**Board of Appeals**

**September 9, 2021**

Members present: Clay Dietrich, Justin Schoenberg and Dave Obermiller

Members Absent: Brian Berg, Mike Wild and Kevin Bartram

Others Present: Kenton Chromey, Ryan Erickson, Dawn Stollenwerk, Brett Bergh, Trevor Rysgaard, James Garvey, Ryan Young, Mike Moss, Mark Puppe, Jon Woltmann, Shawn Ouradnik and Chris Rose.

Chairperson Dietrich called the meeting to order at 9:30.

Justin made a motion to approve the minutes from July 15, 2021 and it was seconded by Dave, no one was in opposition and the motion was declared carried.

There was no unfinished business. A review of the International Residential code chapter 10 and 12 – 25. Presented by Jon Woltmann.

Shawn Ouradnik did a brief introduction of himself as the new director. He also announced that the department would like to table the IMC and IFGC until September 23, 2021. There was no opposition.

**Chapter 10:** Chimneys and Fireplaces

No change

**Chapter 11:** Energy efficiency

**Chapter 12:** Mechanical administration

No changes

**Chapter 13:** General mechanical systems requirements

Page 13-1 Section M1301.1.1 Staff recommends continuing the existing local **amendment**

Chapter 14 Heating and cooling equipment and appliances

Page 14-1 Section M1401.5 Staff recommends continuing the existing local **amendment**

Chapter 15 Exhaust system

Page 15-1 M1502.3 Duct termination. Added including opening in ventilated soffit

Page 15-1 M1502.4.5 Booster fans prohibited. Domestic booster fans shall not be installed in dryer exhaust

Page 15-3 section M1503.6 Staff recommends continuing the existing local **amendment**

Deletion of the exception

Chapter 16 Duct systems

Page 16-3 Section M1601.4.1 Joints seams and connections. Staff recommends continuing the existing local **amendments**

Page 16-3 Section M1601.4.10 Flood hazard areas. Staff recommends continuing the existing local **amendment**

Chapter 17 Combustion air

Page 17-1 Section M1701.2 Opening locations. Staff recommends continuing the existing local **amendment**.

Chapter 18 Chimneys and vents

Page 18-2 Section M1802.4 Blocked vent switch. Oil fired appliances shall be equipped with a device that will stop burner operation in the event that the venting system is obstructed. Such device shall have a manual reset and shall be installed according to manufacturer’s instructions.

Chapter 19 Special appliances, equipment and systems

No changes

Chapter 20 Boiler and water heater

Page 20-2 Section M2005.1 General. Staff recommends continuing the existing local **amendment**.

Chapter 21 Hydronic piping

Page 21-1 Section M2103.3 Protection of potable water. Staff recommends continuing the existing **amendments**.

Page 21-3 Section M2101.10 Tests. New hydronic piping systems shall be isolated and tested hydrstatically at a pressure of (one and one half times the maximum system design pressure) not less than 100 pounds per square inch (698 kPa ) the duration of the test shall not be less than 15 min. Hydronic piping to be embedded in concrete shall be pressure tested and inspected prior to pouring concrete.

There was some discussion on when to do the inspection but the board agreed the department was doing it at the correct time.

Pages 21-3

Pages 21-4 Section M2101.11-M2101.31. This has been duplicated from heat pump looping system in section in Section 2105 to apply for all hydronic piping

Page 21-5 Section M2103.3 Staff recommends continuing existing **amendment**

Chapter 22 Special piping and storage systems

Page 22-1 Section M2201.6 Flood-resistant installation Staff recommends continuing the existing **amendment**

Chapter 23 Solar thermal energy systems

No changes

Chapter 24 Fuel gas

Page 24-8 Section G2407.7 Flood Hazard. Staff recommends continuing the existing **amendment**.

Page 24-10 Section G2407.6.1 (304.6.1) Two- permanent-openings method. Staff recommends continuing the existing **amendment** (Deleted)

Page 24-11 Figure G2407.6.1(2) [304.6.1(2)] Staff recommends continuing the existing **amendment**.

(deleted)

There was discussion on when and how the flood ordinance became code and how often it is reviewed. Chris Rose will talk with Brenda Derrig or a member of the engineering staff to see if we can get an explanation.

Page 24-13 Section G2407.11 (304.11) Combustion air. Staff recommends continuing the existing **amendment**.

Page 24-46 Section G2417.4.1 (406.4.1) Test Pressure. Staff recommends continuing the existing **amendment**.

Page 24-51 Section G2425.12 (501.12) Residential and low-heat appliances flue lining systems. Staff recommends continuing the existing **amendment**

Page 24-54 Section G2427.5.5.1 (503.5.6.1) Chimney lining. There was an exception that was deleted. That did allow replacing a like appliance with out lining the chimney.

Page 24-58,24-59 Section G2427.8 (503.8) Venting system terminal clearances. This section was reformatted. They made no technical changes just reformatted the lay out to Figure G2427.8 (503.8) and Table G2427.8 (503.8)

Page 24-54 Section 2427.5.2 (503.5.3) Masonry chimneys. Staff recommends continuing the existing **amendment**.

Page 24-75 Section G2439.5 (614.7) and Section G2439.5.1 (614.7.1) they split up the 2 requirement the where previously in the same section this was done to prevent any confusion.

Page 24-77 Section G2442.4 (618.4) Screen. Staff recommend continuing the existing **amendment.**

Page 24-78 Section G2445 ((621) Unvented room heater Staff recommends discontinuing this existing **amendment.**

Chapters 25-43 staff recommends continuing the existing **amendment**

**IFC**

**(Pg 1-1)**

**Section 101.1 Title.**

Section 101.1 is **amended** to read as follows:

101.1 Title. These regulations shall be known as the Fire Code of ~~[NAME OF JURISDICTION]~~ the city of Fargo, hereinafter referred to as “this code.”

