive care patient sleeping rooms serving *Accessible* units are not required to be *accessible*.
- 6) Toilet rooms or bathing rooms designed for bariatrics patients are not required to comply with the toilet room and bathing room requirement in ICC A117.1. The *sleeping units* served by bariatrics toilet or bathing rooms shall not count toward the required number of *Accessible sleeping units*.
- 7) Where permitted in Section 1107, in toilet rooms or bathrooms serving Accessible units, water closets designed for assisted toileting shall comply with Section 1109.2.2.
- 8) Where toilet facilities are primarily for children's use, required accessible water closets, toilet compartments and lavatories shall be permitted to comply with children's provision of ICC A 117.1.

### **Current Language**

**1109.2.2** Water closet compartments. Where water closet compartments are provided in a toilet room or bathing room, at least 5 percent of the total number of compartments shall be wheelchair *accessible*. Where the combined total water closet compartments and urinals provided in a toilet room or bathing room is six or more, at least 5 percent of the total number of compartments shall be ambulatory *accessible*, provided in addition to the wheelchair *accessible* compartment.

## **Proposed Language**

<u>1109.2.2 Water closets designed for assisted toileting.</u> Water closets designed for assisted toileting shall comply with Section 1109.2.2.1 through 1109.2.2.6.

There is no current language.

## **Proposed Language**

1109.2.2.1 Location. The centerline of the water closets shall be 24 inches (610mm) minimum and 26 inches maximum (660mm) from one side of the required clearance.

## **Current Language**

There is no current language.

### **Proposed Language**

1109.2.2.2 Clearance. Clearance around the water closet shall comply with Section 1109.2.2.2.1 through 1109.2.2.2.3.

# **Current Language**

There is no current language.

### **Proposed Language**

<u>1109.2.2.2.1 Clearance width.</u> Clearance around a water closet shall be 66 inches (1675mm) minimum in width, measured perpendicular from the side of the clearance that is 24 inches (610 mm) minimum and 26 inches (660mm) maximum from the water closet centerline.

### **Current Language**

There is no current language.

### **Proposed Language**

1109.2.2.2.2 Clearance depth. Clearance around the water closet shall be 78 inches (1980 mm) minimum in depth, measured perpendicular from the rear wall.

There is no current language.

## **Proposed Language**

<u>1109.2.2.2.3</u> Clearance overlap. The required clearance around the water closet shall be permitted overlaps per ICC A117.1 Section 604.3.3.

## **Current Language**

There is no current language.

### **Proposed Language**

109.2.2.3 Height. The height of the water closet seats shall comply with ICC A117.1 Section 604.4.

## **Current Language**

**1109.2.3 Lavatories.** Where lavatories are provided, at least 5 percent, but not less than one, shall be *accessible*. When an *accessible* lavatory is located within the *accessible* water closet compartment at least one additional *accessible* lavatory shall be provided in the multicompartment toilet room outside the water closet compartment. Were the total lavatories provided in a toilet room or bathing facility is six or more, at least one lavatory with enhanced reach ranges shall be provided.

## **Proposed Language**

Add new text:

1109.2.3 Standard roll-in-type shower compartment designed for assisted bathing. Standard roll-in-type shower compartments designed for assisted bathing shall comply with Section 1109.2.3.1 through 1109.2.3.8.

## **Current Language**

There is no current language.

1109.2.3.1 Size. Standard roll-in-type shower compartments shall have a clear inside dimension of 60 inches (1525 mm) minimum in width and 30 inches (760mm) minimum in depth, measured at the center point opposing sides. An entry 60 inches (1525mm) minimum in width shall be provided.

#### **Current Language**

There is no current language.

## **Proposed Language**

1109.2.3.2 Clearance. A clearance of 60 inches (1525mm) minimum in length adjacent to the 60 inche (1525mm) width of the open face of the shower compartment, and 30 inches (760mm) minimum in depth, shall be provided.

#### Exceptions:

- 1) A lavatory complying with Section 606 shall be permitted at one end of the clearance.
- 2) Where the shower compartments exceeds minimum sizes, the clear floor space shall be placed adjacent to the grab bars and 30 inches minimum from the back wall.

#### **Current Language**

There is no current language.

#### **Proposed Language**

1109.2.3.3 Grab bars. Grab bars shall comply with ICC Section 609 and shall be provided in accordance with Section 1109.2.3.3.1 and 1109.2.3.3.2. In standard roll-in type shower compartments, grab bars shall be provided on the three walls. Where multiple grab bars are used, required horizontal grab bars shall be installed at the same height above the floor. Grab bars can be separate bars or one continuous bar.

#### **Current Language**

There is no current language.

### **Proposed Language**

<u>1109.2.3.3.1 Back- wall grab bar.</u> The back-wall grab bar shall extend the length of the back wall and extend within 6 inches (150mm) maximum from the two adjacent side walls.

Exception: The back-wall grab bar shall not be required to exceed 48 inches (1220mm) in length. The rear grab bar shall be located with one end within 6 inches maximum of a side wall with a grab bar complying with Section 1109.2.3.3.2.

#### **Current Language**

There is no current language.

## **Proposed Language**

1109.2.3.3.2 Side-wall grab bars. The side wall grab bars shall extend the length of the wall and extend within 6 inches (150mm) maximum from the adjacent back wall.

## Exceptions:

- 1) The side- wall grab bar shall not be required to exceed 30 inches (760mm) in length. The side grab bar shall be located with one end within 6 inches maximum of the back wall with a grab bar complying with Section 1109.2.3.3.1.
- 2) Where the side walls are located 72 inches (1830mm) or greater apart, a grab bar is not required on one of the side-walls.

### **Current Language**

There is no current language.

### **Proposed Language**

**1109.2.3.4 Seats.** Wall-mounted folding seats shall not be installed.

### **Current Language**

There is no current language.

#### **Proposed Language**

1109.2.3.5 Controls and hand showers. Controls and hand showers. In standard roll-in-type showers, the controls and hand shower shall be located 38 inchs (965mm) minimum and 48 inches (1220mm) maximum above the shower floor. Controls shall be located to facilitate caregiver access.

There is no current language.

# **Proposed Language**

1109.2.3.6 Hand showers. Hand showers shall comply with ICC A117.1 Section 608.5.

# **Current Language**

There is no current language.

# **Proposed Language**

1109.2.3.7 Thresholds. Thresholds shall comply with ICC A117.1 Section 608.6.

## **Current Language**

There is no current language.

## **Proposed Language**

<u>1109.2.3.8 Shower enclosures.</u> Shower compartment enclosures for shower compartments shall comply with ICC A117.1 Section 608.7.

### **Current Language**

There is no current language.

## **Proposed Language**

1109.2.3.9 Water temperature. Water temperature shall comply with ICC A117.1 Section 608.8.

### **Current Language**

**IBC 1107.5.2 Group I-2 nursing home.** *Accessible units* and *Type B units* shall be provided in nursing homes of Group I-2 occupancies in accordance with Sections 1107.5.2.1 and 1107.5.2.2.

**IBC 1107.5.2 Group I-2 nursing homes.** Accessible units and Type B units shall be provided in nursing homes of Group I-2, Condition 1 occupancies in accordance with Sections 1107.5.2.1 and 1107.5.2.2.

### **Current Language**

**1107.5.2.1 Accessible units.** At least 50 percent but not less than one of each type of the *dwelling units* and *sleeping units* shall be *Accessible units*.

## **Proposed Language**

**1107.5.2.1 Accessible units.** At least 50 percent but not less than one of each type of the *dwelling units* and *sleeping units* shall be *Accessible units*.

### **Exceptions:**

- 1) In not more than 90 percent of the Accessible units, water closets shall not be required to comply with ICC A117.1 where such water closets comply with Section 1109.2.2.
- 2) <u>In not more than 90 percent of the Accessible units, roll-in-type showers shall not be required to comply with ICC A117.1</u> where roll-in-type showers comply with Section 1109.2.2.

#### **Current Language**

**1107.5.2.2 Type B units.** In structures with four or more *dwelling units or sleeping units intended to be occupied as a residence*, every *dwelling unit and sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

**Exception:** The number of Type B units is permitted to be reduced in accordance with Section 1107.7.

### **Proposed Language**

**IBC 1107.5.2.2 Type B units**. In structures with four or more *dwelling units* or sleeping units intended to be occupied as a *residence*, every *dwelling unit* and *sleeping unit* intended to be occupied as a residence shall be a Type B unit.

**Exception:** The number of Type B units is permitted to be reduced in accordance with Section 1107.7.

2018 IBC, section 423 Storm Shelters. The Michigan Masonry Coalition (MMC) is in support of Section 423 Storm Shelters in the 2018 IBC. There seems to be a growing awareness in this country in designing and constructing resilient buildings. Resiliency is needed when natural and man-made disasters occur.

## **Current Language**

There is no current language.

## **Proposed Language**

**Carbon dioxide systems.** Caron dioxide extinguishing systems shall be installed maintained, periodically inspected and tested in accordance with NFPA 12 and their listing/ Records of inspections and testing shall be maintained.

### **Current Language**

There is no current language.

### **Proposed Language**

**Gas detection system components.** Gas detection system control units shall be listed and labeled in accordance with UL 864 or UL 2017. Gas detectors shall be listed and labeled in accordance with UL 2075 for use with the gases and vapors being detected.

### **Current Language**

There is no current language.

## **Proposed Language**

**Operation**. Activation of the gas detection system shall result in all the following:

- 1) Initiation of distinct audible and visual alarm signals in the extraction room.
- 2) Deactivation of all heating systems located in the extraction room.
- 3) Activation of the mechanical ventilation system, where the system is interlocked with gas detection.

There is no current language.

### **Proposed Language**

**System Interlocking.** Automatic equipment interlocks with fuel shutoffs, ventilation controls, door closers, window shutters conveyor opening, smoke and heat vents and any other features necessary for proper operation of a fire extinguishing system shall be provided as required by the design and installation standard utilized for the hazard DSI.

### **Current Language**

There is no current language.

# **Proposed Language**

Use of flammable and combustible liquids. The use of flammable and combustible liquids for liquid extraction processes where the liquids is boiled, distilled or evaporated shall be located within a hazardous exhaust fume hood, rated for exhausting flammable vapors. Electrical equipment used within the hazardous exhaust fume hood shall be rated for use in flammable atmospheres. Heating of flammable or combustible liquids over an open flame is prohibited.

### **Current Language**

There is no current language.

### **Proposed Language**

**Emergency shutoff.** Extraction processes utilizing gaseous hydrocarbon-based solvents shall be provided with emergency shutoff systems in accordance with Section 5803.1.3.

### **Current Language**

There is no current language.

#### **Proposed Language**

**Ventilation.** Process and Grow facilities shall be mechanically ventilated in accordance with the International Mechanical Code. The ventilation system shall be controlled at the entrance to the facilities.

There is no current language.

### **Proposed Language**

**Liquefied petroleum gas.** Liquefied petroleum gases shall not be released to the atmosphere except where released in accordance with Section 7.3 of NFPA 58.

## **Current Language**

There is no current language.

### **Proposed Language**

**System design.** The flammable gas detection system shall be listed or approved and shall be calibrated to the types of fuels or gases used for the extraction process. The gas detection system shall be designed to activate when the level of flammable gas exceeds 25 percent of the LFL.

## **Current Language**

There is no current language.

## **Proposed Language**

**Failure of the gas detection system.** Failure of the gas detection system shall result in the deactivation of the heating system; activation of the mechanical ventilation system where the system is interlocked with the gas detection system; and initiation of a trouble signal to sound in an approved location.

## **Current Language**

There is no current language.

#### **Proposed Language**

**Floor Surface.** Process and Grow facilities shall be of concrete or similar noncombustible and nonabsorbent materials.

Exception: Slip-resistant, nonabsorbent, interior floor finished having a critical radiant flux not more than 0.45 W/cm2, as determined by NFPA 253, shall be permitted.

There is no current language.

### **Proposed Language**

**Heating equipment.** Heating equipment shall be installed in accordance with the *International Mechanical Code*.

## **Current Language**

There is no current language.

## **Proposed Language**

**Operation.** Activation of the gas detection system shall result in all of the following;

- 1) Initiation of distinct audible and visual alarm signals in the facility.
- 2) Deactivation of all heating systems located in the repair facility.
- 3) Activation of the mechanical *ventilation* system, where the system is interlocked with gas detection.

# **Current Language**

There is no current language.

## **Proposed Language**

**Systems and equipment.** Systems or equipment used for the extraction of oils from plant material shall be listed or approved for the specific use. If the system used for extraction of oils and products from plant material is not listed, the system shall be reviewed by a registered design professional. The registered design professional shall review and consider any information provided by the system's designer or manufacturer.

#### **Current Language**

**1015.6 Mechanical equipment, systems and devices.** *Guards* shall be provided where various components that require service are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The *guard* shall extend not less than 30 inches (762 mm) beyond each end of such components. The *guard* shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.

**Exception:** *Guards* are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z 359.1 are installed.

### **Proposed Language**

**IBC 1015.6 Mechanical equipment, systems and devices.** Permanent anchorage connectors shall be installed to fixed structural members to provide a secure connecting points for personal fall arrest systems. The anchorage connecting devices must meet the applicable requirements in ANSI/ASSE Z359.1.

## **Current Language**

**102.2 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

## **Proposed Language**

**2015 MRC Chapters 1 & 2 R102.2 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law; INCLUDING THE COST-EFFECTIVE ENERGY EFFICIENCY LIMITATIONS OF MCL 125.1502A AND 125.1504.