**(Pg 1-2)**

**Section 102.6 Historic buildings.**

Section 102.6 is **amended** to read as follows:

The provisions of this code relating to the construction, *alteration*, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings where such buildings or structures do not constitute a distinct hazard to life or property. Fire protection in designated historic buildings shall be provided with an *approved* fire protection plan. ~~as required in Section 1103.1.1.~~

**(Pg 1-2)**

**Section 103.1 Creation of Agency.**

Section 103.1 is **amended** to read as follows:

The ~~[INSERT NAME OF DEPARTMENT]~~ Fargo Fire Department is hereby created and the official in charge thereof shall be known as the fire code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

**(Pg 1-3)**

**Section 104.7 Liability.**

Section 104.7 is **amended** to read as follows:

The fire code official, member of the board of appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act or omission performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the protection provided by the city's insurance pool and immunities and defenses provided by other applicable state and federal laws and shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating, or controlling any building or structure for any damages to persons or property caused by defects nor shall the code enforcement agency or the city be held as assuming any such liability by reason of the inspection authorized by this code or any permits or certificates issued under this code.

**(Pg 1-6)**

**Section 105.5.1 Additive Manufacturing.**

Section 105.5.1 is hereby deleted in its entirety.

This is a new permit added to the 2021 IFC for 3D printing. Recommend removing the permit, but all code requirements of Section 320 would remain.

**(Pg 1-7)**

**Table 105.5.9 Permit Amounts for Compressed Gases.**

Table 105.5.9 is **amended** to read as follows:

Carbon dioxide used in carbon dioxide enrichment systems ~~875 (100 lbs)~~ 4375 (500 lbs.)

Carbon dioxide used in insulated liquid carbon dioxide beverage dispensing applications ~~875 (100 lbs)~~ 4375 (500 lbs.)

The amount was increased to include regulation for large systems that can impact safety if a leak develops.

**(Pg 1-7)**

**Section 105.5.14 Energy Storage Systems.**

Section 105.5.14 is hereby deleted in its entirety.

This is a new permit added to the 2021 IFC, however this is adequately covered through permits at the inspections office.

**(Pg 1-7)**

**Section 105.5.15 Exhibits and trade shows.**

Section 105.5.15 is hereby deleted in its entirety.

Historically the fire department has not issued this permit, and we do not have the capacity to issue permits for all exhibits and trade shows.

**(Pg 1-7)**

**Section 105.5.18 Flammable and combustible liquids.**

**Subsection 2** is hereby amended in part to read as follows:

To store, handle or use Class 1A liquids in excess of ~~5~~ 30 gallons, Class 1B liquids in excess of 60 gallons, Class 1C liquids in excess of 90 gallons ~~(19 L)~~ in a building or ~~in excess of 10 gallons (37.9 L)~~ outside of a building, except that a permit is not required for the following:

The existing exemption limits were not practical for requiring a permit and have increased them accordingly. See Table 5003.1.1(1)

**(Pg 1-8)**

**Section 105.5.18 Flammable and combustible liquids.**

**Subsection 3** is hereby amended to read as follows:

To store, handle or use Class II or Class IIIA liquids in excess of ~~25~~ 120 gallons ~~(95 L)~~ in a building or in excess of ~~60~~ 120 gallons ~~(227 L)~~ outside a building, except for fuel oil used in connection with oil-burning equipment.

The existing exemption limits were not practical for requiring a permit. See Table 5003.1.1(1)

**(Pg 1-8)**

**Section 105.5.19 Floor finishing.**

Section 105.5.19 is hereby deleted in its entirety.

Floor finishing is adequately covered under a building permit.

**(Pg 1-8)**

**Section 105.5.25 Hot work operations.**

Section 105.5.25 Subsections 1, 5, and 6 of are hereby deleted in their entirety.

These areas are either unenforceable or were not felt to be necessary for requiring a permit.

**(Pg 1-9)**

**Section 105.5.31 Miscellaneous combustible storage.**

Section 105.5.31 is hereby deleted in its entirety.

Permitting requirements for this type of storage does not appear to be necessary.

**(Pg 1-9)**

**Section 105.5.32 Mobile food preparation vehicles.**

Section 105.5.32 is hereby deleted in its entirety.

Mobile food trucks are currently licensed by the Health Department. There are over 60 current licenses issued by the health department. If an additional operational permit is required by the fire department there will be an impact to staff time, currently there is not extra capacity.

**(Pg 1-10)**

**Section 105.5.33 Motor fuel-dispensing facilities.**

Section 105.5.33 Motor fuel-dispensing facilities is hereby deleted in its entirety.

Motor fuel dispensing facilities as noted in this section are licensed through the Auditor’s Office.

**(Pg 1-10)**

**Section 105.5.36 Open flames and candles.**

**Section 105.5.36** is amended to read as follows:

**105.5.33 Open flames and candles.** An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments. For purposes of this provision, churches shall not be deemed to be assembly areas and shall not be required to obtain a permit to utilize candles in religious ceremonies.

This exemption is for the church altar area only.

**(Pg 1-10)**

**Section 105.5.38 Outdoor assembly event**

Section 105.5.38 Outdoor assembly event. Is hereby deleted in its entirety.

The City of Fargo is currently setting up an ordinance for special events. The permit will be through the City of Fargo. These events affect multiple departments, and it makes sense to have the permit include all those affected.