### **Current Language**

## R 408.30401 Applicable code.

Rule 401. The provisions of the international building code, 2015 edition, including appendices F, G, and H, except for sections 104.8, 109.2 to 109.6, 114.3, 415.9.1.2 to 415.9.1.9, 415.7.4, 903.2.8.3.1, 903.2.8.3.2, 903.2.8.4, 2902 to 2902.6, Table 2902.1, 3005.5, the definition of "agricultural building" in section 202, the definition of "recreational vehicle" in Appendix G, and, IECC-2015, IEBC-2015, IMC-2015, IPC-2015, IPSDC-2015, NFPA 70-2014, listed in chapter 35, govern the construction, alteration, relocation, demolition, use, and occupancy of buildings and structures, and, with exceptions noted, the international building code is adopted by reference in these rules. All references to the International Building Code, International Residential Code, International Energy Conservation Code, National Electrical Code, International Existing Building Code, International Mechanical Code, and International Plumbing Code mean the Michigan Building Code, Michigan Residential Code, Michigan Energy Code, Michigan Electrical Code, Michigan Rehabilitation Code for Existing Buildings, Michigan Mechanical Code, and Michigan Plumbing Code respectively. The code is available for inspection at the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa St., 1st Floor Ottawa Building Lansing, MI 48933. The code may be purchased from the International Code Council, through the bureau's website at www.michigan.gov/bcc, at a cost as of the time of adoption of these amendatory rules of \$128.00.

**R 408.30401** Applicable code. Rule 401. The provisions of the international building code, 20152018 edition, including appendices F, G, and H, except for sections 104.2, 104.3, 104.5, 104.7, 104.8, 104.9, 104.10, 104.11.1, 104.11.2, 105.1.1, 105.1.2, 105.3, 105.3.1, 105.3.2, 105.6, 107.2.5, 109.1, 109.2 to 109.6, 110.3.9, 111.1, 111.2, 111.3, 113.2, 113.3, 114.1, 114.2, 114.3, 114.4, 115.1 to 115.3, 415.9.1.2 to 415.9.1.9, 415.7.4, 903.2.8.4,, 2902 to 2902.6, Table 2902.1, 3005.5, the definition of "agricultural building" in section 202, the definition of "recreational vehicle" in Appendix G, and, IECC-2015-2018, IEBC-<del>2015</del>2018, IMC-<del>2015</del>2018, IPC-<del>2015</del>2018, IPSDC-<del>2015</del>2018, NFPA 70-<del>2014</del>2017, listed in chapter 35, govern the construction, alteration, relocation, demolition, use, and occupancy of buildings and structures, and, with exceptions noted, the international building code is adopted by reference in these rules. All references to the International Building Code, International Residential Code, International Energy Conservation Code, National Electrical Code, International Existing Building Code, International Mechanical Code, and International Plumbing Code mean the Michigan Building Code, Michigan Residential Code, Michigan Energy Code, Michigan Electrical Code, Michigan Rehabilitation Code for Existing Buildings, Michigan Mechanical Code, and Michigan Plumbing Code respectively. The code is available for inspection at the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa St., 1st Floor Ottawa Building Lansing, MI 48933. The code may be purchased from the International Code Council, through the bureau's website at www.michigan.gov/bcc, at a cost as of the time of adoption of these amendatory rules of \$128.00.

#### **Current Language**

#### R 408.30403 Residential group R-3.

Rule 403. Sections 310.5 310.5.1, 903.3.8.1, and 903.3.8.5 are amended and 903.2.8.3 is added to the code to read as follows:

- 310.5. Residential group R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as group R-1, R-2, R-4, or I, including any of the following:
- (a) Adult foster care family homes or adult foster care small group homes licensed per the adult foster care facility licensing act, 1979 PA 218, MCL 400.701 to 400.737, that provide accommodations for 6 or fewer persons receiving care.
- (b) Buildings that do not contain more than 2 dwelling units.
- (c) Boarding houses (nontransient) with 16 or fewer occupants.
- (d) Boarding houses (transient) with 10 or fewer occupants.
- (e) Congregate living facilities (nontransient) with 16 or fewer occupants.
- (f) Congregate living facilities (transient) with 10 or fewer occupants.
- (g) Foster family homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for not more than 4 minor children.
- (h) Foster care family group homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 4 but fewer than 7 minor children.
- 310.5.1. Care facilities within a dwelling. Care facilities that are located within a single- family dwelling may comply with the Michigan residential code if 1 of the following conditions is met:
- (a) Adult foster care family homes or adult foster care small group homes for 6 or fewer persons receiving care that are within a single-family dwelling and licensed in accordance with the adult foster care facility licensing act, 1979 PA 218, MCL 400.701 to 400.737.

- (b) Family child care homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for fewer than 7 minor children.
- (c) Group child care homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 6 but not more than 12 minor children.
- (d) Foster family homes licensed per the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for not more than 4 minor children.
- (e) Foster care family group homes licensed per the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 4 but fewer than 7 minor children.
- 903.2.8.3. Child care organizations. An automatic sprinkler system installed in accordance with section 903.3.1.3 shall be permitted in child care organizations that are within a single-family dwelling and licensed in accordance with the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, as follows:
- (a) Foster family homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 4 but fewer than 7 minor children.
- (b) Foster care family group homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 4 but fewer than 7 minor children.
- (c) Family child care homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for fewer than 7 minor children.
- (d) Group child care homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 6 but not more than 12 minor children.
- 903.3.8.1. Number of sprinklers. Limited area sprinkler systems shall not exceed 20 sprinklers.
- 903.3.8.5. Calculations. Hydraulic calculations in accordance with NFPA 13 shall be provided to demonstrate that the available water flow and pressure are adequate to supply all sprinklers installed with discharge densities corresponding to the hazard classification.

#### R 408.30403 Residential group R-3.

Rule 403. Sections  $\frac{310.5}{310.4}$   $\frac{310.5.1}{310.5.1}$  and  $\frac{310.4.1}{310.4.1}$ ,  $\frac{903.3.8.1}{310.4.1}$ , and  $\frac{903.3.8.5}{310.4.1}$  are amended and  $\frac{903.2.8.3}{310.4.1}$  903.8.11 is added to the code to read as follows:

310.5 310.4.1. Residential group R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as group R-1, R-2, R-4, or I, including any of the following:

- (a) Adult foster care family homes or adult foster care small group homes licensed per the adult foster care facility licensing act, 1979 PA 218, MCL 400.701 to 400.737, that provide accommodations for 6 or fewer persons receiving care.
- (b) Buildings that do not contain more than 2 dwelling units.
- (c) Boarding houses (nontransient) with 16 or fewer occupants.
- (d) Boarding houses (transient) with 10 or fewer occupants.
- (e) Congregate living facilities (nontransient) with 16 or fewer occupants.
- (f) Congregate living facilities (transient) with 10 or fewer occupants.
- (g) Foster family homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for not more than 4 minor children.
- (h) Foster care family group homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 4 but fewer than 7 minor children.
- 310.5.1. Care facilities within a dwelling. Care facilities that are located within a single- family dwelling may comply with the Michigan residential code if 1 of the following conditions is met:

- (a) Adult foster care family homes or adult foster care small group homes for 6 or fewer persons receiving care that are within a single-family dwelling and licensed in accordance with the adult foster care facility licensing act, 1979 PA 218, MCL 400.701 to 400.737.
- (b) Family child care homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for fewer than 7 minor children.
- (c) Group child care homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 6 but not more than 12 minor children.
- (d) Foster family homes licensed per the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for not more than 4 minor children.
- (e) Foster care family group homes licensed per the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 4 but fewer than 7 minor children.
- 903.2.8.3. Child care organizations. An automatic sprinkler system installed in accordance with section 903.3.1.3 shall be permitted in child care organizations that are within a single-family dwelling and licensed in accordance with the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, as follows:
- (a) Foster family homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 4 but fewer than 7 minor children.
- (b) Foster care family group homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 4 but fewer than 7 minor children.
- (c) Family child care homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for fewer than 7 minor children.
- (d) Group child care homes licensed under the child care organizations act, 1973 PA 116, MCL 722.111 to 722.127a, that provide care for more than 6 but not more than 12 minor children.
- 903.3.8.1. Number of sprinklers. Limited area sprinkler systems shall not exceed 20 sprinklers.
- 903.3.8.5. Calculations. Hydraulic calculations in accordance with NFPA 13 shall be provided to demonstrate that the available water flow and pressure are adequate to supply all sprinklers installed with discharge densities corresponding to the hazard classification.

**104.9 Approved materials and equipment**. Materials, equipment, and devices shall be constructed or installed in accordance with approvals granted under the act or by the building official. The building official shall review reports prepared by recognized evaluation services and determine if the intent of the code is met.

## **Proposed Language**

#### R 408.30404 Duties and powers of building officials. rescind

Rule 404. Section 104.9 of the code is amended to read as follows:

104.9 Approved materials and equipment. Materials, equipment, and devices shall be constructed or installed in accordance with approvals granted under the act or by the building official. The building official shall review reports prepared by recognized evaluation services and determine if the intent of the code is met.

R 408.30418 Maximum floor area allowances per occupant.

Rule 418. Table 1004.1.2 of the code is amended to read as follows:

Table 1004.1.2

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 grass
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit Gallery and Museum	30 net
Assembly with fixed seats	See section 1004.4
Assembly without fixed seats	
Concentrated (chairs only-not fixed) Standing space	7 net
	5 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional	7 net
areas	/ net
Business areas	100 gross
Courtrooms-other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	

Outpatient areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	200 gross
Library	
Reading rooms	50 net
Mall buildings-covered and open	See Section 402.8.2
Locker rooms	50 gross
Mercantile	60 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Stages and platforms	15 net
Accessory storage areas, mechanical equipment	
room	300 gross
Warehouses	500 gross

For SI: 1 square foot = 0.0929 m<sup>2</sup>

# **Proposed Language**

# R 408.30418 Maximum floor area allowances per occupant. rescind

Rule 418. Table 1004.1.2 of the code is amended to read as follows:

### Table 1004.1.2

# **MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT**

Agricultural building	<del>300 gross</del>
Aircraft hangars	<del>500 gross</del>
Airport terminal	
Baggage claim	<del>20 gross</del>
Baggage handling	<del>300 gross</del>
Concourse	100 gross

Assembly	
Coming floors (Isono plate etc.)	11
Gaming floors (keno, slots, etc.)	<del>11 gross</del>
Exhibit Callony and Museum	20 not
Assembly with fixed seats	See section 1004.4
Assembly without fixed seats	
Concentrated (chairs only-not fixed) Standing space	<del>7 net</del>
	<del>5 net</del>
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	<del>7 net</del>
Business areas	100 gross
Courtrooms-other than fixed seating areas	40 net
<del>Day care</del>	<del>35 net</del>
<del>Dormitories</del>	<del>50 gross</del>
<u>Educational</u>	
Classroom area	<del>20 net</del>
Shops and other vocational room areas	<del>50 net</del>
Exercise rooms	<del>50 gross</del>
H-5 Fabrication and manufacturing areas	<del>200 gross</del>
Industrial areas	100 gross
Institutional areas	
Outpatient areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	<del>200 gross</del>
Library	
Reading rooms	<del>50 net</del>
Mall buildings-covered and open	See Section 402.8.2
Locker rooms	<del>50 gross</del>
Mercantile	<del>60 gross</del>
Storage, stock, shipping areas	<del>300 gross</del>
Parking garages	<del>200 gross</del>
Residential	<del>200 gross</del>

Skating rinks, swimming pools	
Rink and pool	<del>50 gross</del>
Stages and platforms	<del>15 net</del>
Accessory storage areas, mechanical equipment	
<del>room</del>	<del>300 gross</del>
Warehouses	<del>500 gross</del>

For SI: 1 square foot - 0.0929 m<sup>2</sup>

## **Current Language**

### R 408.30419 Toilet room requirements.

Rule 419. Sections 1210.1, is amended and 1210.5, 1210.4, and 1210.6 are added to the code to read as follows:

1210.1. Required fixtures. The number and type of plumbing fixtures provided in any occupancy shall comply with the Michigan plumbing code.

1210.4. Toilet room location. Toilet rooms shall not open directly into a room used for the preparation of food for service to the public.

1210.5. Baby changing stations. A building or structure that has baby changing stations in the women's restrooms shall have baby changing stations in the men's restrooms.

1210.6. Directional signage. Directional signage indicating the route to the public facilities shall be posted in accordance with section 3107 of the international building code. Signage shall be located in a corridor or aisle at the entrance to the facilities for customers and visitors.

### **Proposed Language**

### R 408.30419 Toilet room requirements.

Rule 419. Section 1210, is amended and 1210.5, and 1210.4, and 1210.6 are added to the code to read as follows:

1210.1 Required fixtures. The number and type of plumbing fixtures provided in any occupancy shall comply with the Michigan plumbing code.

1210.4 Toilet room location. Toilet rooms shall not open directly into a room used for the preparation of food for service to the public.

1210.5 Baby changing stations. A building or structure that has baby changing stations in the women's restrooms shall have baby changing stations in the men's restrooms.

1210.6 Directional signage. Directional signage indicating the route to the public facilities shall be posted in accordance with section 3107 of the international building code. Signage shall be located in a corridor or aisle at the entrance of the facilities for customers and visitors.

#### R 408.30427 Barrier free design for buildings, structures, and improved areas.

- Rule 427. Sections 1101.2 and 1109.8 of the code are amended and section 1103.2.15 is added to the code to read as follows:
- 1101.2. Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with 1966 PA 1, MCL 125.1351 to 125.1356, this code, and ICC/ANSI A 117.1, except sections 611 and 707.
- 1103.2.15. Military, fire service, and police facilities. Housing, bathing, toilet, training, and storage areas intended for use and occupancy exclusively by military, fire service, police, or security personnel required to be physically agile are not required to be accessible.
- 1109.8. Lifts. Platform (wheelchair) lifts may be a part of a required accessible route in new construction where indicated in items 1 to 10. Platform (wheelchair) lifts shall be installed in accordance with the Michigan elevator code, R 408.7001 to R 408.8695.
- 1. An accessible route to a performing area and speakers' platforms.
- 2. An accessible route to wheelchair spaces required to comply with the wheelchair space dispersion requirements of sections 1108.2.2 to 1108.2.6.
- 3. An accessible route to spaces that are not open to the general public with an occupant load of not more than 5.
- 4. An accessible route within a dwelling or sleeping unit.
- 5. An accessible route to jury boxes and witness stands; raised courtroom stations including judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations and court reporters' stations; and to depressed areas such as the well of the court.
- 6. An accessible route to load and unload areas serving amusement rides.
- 7. An accessible route to play components or self-contained play structures.
- 8. An accessible route to team or player seating areas serving areas of sport activity.
- 9. An accessible route instead of gangways serving recreational boating facilities and fishing piers and platforms.
- 10. An accessible route where existing exterior site constraints make use of a ramp or elevator infeasible.