**(Pg 1-10)**

**Section 105.5.40 Plant extraction systems.**

Section 105.5.40 Plant extraction systems is hereby deleted in its entirety

Plant extraction systems are used in processing marijuana. The state health department is currently charged with creating statewide rules regarding licensing and permitting of both grow and sale facilities. It is important to note that this simply deletes the permit requirement. Any facility would still have to comply with the fire code and would be subject to fire inspections.

**(Pg 1-10)**

**Section 105.5.44 Refrigeration equipment**

Section 105.5.44 is amended to read as follows:

**105.5.44 Refrigeration equipment**. An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6 containing more than 30 pounds of Group A3, B2, or B3 refrigerant.

This new amendment clarifies when an annual permit is required from the fire department for refrigeration systems. Group A3 refrigerant is highly flammable. Group B2 and B3 refrigerants are both flammable and toxic.

**(Pg 1-10)**

**Section 105.5.45 Repair garages and motor fuel dispensing facilities.**

Section 105.5.45 is amended to read as follows:

**105.5.45 Repair garages ~~and motor fuel-dispensing facilities~~.** An operational permit is required for operation of repair garages.

Motor fuel dispensing facilities as noted in this section are licensed through the Auditor’s Office.

**(Pg 1-10)**

**Section 105.5.49 Temporary membrane structures and tents**

Section 105.5.49 is amended to read as follows:

**Section 105.5.49 Temporary membrane structures and tents.** An operational permit is required to operate an air-supported temporary membrane structure, a temporary special event structure, or a tent having an area in excess of 400 square feet (37m2) for the purposes of assembly.

Tents are also regulated by the inspection and planning departments. Typically, tents for the purposes of greenhouses and sales are permitted there. The fire department will continue to regulate the higher risk tents where public assembly events occur.

**(Pg 1-10)**

**Section 105.6.2 Compressed gases.**

Section 105.6.2 is hereby deleted in its entirety.

This section is adequately covered under the operational permit section of the code.

**(Pg 1-11)**

**Section 105.6.5 Energy storage systems.**

Section 105.6.5 is hereby deleted in its entirety.

Energy storage systems are adequately covered under inspection department permits.

**(Pg 1-11)**

**Section 105.6.7 Fire pumps and related equipment.**

Section 105.6.7 is hereby deleted in its entirety.

This section is covered under other permitting guidelines.

**(Pg 1-11)**

**Section 105.6.10 Gas detection systems.**

Section 105.6.10 is hereby deleted in its entirety.

This section is covered under other permitting guidelines.

**(Pg 1-11)**

**Section 105.6.11 Gates and barricades across fire apparatus access roads.**

Section 105.6.11 is hereby deleted in its entirety.

This section is adequately covered under other sections of the code.

**(Pg 1-11)**

**Section 105.6.12 Hazardous Materials**

Section 105.6.12 is hereby deleted in its entirety.

This section is covered under other permitting guidelines.

**(Pg 1-11)**

**Section 105.6.13 High-piled combustible storage.**

Section 105.6.13 is hereby deleted in its entirety.

This section is covered under other permitting guidelines.

**(Pg 1 -11)**

**Section 105.6.15 LP-gas.**

Section 105.6.15 is hereby amended to read as follows:

105.6.15 LP-gas. A construction permit is required for installation of or modification to an LP-gas system with a single container in excess of 2000 gallons water capacity or the aggregate capacity of containers is more than 4000 gallons in water capacity.

This section was modified to match the construction document submittal requirements for LPG. (See Section 6101.3)

**(Pg 1-11)**

**Section 105.6.16 Motor vehicle repair rooms and booths.**

Section 105.6.16 is hereby deleted in its entirety.

This is a new permit and is covered under other permitting guidelines.

**(Pg 1-11)**

**Section 105.6.17 Plant extraction systems.**

Section 105.6.17 is hereby deleted in its entirety.

This is a new permit and is covered under other permitting guidelines.

**(Pg 1-11)**

**Section 105.6.18 Private fire hydrants.**

Section 105.6.18 is hereby deleted in its entirety.

This section is reviewed and approved during the building permitting process.

**(Pg 1-11)**

**Section 105.6.19 Smoke control or smoke exhaust systems.**

Section 105.6.19 is hereby deleted in its entirety.

This section is reviewed and approved during the building permitting process.

**(Pg 1-12)**

**Section 105.6.20 Solar photovoltaic power systems.**

Section 105.6.20 is hereby deleted in its entirety.

This section is reviewed and approved during the building permitting process.

**(Pg 1-12)**

**Section 105.6.21 Special event structure.**

Section 105.6.21 is hereby deleted in its entirety.

This permit is covered under other permitting guidelines.

**(Pg 1-12)**

**Section 105.6.23 Standpipe systems.**

Section 105.6.23 is hereby deleted in its entirety.

This section is covered under other permitting guidelines.

**(Pg 1-12)**

**Section 105.6.24 Temporary membrane structures and tents.**

Section 105.6.24 is hereby deleted in its entirety.

This section is adequately covered in the operational permit section. (See section 105.5.49)

**(Pg 1-12)**

**Section 106.4 Retention of construction documents.**

Section 106.4 is hereby amended as follows:

106.4 Retention of construction documents. One set of construction documents shall be retained by the fire code official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws. ~~One set of approved construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.~~

This amendment is added to coincide with the longstanding amendment in the IBC.