#### **Proposed Language**

## R 408.30427 Barrier free design for buildings, structures, and improved areas.

- Rule 427. Sections <u>1101.2</u> <u>1102.1</u> and 1109.8 of the code are amended and section 1103.2.15 is added to the code to read as follows:
- 1101.2. Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with 1966 PA 1, MCL 125.1351 to 125.1356, this code, and ICC/ANSI A 117.1, except sections 611 and 707.
- 1103.2.15. Military, fire service, and police facilities. Housing, bathing, toilet, training, and storage areas intended for use and occupancy exclusively by military, fire service, police, or security personnel required to be physically agile are not required to be accessible.

1109.8. Lifts. Platform (wheelchair) lifts may be a part of a required accessible route in new construction where indicated in items 1 to 10. Platform (wheelchair) lifts shall be installed in accordance with the Michigan elevator code, R 408.7001 to R 408.8695.

- 1. An accessible route to a performing area and speakers' platforms.
- 2. An accessible route to wheelchair spaces required to comply with the wheelchair space dispersion requirements of sections 1108.2.2 to 1108.2.6.
- 3. An accessible route to spaces that are not open to the general public with an occupant load of not more than 5.
- 4. An accessible route within a dwelling or sleeping unit.
- 5. An accessible route to jury boxes and witness stands; raised courtroom stations including judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations and court reporters' stations; and to depressed areas such as the well of the court.
- 6. An accessible route to load and unload areas serving amusement rides.
- 7. An accessible route to play components or self-contained play structures.
- 8. An accessible route to team or player seating areas serving areas of sport activity.
- 9. An accessible route instead of gangways serving recreational boating facilities and fishing piers and platforms.
- 10. An accessible route where existing exterior site constraints make use of a ramp or elevator infeasible.

# **Current Language**

## R 408.30428 Structural integrity.

Rule 428. Section 1615.1 of the code is amended to read as follows:

1615.1. General. Buildings with an occupied floor 75 feet (22 860 mm) or more in height above the lowest level of fire department vehicle access and assigned to risk category III or IV shall comply with the requirements of this section. Frame structures shall comply with the requirements of section 1615.3. Bearing wall structures shall comply with the requirements of section 1615.4.

## **Proposed Language**

## R 408.30428 Structural integrity.

Rule 428. Section 1615.1 1616.1 of the code is amended to read as follows:

1615.1 11616.1. General. Buildings with an occupied floor 75 feet (22 860 mm) or more in height above the lowest level of fire department vehicle access and assigned to risk category III or IV shall comply with the requirements of this section. Frame structures shall comply with the requirements of section 1615.3. Bearing wall structures shall comply with the requirements of section 1615.4.

**713.14.1 Enclosed elevator lobby.** An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than 3 stories. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by fire partitions. In addition to the requirements in section 708 for fire partitions, doors protecting openings in the elevator lobby enclosure walls shall also be in compliance with section 716.5.3 as required for corridor walls and penetrations of the elevator lobby enclosure by ducts and air transfer openings shall be protected as required for corridors in accordance with section 717.5.4.1. Elevator lobbies shall have at least 1 means of egress complying with chapter 10 and other provisions within this code.

### **Exceptions:**

- 1. Enclosed elevator lobbies are not required at the level or levels of exit discharge provided the level or levels of exit discharge is equipped with an automatic sprinkler system in accordance with section 903.3.1.1.
- 2. Elevators not required to be located in a shaft in accordance with section 712.1 are not required to have enclosed elevator lobbies.
- 3. Enclosed elevator lobbies are not required where additional doors are provided at the hoistway opening in accordance with section 3002.6. The doors shall comply with the smoke and draft control door assembly requirements in section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal.
- 4. Enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with section 902.2.1.1 or 903.3.1.2.

This exception shall not apply to all of the following:

- 4.1 Group I-2 occupancies.
- 4.2 Group I-3 occupancies.
- 4.3 Elevator serving floor levels over 55 feet above the lowest level of fire department vehicle access in high-rise buildings.
- 5. Smoke partitions may be in place of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with section 903.3.1.1 or 903.3.1.2. In addition to the requirements in section 710 for smoke partitions, doors protecting opening in the smoke partitions shall also be in compliance with section 710.5.2.2, 710.5.2.3, and 716.5.9 and duct penetrations of the smoke partitions shall be protected as required for corridors in accordance with section 717.5.4.1.
- 6. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with section 909.21.
- 7. Enclosed elevator lobbies are not required where the elevator serves only one parking garage in accordance with section 406.5.

**R 408.30429b Elevator Language.** Section 713.14.1 of the code is amended added to read as follows:

713.14.1. An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than 3 stories. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by fire partitions. In addition to the requirements in section 708 for fire partitions, doors protecting openings in the elevator lobby enclosure walls shall also be in compliance with section 716.5.3 as required for corridor walls and penetrations of the elevator lobby enclosure by ducts and air transfer openings shall be protected as required for corridors in accordance with section 717.5.4.1. Elevator lobbies shall have at least 1 means of egress complying with chapter 10 and other provisions within this code.

## Exceptions:

- 8. Enclosed elevator lobbies are not required at the level or levels of exit discharge provided the level or levels of exit discharge is equipped with an automatic sprinkler system in accordance with section 903.3.1.1.
- 9. Elevators not required to be located in a shaft in accordance with section 712.1 are not required to have enclosed elevator lobbies.
- 10. Enclosed elevator lobbies are not required where additional doors are provided at the hoistway opening in accordance with section 3002.6. The doors shall comply with the smoke and draft control door assembly requirements in section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal.
- 11. Enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with section 902.2.1.1 or 903.3.1.2.

This exception shall not apply to all of the following:

- 11.1 Group I-2 occupancies.
- 11.2 Group I-3 occupancies.
- 11.3 Elevator serving floor levels over 55 feet above the lowest level of fire department vehicle access in high-rise buildings.
- 12. Smoke partitions may be in place of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with section 903.3.1.1 or 903.3.1.2. In addition to the requirements in section 710 for smoke partitions, doors protecting opening in the smoke partitions shall also be in compliance with section 710.5.2.2, 710.5.2.3, and 716.5.9 and duct penetrations of the smoke partitions shall be protected as required for corridors in accordance with section 717.5.4.1.
- 13. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with section 909.21.
- 14. Enclosed elevator lobbies are not required where the elevator serves only one parking garage in accordance with section 406.5.

#### R 408.30441 Consumer fireworks facilities.

- Rule 441. Sections 307.5.1, 415.1.1, 427.1, 509.4.2.2, 907.2.5.1, 910.2.3, and 1031.1 of the code are added to read as follows:
- 307.5.1. High-hazard group H-3. Consumer fireworks 1.4G (class C common) Consumer fireworks 1.4G facilities shall meet the requirements of this code and those requirements of this code and those requirements referenced in section 427.1.
- 415.1.1. Consumer fireworks facilities 1.4 G (class C common) consumer fireworks 1.4 G facilities shall be designed and constructed in accordance with NFPA 1124 as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.
- 427.1. Consumer fireworks (1.4G) facilities. The items in buildings used for the retail sale of consumer fireworks shall be designed and constructed in accordance with NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471 as follows:
- (a) Means of egress.
- (b) Storage rooms.
- (c) Fire alarms.
- (d) Smoke control.
- (e) Automatic sprinkler systems.
- 509.4.2.2. Consumer fireworks (1.4G) facilities storage rooms. Storage rooms in consumer fireworks (1.4G) facilities used for the retail sale of consumer fireworks shall be designed and constructed in accordance with the code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles, NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.
- 907.2.5.1. Consumer fireworks (1.4G) facilities fire alarms. Fire alarm systems in consumer fireworks (1.4G) facilities used for the retail sale of consumer fireworks storage shall be designed and constructed in accordance with the code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles, NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.
- 910.2.3. Consumer fireworks (1.4G) facilities smoke and heat vents. Smoke and heat vents in consumer fireworks (1.4G) facilities used for the retail sale of consumer fireworks storage shall be designed and constructed in accordance with the code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles, NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.
- 1031.1. Consumer fireworks (1.4G) facilities means of egress. The means of egress in consumer fireworks (1.4G) facilities used for the retail sale of consumer fireworks means of egress shall be designed and constructed in accordance with the code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles, NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.

#### R 408.30441 Consumer fireworks facilities.

- Rule 441. Sections 307.5.1, 415.1.1, 427.1 429.1, 509.4.2.2, 907.2.5.1, 910.2.3, and 1031.1 of the code are added to read as follows:
- 307.5.1. High-hazard group H-3. Consumer fireworks 1.4G (class C common) Consumer fireworks 1.4G facilities shall meet the requirements of this code and those requirements of this code and those requirements referenced in section 427.1.
- 415.1.1. Consumer fireworks facilities 1.4 G (class C common) consumer fireworks 1.4 G facilities shall be designed and constructed in accordance with NFPA 1124 as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.
- 427.1. Consumer fireworks (1.4G) facilities. The items in buildings used for the retail sale of consumer fireworks shall be designed and constructed in accordance with NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471 as follows:
- (a) Means of egress.
- (b) Storage rooms.
- (c) Fire alarms.
- (d) Smoke control.
- (e) Automatic sprinkler systems.
- 509.4.2.2. Consumer fireworks (1.4G) facilities storage rooms. Storage rooms in consumer fireworks (1.4G) facilities used for the retail sale of consumer fireworks shall be designed and constructed in accordance with the code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles, NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.
- 907.2.5.1. Consumer fireworks (1.4G) facilities fire alarms. Fire alarm systems in consumer fireworks (1.4G) facilities used for the retail sale of consumer fireworks storage shall be designed and constructed in accordance with the code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles, NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.
- 910.2.3. Consumer fireworks (1.4G) facilities smoke and heat vents. Smoke and heat vents in consumer fireworks (1.4G) facilities used for the retail sale of consumer fireworks storage shall be designed and constructed in accordance with the code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles, NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.
- 1031.1. Consumer fireworks (1.4G) facilities means of egress. The means of egress in consumer fireworks (1.4G) facilities used for the retail sale of consumer fireworks means of egress shall be designed and constructed in accordance with the code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles, NFPA 1124, as referenced by the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.

**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.

**Exception:** Camp buildings in remote areas without municipal water supply that meet all of the following:

- 1. Not more than 1 story, 2,000 square feet (186 m2) and 25 occupants.
- 2. Are used not more than 5 months in a year.
- 3. Shall be provided with not less than 2 exits in compliance with section 1019.
- 4. Shall not be provided with cooking equipment.
- 5. Provided with a manual fire alarm system and smoke alarms throughout in compliance with NFPA 72 as listed in chapter 35. For cabins sleeping 4 or fewer occupants only, smoke alarms are required.
- 6. Storage and equipment rooms shall be protected by a 1- hour fire partition.
- 7. Compliance with all applicable requirements of the code.
- **903.2.8.2 Adult foster care family homes.** An automatic sprinkler system installed in accordance with section 903.3.1.3 shall be permitted in adult foster care family homes or adult foster care small group homes for 6 or fewer persons receiving care that are within a single-family dwelling and licensed in accordance with the adult foster care facility licensing act, 1979 PA 218, MCL 400.701 to 400.737.
- **903.2.5 Group H.** automatic sprinkler systems shall be provided in high-hazard occupancies as required in sections 903.2.5.1 to 903.2.5.4.
- **903.2.5.1 General.** An automatic sprinkler system shall be installed in group H occupancies unless the requirements of section 903.2.5.4 are met for buildings containing consumer fireworks.
- **903.2.5.4 consumer fireworks (1.4G).** Buildings used for the retail sale of consumer fireworks shall be provided with an automatic sprinkler system in accordance with the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.

## **Proposed Language**

### R 408.30442 Automatic sprinkler systems.

Rule 442. Section 903.2.8, 903.2.8.2 903.2.8.4, 903.2.5, and 903.2.5.1 are amended and section 903.2.5.4 is added to the code to read as follows:

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.

Exception: Camp buildings in remote areas without municipal water supply that meet all of the following:

- 1. Not more than 1 story, 2000 square feet (186m) and 25 occupants.
- 2. Are used not more than 5 months in a year.
- 3. Shall be provided with not less then 2 exits in compliance with section 1019.
- 4. Shall not be provided with cooking equipment.

- 5. Provided with a manual fire alarm system and smoke alarms throughout in compliance with NFPA 72 a listed in chapter 35. For cabins sleeping 4 or fewer occupants only, smoke alarms are required.
- 6. Storage and equipment rooms shall be protected by a 1-hour fire partition.
- 7. Compliance with all applicable requirements of the code.
- 903.2.8.2. Adult foster care family homes. An automatic sprinkler system installed in accordance with section 903.3.1.3 shall be permitted in adult foster care family homes or adult foster care small group homes for 6 or fewer persons receiving care that are within a single-family dwelling and licensed in accordance with the adult foster care facility licensing act, 1979 PA 218, MCL 400.701 to 400.737.
- 903.2.5. Group H. Automatic sprinkler systems shall be provided in high-hazard occupancies as required in section 903.2.5.1 to 903.2.5.4.
- 903.2.5.1. General. An automatic sprinkler system shall be installed in group H occupancies as required unless the requirements of section 903.2.5.4 are met for buildings containing consumer fireworks.
- 903.2.5.4. Consumer fireworks (1.4G). Buildings used for the retail sale of consumer fireworks shall be provided with an automatic sprinkler system in accordance with the Michigan fireworks safety act, 2011 PA 256, MCL 28.451 to 28.471.