**(Pg 1-15)**

**Section 112.4 Violation penalties.**

Section 112.4 is amended in part to read as follows:

112.4 Violation penalties.

….shall be guilty of an ~~[SPECIFY OFFENSE]~~ infraction.~~, punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [number of days], or both such fine and imprisonment.~~ Every person, firm or corporation violating an ordinance which is punishable as an infraction shall be punished by a fine not to exceed $1,000.00; the court to have power to suspend said sentence and to revoke the suspension thereof.

(This section outlines the penalties for violations of the code.)

**(Pg 1-15, 1-16)**

**Section 114.3 – 114.6 Unsafe structures or equipment**

Incorporated administrative sections that were previously in the IBC. Sections include requirements for reports and notice to owners. Method of service is also clarified.

**(Pg 2-1)**

**Chapter 2 Additive Manufacturing**

Added definitions for 3D printing that occurs in manufacturing facilities.

**(Pg 2-7)**

**Chapter 2 Critical areas**

Added definitions for critical areas and delivered audio quality for emergency responder radio coverage requirements.

**(Pg 2-9)**

**Chapter 2 Energy storage systems**

Added definitions for energy storage systems to further clarify requirements of Chapter 12.

**(Pg 3-3)**

**Section 307.1.1 Prohibited open burning.**

Section 307.1.1 is amended to read as follows:

307.1.1 Prohibited open burning. *Open burning* shall be prohibited when atmospheric conditions or local circumstances make such fires hazardous. All open burning, including recreational fires, is banned when the fire index is at the high, very high or extreme level and any time during a red flag warning.

This new amendment codifies the City’s policy regarding open burning and recreational fires.

**(Pg 3-4)**

**Section 308.1.4 Open flame cooking devices.**

Section 308.1.4 is amended to read as follows:

308.1.4 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or decks or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family *dwellings*.
2. Where buildings, balconies and decks are protected by an *automatic* *sprinkler system*.
3. LP-gas cooking devices having LP-gas container with a water capacity not greater than ~~2 ½ pounds [nominal 1 pound (0.454 kg)~~ 47.8 pounds [nominal 20 pounds (9 kg) LP-gas capacity].

This longstanding amendment allows for the common size of LPG tanks. It is restricted to only 1 tank.

**(Pg 3-4)**

**Section 308.3 Group A occupancies.**

Section 308.3 is amended by adding the following subsection 1.4 to exception 1:

308.3 Group A Occupancies. Open-flame devices shall not be used in a Group A occupancy.

Exceptions:

1. Open-flame devices are allowed to be used in the following situations, provided *approved* precautions are taken to prevent ignition of a combustible material or injury to occupants:

1.4 Open-flame devices for food warming.

This exception was added to cover the use of Sterno or similar products to warm food.

**(Pg 3-11)**

**Section 319.4** **Fire Protection.**

Section 319.4 is hereby amended to read as follows:

319.4 Fire protection. Fire Protection shall be provided in accordance with Section~~s 319.4.1 and~~ 319.4.2.

Many mobile food preparation vehicles are not constructed locally and travel around the region to events.

**(Pg 3-11)**

**Section 319.4.1 Fire protection for cooking equipment.**

Section 319.4 is hereby deleted in its entirety.

Many mobile food preparation vehicles are not constructed locally and travel around the region to events.

**(Pg 3-13)**

**Section 320 Additive Manufacturing (3D Printing)**

New section regulating 3D printing. Most of the requirements existed in the code prior, however this section clarifies the codes intention that the sections apply to 3D printing. Industrial 3D printing is restricted to occupancy groups associated with manufacturing.

**(Pg 3-14)**

**Section 321 Artificial Combustible vegetation**

New section regulating artificial vegetation over 6ft in height and within 5 feet of a building.

**(Pg 4-4)**

**Section 403.7.1 Fire safety and evacuation plans**

Added a new section to require a fire safety and evacuation plan for group I-3. The plan needs to contain any ‘special actions’ required of staff.

**(Pg 4-4)**

**Section 403.7.3.2 Fire Safety plan**

Added a new section requiring a fire safety plan be available and include any special locking arraignments and location of cells.

**(Pg 4-8)**

**Section 405.1 General**

Added language to clarify that lockdown drills do not count as evacuation drills. Evacuation drills are required to involve actual evacuation to an assembly point through exits. Exceptions are included for special occupancies.

**(Pg 5-1)**

**Section 501.3.1 Site Safety plan.**

Added a new section requiring a site safety plan for the site during construction. See section 3303.

**(Pg 5-2)**

**Section 503.4 Obstruction of fire apparatus access roads.**

Section 503.4 is amended to read as follows:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and 503.2.2 shall be maintained at all times. Enforcement of such prohibited parking may be accomplished in the same manner as regulations contained in Article 8-10 and in Section 9-0705 of the Fargo Municipal Code.

The FMC contains ordinances to deal with parking that are used as guidelines for enforcement.

**(Pg 5-4)**

**Section 507.5.4 Obstruction**

Section 507.5.4 Obstructionis amended to read as follows:

507.5.4 Obstruction.Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. An approved hydrant marker shall be installed immediately adjacent to the rear of the hydrant.

This is a new amendment to codify the city’s requirement to have a hydrant marker installed. The hydrant markers allow hydrants to be located in deep snow.

**(Pg 5-4)**

**Section 508.1 General**

Added a new section requiring a fire command room in F-1 and S-1 occupancies greater then 500,000 sf.

**(Pg 5-7)**

**Section 510.5.1 Mounting of the donor antenna(s).**

New section requiring signage at donor antenna locations that prohibits moving the antenna. Movement of the antenna can affect performance of the in building communication system.