**1405.4.2 Masonry**. Flashing and weep holes shall be located in the first course of masonry above finished ground level above the foundation wall or slab; at the heads of windows, doors, and other wall openings; at window sills and at other points of support including structural floors, shelf angles, and lintels where anchored veneers are designed in accordance with section 1405.6. Flashing shall extend to, or beyond, the finished face of the wall.

## **Proposed Language**

R 408.30443 Masonry. rescinded.

Rule 443. Section 1405.4.2 of the code is amended to read as follows:

1405.4.2. Masonry. Flashing and weep holes shall be located in the first course of masonry above finished group level above the foundation wall or slab; at the heads of windows, doors, and other wall openings; at window sills and at other points of support including structural floors, shelf angles, and lintels where anchored veneers are designed in accordance with section.

1405.6. Flashing shall extend to, or beyond, the finished face of the wall.

#### R 408.30446 Smoke alarm locations.

Rule 446. Sections 907.2.11.8 and 907.2.11.8.1 are added to the code as follows:

907.2.11.8. Smoke alarm locations in existing buildings constructed before November 6, 1974. Within each dwelling unit or sleeping unit, a single-station smoke alarm shall be installed in all of the following locations:

- (1) In each sleeping room or each area directly outside the sleeping room.
- (2) On each floor level including the basement level.

For sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than 1 full story below the upper level.

907.2.11.8.1. Equipment requirements. The required equipment for smoke alarms shall consist of the following:

- (1) Installation. Smoke alarm devices shall be listed and installed in accordance with the manufacturer's installation requirements, the provisions of the code, and the provisions of NFPA 72 as listed in chapter 35.
- (2) Power Source. The equipment shall be operable by power from 1 of the following primary sources:
- (a) The building wiring provided the wiring is served from a commercial source and is equipped with a battery backup. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.
- (b) A non-rechargeable battery able to power the smoke alarm in the normal condition for a life of 5 years.
- (c) A rechargeable battery, with proper charging, able to power the alarm for a life of 5 years.
- (d) A commercial use alarm system with battery backup listed and approved in accordance with the commercial fire warning equipment provisions of NFPA 72, as adopted by reference in this rule.
- (3) Audible Alarm Notification. The activation of the alarm signal shall produce a sound that is audible in all occupiable dwelling areas.
- (4) Testing and Maintenance. The owner of a dwelling unit, in which required or optional fire detection or fire protection systems equipment is installed, shall be responsible for the proper operation, testing, and maintenance of the equipment in accordance with the manufacturer's instructions included with the equipment. The occupant of rental dwelling units shall be responsible for the periodic operational testing and periodic cleaning of the installed equipment within the rental unit in accordance with the testing instructions provided in the manufacturer's instructions for the equipment. If the system fails, breaks, or is out of service, it shall be repaired and functional within 30 days. Exception: Smoke alarms and devices installed in buildings constructed before November 6, 1974 where an installation was approved by the appropriate enforcing agency under regulations in effect at the time of the installation shall be considered to comply with the provisions of the code.

#### R 408.30446 Smoke alarm locations.

Rule 446. Sections 907.2.11.8 907.2.10.8 and 907.2.11.8.1 207.2.10.8.1 are added to the code as follows:

907.2.11.8. Smoke alarm locations in existing buildings constructed before November 6, 1974. Within each dwelling unit or sleeping unit, a single-station smoke alarm shall be installed in all of the following locations:

- (1) In each sleeping room or each area directly outside the sleeping room.
- (2) On each floor level including the basement level.

For sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than 1 full story below the upper level.

907.2.11.8.1. Equipment requirements. The required equipment for smoke alarms shall consist of the following:

- (1) Installation. Smoke alarm devices shall be listed and installed in accordance with the manufacturer's installation requirements, the provisions of the code, and the provisions of NFPA 72 as listed in chapter 35.
- (2) Power Source. The equipment shall be operable by power from 1 of the following primary sources:
- (a) The building wiring provided the wiring is served from a commercial source and is equipped with a battery backup. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.
- (b) A non-rechargeable battery able to power the smoke alarm in the normal condition for a life of 5 years.
- (c) A rechargeable battery, with proper charging, able to power the alarm for a life of 5 years.
- (d) A commercial use alarm system with battery backup listed and approved in accordance with the commercial fire warning equipment provisions of NFPA 72, as adopted by reference in this rule.
- (3) Audible Alarm Notification. The activation of the alarm signal shall produce a sound that is audible in all occupiable dwelling areas.
- (4) Testing and Maintenance. The owner of a dwelling unit, in which required or optional fire detection or fire protection systems equipment is installed, shall be responsible for the proper operation, testing, and maintenance of the equipment in accordance with the manufacturer's instructions included with the equipment. The occupant of rental dwelling units shall be responsible for the periodic operational testing and periodic cleaning of the installed equipment within the rental unit in accordance with the testing instructions provided in the manufacturer's instructions for the equipment. If the system fails, breaks, or is out of service, it shall be repaired and functional within 30 days. Exception: Smoke alarms and devices installed in buildings constructed before November 6, 1974 where an installation was approved by the appropriate enforcing agency under regulations in effect at the time of the installation shall be considered to comply with the provisions of the code.

**1809.5 Frost protection.** Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- 1. Extending below the frost line of the locality,
- 2. Constructing in accordance with ASCE 32.
- 3. Erecting on solid rock.

**Exception:** Free-standing buildings meeting all of the following conditions shall not be required to be protected:

- 1. Assigned to Risk Category I.
- 2. Area of 600 square feet (56 m2) or less for lightframe construction or 400 square feet (37 m2) or less for other than light-frame construction.
- 3. Eave height of 10 feet (3048 mm) or less.

Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character.

## **Proposed Language**

### R 408.30449 Frost protection.

Rule 449. Section 1809.5 of the code is amended to read as follows:

1809.5 Frost protection. Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- 1. Extending not less than 42 inches (1067mm) below finish grade.
- 2. Constructing in accordance with ASCE 32.
- 3. Erecting on solid rock.

Exception: Free- standing buildings meeting all of the following conditions shall not be required to be protected.

- a. Assigned to Risk Category I.
- b. Area of 600 square feet (56m2) or less for lightframe construction or 400 square feet (37 m2) or less for other than light- frame construction.
- c. Eave height of 10 feet (3048 mm) or less.

Upon evidence of the existence of any of the following conditions, the building official may modify the footing depth accordingly.:

- 1. Freezing temperatures.
- 2. Soil type.
- 3. Groundwater conditions.

- 4. Snow depth experience.
- 5. Exposure to the elements.
- 6. Other specific conditions identified by the building official that may affect the foundation system.

Shallow foundations shall not bear on frozen soil unless such frozen conditions is of a permanent character. 1809.5. Frost protection. Except where otherwise protected from frost, foundation walls, piers, and other permanent supports of buildings and structures shall be protected from frost by at least 1 of the following methods:

- 1) Extending not less than 42 inches (1067 mm) below finish grade,
- 2) Constructing in accordance with ASCE 32 listed in chapter 35. (3) Erecting on solid rock.