Portions of chapter 6 were reorganized for clarity which is the reason for the chapter containing a large number of vertical bars.

**(Pg 6-1)**

**Section 603.5. Listing.**

This section was revised to include specific UL requirements for power taps and current taps. Group I-2 requires specific listing in accordance with NFPA 99.

**(Pg 6-3)**

**Section 604.5 Maintenance of elevators.**

New section was added that requires elevator lobbies of fire service access, occupant evacuation, and where hoistway protection is required, to be free of storage and furniture.

**(Pg 6-4)**

**Section 604.7 Storage**

New section that clarifies storage is prohibited in elevator cabs and machine rooms. This is an existing requirement, but is now clarified.

**(Pg 6-6)**

**Section 605.5.2.2.1 Listing and approval.**

New requirement that portable outdoor gas-fired heating appliances shall be listed and labeled in accordance with ANSI Z83.26/CSA

**(Pg 6-12)**

**Section 610 Clothes Dryer Exhaust Systems**

New requirement in the fire code that states clothes dryer exhaust systems shall be installed in accordance with IMC or IFGC. The exhaust system is required to be maintained in accordance with the manufacturer’s instruction to prevent lint or debris buildup.

**(Pg 7-1)**

**Section 701.6 Owner’s Responsibility. (General requirements for Fire and Smoke Protection Features)**

Modified to create an owner’s responsibility to conduct annual inspections (and repair as necessary) for fire-resistance-rated protection.

Includes new reference back to sections 602.4.1 and 602.4.2 of the IBC. IBC 602.4.1 contains the provision for type IV-A construction, mass timber with fire-rated components covering the mass timber. IBC 602.4.2 contains the provision for IV-B construction, mass timber with fire-resistance-rated components covering portions of the mass timber members.

**(Pg 7-2)**

**Section 703.2 Repair of penetration.**

New sub-section providing guidance for the repair or replacement of materials protecting penetrations. To be repaired with materials/systems which meet or exceed the code requirements applicable at the time of assembly construction.

**(Pg 7-2)**

**Section 704.2 Repair of joints and voids.**

New sub-section providing guidance for the repair or replacement of materials protecting joints and voids. To be repaired with materials/systems which meet or exceed the code requirements applicable at the time of assembly construction.

**(Pg 7-3)**

**Section 708 Spray Fire-Resistant Materials and Intumescent Fire-Resistant Materials**

New section addressing maintenance requirements for spray fire-resistant materials and intumescent fire-resistant materials. Shall be visually inspected to verify substrate is not exposed.

**(Pg 8-7)**

**Section 806.1.1** is amended by adding the following exception:

3. For purposes of this provision, churches shall not be deemed public buildings and may utilize natural or resin bearing cut trees in the altar area of the church. No electric lighting is allowed on the tree.

This longstanding amendment allows churches to have trees as decoration. The natural cut trees are required to comply with section 806.

**(Pg 8-7)**

**Section 806.1.4 Fire-retardant treatment for natural cut trees.**

New section providing guidance on the requirements for fire-retardant treatment applied to natural cut trees.

**(Pg 8-10)**

**Section 808.5 Play structures added to existing buildings.**

Modified, play structures (exceeding 10’ in height or 150 square feet)are added to existing buildings, they shall meet the requirements of the IBC section 424.

**(Pg 9-1)**

**Section 901.4.3 Alterations to buildings and structures.**

New Subsection requiring approval of the fire code official for removal or modifications to any fire protection and life safety system.

**(Pg 9-6)**

**Section 903.2.4.2 Group F-1 distilled spirits.**

New subsection requiring an automatic sprinkler system throughout a Group F-1 fire areas used for the manufacture of distilled spirits.

**(Pg 9-7)**

**Section 903.2.9.3 Group S-1 distilled spirits and wine.**

New subsection requiring an automatic sprinkler system throughout a Group S-1 fire areas used for the bulk storage of distilled spirits or wine.

**(Pg 9-7)**

**Section 903.2.9.4 Group S-1 upholstered furniture and mattresses.**

Moved from 903.2.9(5) to its own subsection and includes a new exception: “*Self-service storage facilities not greater than one story above grade plane where all storage spaces can be accessed directly from the exterior***”** does not require a sprinkler system.

**(Pg 9-7)**

**Section 903.2.10 S-2 parking garages.**

Modified, requiring automatic sprinklers in open parking garages which exceed 48,000 square feet.

**(Pg 9-7)**

**Section 903.2.10.2 Mechanical-access enclosed parking garages.**

New subsection requiring approved automatic sprinkler system throughout buildings used for the storage of motor-vehicles in mechanical-accessed enclosed parking garages. The portion of the building that contains the mechanical-access enclosed parking garage shall be protected with a specially engineered automatic sprinkler system.

**(Pg 9-8)**

**Section 903.3.1** is amended to read as follows:

**903.3.1 Standards.** Sprinkler systems shall be designed with a 5 psi safety margin and installed in accordance with Sections 903.3.1.1, 903.3.1.2 or 903.3.1.3 and other chapters of this code, as applicable.

This amendment is requested due to the fluctuation of water pressure at various times of the day and also day of the year.

**(Pg 9-8)**

**Section 903.3.1.1.1 Exempt locations** is amended by adding the following exception:

7. Elevator machine room and machinery spaces. Where sprinklers are not installed in elevator machine rooms, shunt trip required in accordance with IBC 3005.5 shall not be installed.

This proposed amendment would allow elevator machine rooms to not be sprinklered and thereby remove the requirement for elevator shunt trips. This amendment would match the construction practice currently occurring in the state of MN.

**(Pg 9-9)**

**Table 903.2.11.6 Additional required fire protection systems**

Modified for mechanical-access parking garages, stationary and mobile energy storage systems, and record storage, as addressed in applicable code sections.

**(Pg 9-10)**

**Section 903.3.1.2 NFPA 13R sprinkler system.**

Modified to state that the number of stories of the group R occupancy shall be measured from *grade plane* only. This change effects podium-style buildings.

Change: Use of an NFPA 13R sprinkler systems is limited to where all of the following conditions exists:

1. Four stories or less above grade plane.

*2. The floor level of the highest story is 30 feet (9144 mm) or less above the lowest level of fire department vehicle access.*

*3. The floor level of the lowest story is 30 feet (9144 mm) or less below the lowest level of fire department vehicle access.*

**(Pg 9-10)**

**Section 903.3.1.2.2 Corridors and balconies in the means of egress.**

Modified section addresses corridors and egress balconies that are not adequately open to the exterior to provide heat and smoke escape.

New clarifying language stating where any of the following conditions apply, a sprinkler system shall be provided:

*1. Corridors with combustible floor or walls.*

*2. Corridors with an interior change of direction exceeding 45 degrees (0.79 rad).*

*3. Corridors that are less than 50 percent open to the outside atmosphere at the ends.*

*4. Open-ended corridors and associated exterior stairways and ramps as specified in Section 1027.6, Exception 3.*

*5. Egress balconies not complying with Sections 1021.2 and 1021*.3.

**(Pg 9-11)**

**Section 903.3.5 Water Supplies** is amended to read as follows:

**903.3.5 Water supplies.** Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the International Plumbing Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official. Underground water supply piping shall be constructed of a material allowed by Fargo Municipal Code Chapter 16 and Chapter 22 and shall be allowed to extend into the building through the slab or wall not more than 24 inches.

This proposed amendment would allow the use of PVC pipe for the fire main as it passes into the building.

**(Pg 9-16)**

**Section 905.1.1 Standpipe hose.**

Section 905.1.1 is amended by adding the following:

**Section 905.1.1 Standpipe Hose.** The installation of fire hose on standpipes may be omitted when approved by the fire code official. Approved standpipe hose valves and connections shall be provided where required.

We would like to continue this amendment for standpipe hoses because unlined linen hose is seldom if ever used and employees do not get trained in its use.

**(Pg 9-16)**

**Section 905.3.1 Height (Section 905 Standpipe Systems)**

Modification stating that when a standpipe is required in parking garages (whether open or closed) the standpipe shall be Class I.

**(Pg 9-18 & 19 )**

**Section 906.1 Portable fire extinguisher.**

New exception to the requirements for fire extinguishers in S occupancies where forklift, powered industrial truck, or powered cart operators are the primary occupants. Fire extinguishers are not required in these occupancies/situations in accordance with all of the following; vehicle mounted extinguishers (40A 80B:C), spare replacement fire extinguishers on site, fire extinguisher training, daily inspections for vehicle mounted fire extinguishers.

New exception: Portable fire extinguishers are not required in unoccupied Group U communication equipment structures.

**(Pg 9-19 )**

**Table 906.1 Additional Portable Fire Extinguishers**

Addition, requirements for portable generators in the table.

**(Pg 9-25)**

**Section 907.2.10 Group S**

New manual fire alarm requirement for Group S public and self-storage occupancies that are three stories or greater. Visible appliances are not required within storage units. Manual fire alarm boxes (pull stations) are not required in buildings equipped throughout with a NFPA 13 sprinkler system.

**(Pg 9-28 & 9-29 )**

**Section 907.4 Initiating Devices**

Clarifies that when a fire alarm is required by the International Fire Code, it shall activate occupant notification.

**(Pg 9-30)**

**Section 907.5.2.1.2 Maximum sound pressure**

Modified, increases the average ambient noise threshold where visible alarm notification devices are required from 95 dBA to 105 dBA.

**(Pg 9-30)**

**Section 907.5.2.1.3 Audible signal frequency in Group R-1 and R-2 sleeping rooms.**

New subsection requiring audible fire/smoke alarm notification devices in R-1/2 sleeping areas to be 520-Hz for single and multiple station smoke alarms. This mirrors the NFPA 72 Fire Alarm & Signaling requirements. When a smoke alarm is unable to produce a 520-Hz signal, the 520-Hz signal shall be provided by a listed notification appliance or a smoke detector with an integral 520-Hz sounder.

**(Pg 9-30)**

**Section 907.5.2.2.5 Standby power**

Modified, standby power can now be used for emergency voice/alarm communication systems. Emergency power was previously required.

**(Pg 9-31)**

**Section 907.5.2.3.3.1 Wired equipment**

New subsection to specifically address the requirements relating to future occupant notification capability. New requirement for fire alarm power supply and circuits stating they shall have not less than a 5-percent excess capacity to accommodate future additions to visible notification appliances on every story.

**(Pg 9-32)**

**Section 907.6.6.2 MIY monitoring.**

New subsection stating that monitor it yourself (MIY) transmitters to a public safety answering point (PSAP) shall not be permitted unless approved by the fire code official.

**(Pg 9-32)**

**Section 907.8.3 Smoke detector sensitivity.**

**Section 907.8.3** is hereby deleted in its entirety.

The detector sensitivity requirements as outlined in this section are unrealistic. If detectors function within the listed sensitivity range, we feel the calibration test is unnecessary. If records show a frequency of nuisance alarms, the offending detector should be replaced or repaired.