### **Exceptions:**

- 1. Free standing buildings meeting all of the following conditions shall not be required to be protected.
- a. Classified in risk category I in accordance with section 1604.5 of the code,
- b. Area of 600 square feet (55.74 .) or less for light frame construction or 400 2 square feet (37 m) or less for other than light frame construction.
- c. Eave height of 10 feet (3048 mm) or less.
- 2. Upon evidence of the existence of any of the following conditions, the building official may modify the footing depth accordingly:
  - a. Freezing temperatures.
  - b. Soil type.
  - c. Groundwater conditions.
  - d. Snow depth experience.
  - e. Exposure to the elements.
  - f. Other specific conditions identified by the building official that may affect the foundation system.

Footings shall not bear on frozen soil unless such frozen condition is of a permanent character.

### **Current Language**

#### R 408.30458 Elevators and conveying systems.

Rule 458. Sections 3001.1, 3001.2, 3001.4, 3002.5, 3002.6, 3003.1, and 3003.2, of the code are amended and sections 3001.2.1, 3001.2.2, 3003.1.5 and 3004.5 are added to the code to read as follows:

3001.1. Scope. The design, construction, installation, alteration, and repair of elevators and conveying systems and their equipment shall conform with the requirements of the Michigan elevator laws and rules, MCL 408.801 to 408.824, MCL 338.2151 to 338.2160, and R 408.7001 to R 408.8695 and this chapter. Installation or construction in flood hazard areas established in section 1612.3 shall comply with ASCE 24 listed in chapter 35.

- 3001.2. Other devices. Other devices shall conform to the requirements of sections 3001.2.1 and 3001.2.2 of the code.
- 3001.2.1. Conveyors. Conveyors and related equipment shall conform to the requirements of ASME B20.1 listed in chapter 35.
- 3001.2.2. Automotive lifts. Automotive lifts shall conform to the requirements of ALI ALCTV listed in chapter 35.
- 3001.4. Change in use. A change in use of an elevator from freight to passenger, passenger to freight, or from 1 freight class to another freight class shall comply with the requirements of the Michigan elevator code, R 408.7001 to R 408.8695.
- 3002.5. Emergency doors. Where an elevator is installed in a single blind hoistway or on the outside of a building, there shall be installed in the blind portion of the hoistway or blank face of the building, an emergency door in accordance with the requirements of the Michigan elevator code, R 408.7001 to R 408.8695.
- 3002.6. Prohibited doors. Doors, other than hoistway doors and the elevator car door, shall be prohibited at the point of access to an elevator car.
- 3003.1. Standby power. In buildings and structures where standby power is required or furnished to operate an elevator, the operation shall be in accordance with sections 3003.1.1 to 3003.1.5 of the code.
- 3003.1.5. Lighting. Where standby power is connected to elevators, the machine room, car top, pit, and landing lighting shall be connected to the standby power source.
- 3003.2 Fire-fighters' emergency operation. Elevators shall be provided with phase I emergency recall operation and phase II emergency in-car operation in accordance with the requirements of the Michigan elevator code, R 408.7001 to R 408.8695.
- 3004.5. Construction at bottom of hoistway. Pits extending to the ground shall have noncombustible floors and be designed as to prevent entry of ground water into the pit. The pit floor of any hoistway not extending to the ground shall be of fire-resistive construction having a fire-resistance rating at least equal to that required for the hoistway enclosure.

#### R 408.30458 Elevators and conveying systems.

Rule 458. Sections  $\frac{3001.1}{3001.2}$ ,  $\frac{3001.2}{3001.2}$ ,  $\frac{3001.5}{3001.5}$ ,  $\frac{3002.5}{3002.5}$ ,  $\frac{3002.6}{3002.10}$  are added to the code to read as follows:

3001.1–3001.3. Scope. The design, construction, installation, alteration, and repair of elevators and conveying systems and their equipment shall conform with the requirements of the Michigan elevator laws and rules, MCL 408.801 to 408.824, MCL 338.2151 to 338.2160, and R 408.7001 to R 408.8695 and this chapter. Installation or construction in flood hazard areas established in section 1612.3 shall comply with ASCE 24 listed in chapter 35.

- -3001.2. Other devices. Other devices shall conform to the requirements of sections 3001.2.1 and 3001.2.2 of the code.
- -3001.2.1. Conveyors. Conveyors and related equipment shall conform to the requirements of ASME B20.1 listed in chapter 35.

-3001.2.2. Automotive lifts. Automotive lifts shall conform to the requirements of ALI ALCTV listed in chapter 35.

<del>-3001.4.</del> <u>3001.5</u>. Change in use. A change in use of an elevator from freight to passenger, passenger to freight, or from 1 freight class to another freight class shall comply with the requirements of the Michigan elevator code, R 408.7001 to R 408.8695.

3002.5. Emergency doors. Where an elevator is installed in a single blind hoistway or on the outside of a building, there shall be installed in the blind portion of the hoistway or blank face of the building, an emergency door in accordance with the requirements of the Michigan elevator code, R 408.7001 to R 408.8695.

3002.6. Prohibited doors. Doors, other than hoistway doors and the elevator car door, shall be prohibited at the point of access to an elevator car.

3003.1. Standby power. In buildings and structures where standby power is required or furnished to operate an elevator, the operation shall be in accordance with sections 3003.1.1 to 3003.1.5 of the code.

3003.1.5. Lighting. Where standby power is connected to elevators, the machine room, car top, pit, and landing lighting shall be connected to the standby power source.

3003.2 Fire-fighters' emergency operation. Elevators shall be provided with phase I emergency recall operation and phase II emergency in-car operation in accordance with the requirements of the Michigan elevator code, R 408.7001 to R 408.8695.

3004.5 3002.10. Construction at bottom of hoistway. Pits extending to the ground shall have noncombustible floors and be designed as to prevent entry of ground water into the pit. The pit floor of any hoistway not extending to the ground shall be of fire-resistive construction having a fire-resistance rating at least equal to that required for the hoistway enclosure.

### **Current Language**

**1009.4 Elevators.** In order to be considered part of an *accessible means of egress*, an elevator shall comply with Sections 1009.4.1 and 1009.4.2.

**1607.10.1 Elevators.** Members, elements and components subject to dynamic loads from elevators shall be designed for impact loads and deflection limits prescribed by ASME A17.1/CSA B44.

#### **Proposed Language**

#### R 408. 30459 Elevators.

Rule 459. Sections 1009.4 and 1607.9.1 1607.10.1 of the code are amended to read as follows: 1009.4. Elevators. To be considered part of an accessible means of egress, an elevator shall be in compliance with the emergency operation and signaling device requirements of the Michigan elevator code, R 408.7001 to R 408.8695.

1607.9.1. 1607.10.1. Elevators. Elevator loads shall be increased by 100% for impact and the structural supports shall be designed within the limits of deflection prescribed by the Michigan elevator code, R 408.7001 to R 408.8695.