**(Pg 9-33)**

**Section 908.3 Fire alarm system interface**

New subsection for section 908 Emergency Alarm Systems. New subsection states that when an emergency alarm system is interfaced with the building fire alarm system, the signal produced at the fire alarm control unit shall be supervisory.

**(Pg 9-38)**

**Section 909.17 System response time.**

Modified, the time for a smoke control system to reach full operation is limited to 90 seconds. Previous code edition did not indicate a time limit.

**(Pg 9-39 & 9-40)**

**Section 909.20 Smokeproof enclosures – 909.20.6.3 Acceptance and testing.**

New subsections containing construction requirements for smokeproof enclosures which are required by International Fire Code subsection 1023.12 Smokeproof enclosures. The requirements of these subsections address access, construction, door closers, ventilation (natural and mechanical), pressurization for stairway, ramp, and elevator hoistway, associated power and acceptance testing. This now mirrors what appears in the International Building Code.

**(Pg 9-42)**

**Section 910.3.4 Vent operation.**

New subsection stating smoke and heat removal vents shall have approved automatic and manual means of operation.

**(Pg 9-42)**

**Section 910.3.5 Fusible link temperature rating.**

New subsection stating that where smoke and heat removal vents are provided in areas with areas of automatic fire sprinklers and the vent operate by fusible link. The fusible link temperature is now specifies to be 360⁰ F.

**(Pg 9-43)**

**Section 911.1 General (Explosion control)**

Modified, NFPA 68 Standard on Explosion Protection for Deflagration Venting is now a referenced document for this section.

**(Pg 9-45)**

**Section 911.4 Deflagration venting.**

New, approved deflagration venting required to be installed in accordance with NFPA 68.

**(Pg 9-46 )**

**Section 913.1 General (Fire Pumps)**

New exception, fire pumps for automatic sprinkler systems installed in accordance with section 903.3.1.3 (NFPA 13D) or P2904 of the International Residential Code are not required to be listed or comply with NFPA 20.

**(Pg 9-46)**

**Section 913.2 Circuits supplying fire pumps.**

Modified, Conductors powering fire pumps can now be covered with a minimum of 2 inches of concrete to provide the required fire-resistance-rated protection in addition to the other methods previously allowed.

**(Pg 9-47)**

**Section 914.3.1.2 Water Supply to Fire Pumps**

Modified to include type IV-A and type IV-B construction that are more than 120 feet in building height in the redundant water supply to fire pump requirements. This section previously only required buildings that were more than 420 feet in building height to have a redundant water supply to fire pumps.

**(Pg 9-48 )**

**Section 914.7 Special amusement areas.**

Modified, specific provisions were added to address puzzle rooms. Changes to section 202 definition of puzzle room states that a puzzle room is a type of special amusement area and therefore fall within the requirements for section 914.7.1 automatic sprinkler system and section 914.7.2 automatic smoke detection.

**(Pg 10-7)**

**Section 1006.2.2.4 Electrical Rooms.**

Modified, When electrical equipment is rated at 1,000 volts or less location and number of exits and exit access doorways shall be provided in accordance with section 110.26 of NFPA 70 and section 110.33 of NFPA 70 when the electrical equipment is rated over 1,000 volts. Panic hardware is required in accordance with section 1010.2.9.2.

**(Pg 10-10)**

**Section 1008.2.1 Illumination level under normal power.**

Modified, additional requirement specifically regarding exit stairs. The illumination level to 10 foot candles (108 lux) at the walking surface along exit access stairways, exit stairways, and at their required landings when the stairway is in use.

**(Pg 10-11)**

**Section 1009.2.1 Elevators required.**

Modified, an occupied roof is added to the accessible route requirements including elevators required. For example, if there is a three story building with an occupied roof, elevators are required in accordance with this section, whereas it was not previously required in this scenario.

**(Pg 10-13)**

**Section 1009.8.1 System requirements**

**Section 1009.8.1** is hereby amended to read as follows:

**1009.8.1 System requirements.** Two-way communication systems shall provide communication between each required location and the fire command center or a central control point location *approved* by the fire department. Where the central control point is not constantly attended, a two-way communication system shall have a timed automatic telephone dial-out capability to a monitoring location ~~or 9-1-1~~. The two-way communication system shall include both audible and visible signals.

This amendment removes the possibility of having a system directly dial dispatch. Fire alarm codes restrict dialers from calling directly to dispatch centers in order to ensure the reliability of the center. This amendment will treat two-way communication systems similarly.

**(Pg 10-14)**

**Section 1010.1.1 Size of door.**

Modified, maximum width of a swinging door has been removed, previously 48 inches.

Minimum clear opening width for non-accessible shower or sauna compartments; toilet stalls or dressing, fitting or changing rooms now have a required minimum width of 20 inches.

**(Pg 10-16)**

**Section 1010.2.4 Locks and latches**

Addition, four exceptions (that fall into two basic categories) were added to the general locking section. The two basic categories are; when needed for the clinical needs of care recipient, or when an exterior area egress’s back into the building.

The exception for Group I-1 Condition 2 and Group I-2 pertain to when clinical needs require such control, in this case there are provisions staff being able to readily unlock the doors at all times.

The section pertaining to exterior areas which egress back into the building provides a balance for egress safety and building security. Provision are in place based upon occupant load and occupancy.

**(Pg 10-17 and 10-18)**

**Section 1010.2.8 Locking arrangements in educational occupancies.**

Modified, This section has been expanded to include I-4 occupancies. It now explicitly allows for remote locking/unlocking of doors from an approved location. Any modifications to fire door assemblies shall be in accordance with NFPA 80.

**(Pg 10-18)**

**Section 1010.2.9 Panic and fire exit hardware**

Modified, courtrooms were added to the exceptions which permit the use of locked (delayed egress) exit doors in accordance with 1010.2.13 item 13.

**(Pg 10-18)**

**Section 1010.2.9.1 Refrigeration machinery rooms.**

Addition, refrigeration machinery space which are over 1,000 feet squared are now required to have two exits (or exit access doorways) that swing in the direction of travel and are equipped with panic or fire exit hardware.

**(Pg 10-18)**

**Section 1010.2.9.2 Rooms with electrical equipment.**

Modified, the threshold for the requirement of panic hardware in these spaces has been reduced to 800 amperes from 1200 amperes and considers other requirements that were present in NFPA 70.

**(Pg 10-23)**

**Section 1011.1 General (Stairways)**

Exceptions are hereby amended to read as follows:

1. Within rooms or spaces used for assembly purposes, stepped *aisles* shall comply with Section 1030.
2. A stairway complying with section 1011 except where in a B, F, M, S or U that serves an area of 750 sf or less, and is not open to the public, that has a maximum riser height of 8 inches and a minimum tread depth of 9 inches, has a minimum width of 36 inches and has at least one handrail that terminates at the top and bottom riser and otherwise complies with section 1014.

**(Pg 10-23 & 10-24))**

**Section 1011.5.2 Riser height and tread depth.**

**Exception 3, 6 of Section 1011.5.2** is amended in part to read as follows:

3. In Group R-3 occupancies; within dwelling units in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual dwelling units in Group R-2 occupancies; the maximum riser height shall be ~~7 ¾ inches (197 mm)~~ 8 inches; the minimum tread depth shall be ~~10 inches (254 mm)~~ 9 inches;

6. Stairways used only to attend equipment or private stairways serving an occupant load of 10 or fewer persons and which are not accessible to the public are permitted to have a maximum 8 inch riser height and minimum 9 tread depth.

Amended to match change in the building code.

**(Pg 10-33 & 10-34)**

**Section 1017.3.2 Atriums., Section 1017.3.2.1 Egress not through an atrium., Section 1017.3.2.2 Exit access travel distance at the level of exit discharge., Section 1717.3.2.3 Exit access travel distance at other than the level of exit discharge.**

Clarification, exit requirements in regards to atriums. When the path of egress travel is not at the level of exit discharge from the atrium, the portion of total permitted exit access travel distance that occurs within the atrium shall not be greater than 200 feet.

**(Pg 10-35 & 10-36)**

**Section 1020.5 Dead ends.**

Modified, group I-2 Condition 2 occupancies (hospitals) can now have a dead end corridor up to 30 feet in length when the corridor does not serve patient rooms or patient treatment spaces. Was previously limited to 20 feet.

**(Pg 10-38)**

**Section 1023.11 Tactile floor level signs.**

Modified, where floor-level exit signs are provided in interior exit stairways and ramps, a floor-level sign in visual characters, raised characters and braille (ICC A117.1) shall be located at each floor level landing adjacent to the door leading from the exit stairway and ramp into the corridor.

**(Pg 10-44)**

**Section 1029 Egress courts.**

Modified, section 1029 has been changed to specifically address egress courts serving as an exit discharge component in the means of egress system. Indicates width requirements (including minimum width not less than 44 inches), construction, and opening requirements.

**(Pg 10-46)**

**Section 1030.6.3.1 Automatic sprinklers (Open-air assembly seating)**

Modified, where open-air seating exists in areas enclosed with walls and ceiling, an approved automatic sprinkler system shall be provided in accordance with section 903.3.1.1. Exceptions exist for floor area used for contests, performances, and entertainment when roof construction is more than 50 feet above the floor level and use is restricted to low-fire hazard uses, press boxes/storage facilities less than 1,000 feet square, and open-air assembly seating facilities where seating and the means of egress in the seating areas are essentially open to the outsise.

**(Pg 10-50)**

**Section 1030.16 Handrails.**

Clarification, this section is to address social stairs that are intended to function more as seating, such as those found in schools. This section indicates when two handrails are required and the provisions for the second handrail.

**(Pg 10-50)**

**Section 1030.16.1 Discontinuous mid-aisle handrails.**

Clarification, this section continues on to state that once the two handrails are required the mid-aisle shall be discontinuous. Provisions for the required gaps and breaks are included in this section.

**(Pg 10-51)**

**Section 1031.2 Where required (Emergency Escape and Rescue)**

Modified, exception was added for storm shelters. Storm shelters constructed in accordance with ICC 500 are not required to have an emergency escape and rescue opening in accordance with section 1031.

**(Pg 10-52)**

**Section 1031.4 Emergency escape and rescue doors.**

Addition, where a door is provided as the required emergency escape/rescue opening it shall be a swinging or sliding door.

**(Pg 10-52)**

**Section 1031.5.3 Drainage. (Emergency Escape and Rescue)**

Addition of provisions for window well drainage to be connected to building drainage system (IBC section 1805).

**Chapter 11** is hereby deleted with the exception of sections 1103.8 and 1103.9.

This will match the requirements of the of IPMC sections 704.6 and 705. IFC section 1103.8 requires smoke alarms in Group I-1 and R occupancies. IFC section 1103.9 requires Carbon Monoxide alarms in dwelling in sleeping units.

There was discussion to move on to the next section or to adjourn. There were no staff reports. Justin Schoenberg made a motion to adjourn and Dave Obermiller seconded, meeting adjourned.

Respectfully submitted



Shawn Ouradnik

Board Secretary