

BOARD OF APPEALS

February 18, 2016

Members Present: Joel Davy, Dave Obermiller, Jeff Furstenau, Harold Thompson.

Members Absent: Wayne Larson, Terry Welle

Others Present: Ron Strand, Ryan Erickson, Leonard Beaken, Gretchen Morlan, Anthony Corcoran.

Mr. Davy called the meeting to order. Mr. Obermiller moved to approve the minutes of the December 17, 2015 meeting. All members present voted aye and the motion was declared carried. Mr. Thompson moved to approve the minutes of the January 7, 2016 meeting. All members present voted aye and the motion was declared carried. Mr. Furstenau moved to approve the minutes of the February 4, 2016 meeting. All members present voted aye and the motion was declared carried.

Unfinished Business - Mr. Strand stated that the sections in Table 301.2(1) "Topographical Effect and Special Wind Region", are listed as "no". Mr. Davy inquired as to which code book was being referenced. Mr. Strand responded that Table 3041.2(1) is located in the IRC. Mr. Strand reminded the Board that April 21, 2016 is the final scheduled hearing. He stated that the hearings will close on schedule, however, his retirement is scheduled to begin on April 1, 2016. He noted that Mr. Bruce Taralson from the Inspections Department will carry the Board through to the conclusion of the hearings. The Board congratulated Mr. Strand on his upcoming retirement. Mr. Strand introduced Leonard "Doc" Beaken to the Board.

Item 1 - Review of changes to the International Mechanical and Fuel Gas Codes, All Chapters.

Mr. Beaken introduced the International Mechanical and Fuel Gas Code to the Board.

IMC 2015

Chapter 1 Administration

Section 101.1 Title. Staff recommends keeping existing local **AMENDMENT** adding "City of Fargo" to the title.

Section 103.1 General. Staff recommends keeping existing local **AMENDMENT** removing "mechanical" from text.

Section 103.4 Liability. Staff recommends keeping existing local **AMENDMENT**.

Section 106.1.1 Annual permits was added.

Section 106.1.2 Annual permit records was added.

Section 106.4.8 Staff recommends keeping existing local **AMENDMENT** deleting this section.

Section 106.5.2 Staff recommends keeping existing local **AMENDMENT** stating the fee schedule shall be established by the Fargo Board of City Commissioners.

Section 106.5.3 Staff recommends keeping existing local **AMENDMENT** issuing not more than an 80% refund for permits in which no work has been done, or the permit has been withdrawn or cancelled prior to any plan review effort being expended.

Chapter 2 Definitions

The following definitions have been added:

Air Make Up, Air Outdoor, Air Transfer, Discrete Product, Exfiltration, Flexible Air Connection, Infiltration and Occupational Exposure Limit.

The following definitions have been modified:

Conditioned Space, Extra-Heavy Duty Cooking Appliance, Flamability Classification Class 1, 2 & 3, Heavy Duty Cooking Appliance.

Section 201.3 Terms defined in other codes. Staff recommends keeping existing local **AMENDMENT** adopting terms and their meanings from the National Electrical Code and North Dakota State Wiring Standards, North Dakota Administrative Code, Chapter 24-02-01 or the North Dakota State Plumbing Code.

Chapter 3 General Regulations

Section 303.3 Prohibited Locations. Exception 2 is changed to read: "Solid fuel-fired appliances, provided that combustion as is provided in accordance with the manufacturer's instructions".

Section 304.11 Guards. Exception was added. Mr. Obermiller clarified that an anchorage device is required as a safety measure when doing roof work. Mr. Beaken agreed and presented a picture to the Board illustrating the exception.

Section 305.4 Interval of support. Changed in accordance with MSS SP-69 to ANSI/MSS-SP-58. Staff recommends keeping existing local **AMENDMENT** that states, "In addition to the requirements of Table 305.4, piping and tubing shall be supported within 2 feet (610 mm) of every bend or angle".

Section 307.2 Evaporators and cooling coils. Exception was added.

Section 307.2.2 Drain pipe materials and sizes. Staff recommends keeping existing local **AMENDMENT** adopting the North Dakota State Plumbing Code.

Section 307.2.4.1 Ductless mini-splint system traps. New section added.

Section 307.2.5 Drain line maintenance. New section added.

Section 307.3 Condensate pumps. New section added.

Chapter 4 Ventilation

Section 401.2 Ventilation Requirements. Ambulatory care facilities and Group I-2 Occupancies shall be ventilated by mechanical means in accordance with Section 407. Staff recommends keeping existing local **AMENDMENT** which states every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical ventilation in accordance with Section 403.

Section 403.1 Ventilations System.

Section 403.2 Outdoor Air Required.

Section 403.2.1 Recirculation of Air. Item 3 identifies the air can be recirculated in its own space. Item 4 states recirculation of air is allowed within its own space.

Section 403.3 Outdoor air and local exhaust airflow rate.

Section 403.3.1 Other buildings intended to be occupied.

Table 403.3.1.1 Footnote H was added.

Section 403.3.1.2 Exhaust ventilation.

Section 403.3.2 Group R-2, R-3 and R-4 Occupancies three stories or less.

Section 403.3.2.1 Outdoor air for dwelling units. Section rewritten. Exception added.

Section 403.3.2.2 Outdoor air for other spaces.

Section 403.3.2.3 Local exhaust.

Section 404.1 Enclosed parking garages. Manufactures installation instructions on Co2 detectors.

Section 407.1 Ambulatory Care Facilities and Group I-2 Occupancies.

Chapter 5 Exhaust Systems

Section 501.3 Exhaust Discharge. Exception 3 was added.

Section 502.20 Manicure and Pedicure Stations. New section added. Mr. Beaken noted that pedicure stations were not addressed in previous code cycles.

Section 504.5 Dryer Exhaust Duct Power Ventilator. Section coordinates with IRC.

Section 504.8.2 Duct Installations. Staff recommends adding local **AMENDMENT** to read: ducts shall not be joined with screws.

Section 504.8.4.3 Dryer Exhaust Duct Power Ventilator Length. New section added.

Section 505.2 Makeup Air Required. Staff recommends adding local **AMENDMENT** to read: shall be provided with makeup air at a rate in excess of 400 cfm.

Section 505.3 Common exhaust systems for domestic kitchens located in multi-story structures. New section added.

Section 506.3.8 Grease duct cleanout and openings. Expanded wording of Item 2.

Section 506.3.11 Grease duct enclosure. Section was reworded: “fire and smoke dampers shall not be installed”. Exception was added.

Section 506.5.1.2 In-line fan location. New section added.

Section 506.5.3 Exhaust Fan Mounting. Hinges on exhaust fan. Mr. Beaken stated that hinges are required to prevent exhaust fans from blowing off of roofs.

Section 507.1 General. Section describes Type 1 and Type 2 kitchen hoods.

Section 507.1.1.1 Multiple hoods utilizing a single exhaust system.

Section 507.4 Hood sizes and locations.

Section 508.1.2 Air Balance. New section added.

Section 508.2 Compensating hoods. Staff recommends keeping existing local **AMENDMENT** which states short circuit compensating hoods are prohibited.

Section 508.2.1 Compensating hood makeup air. Staff recommends keeping existing local **AMENDMENT** which states compensating hoods shall extract at least 40% of the required air flow has to be from the kitchen area.

Mr. Obermiller asked Mr. Beaken to clarify the amendment. Mr. Beaken stated that 60% of required air flow can come from an alternate source.

Section 510.5 Incompatible materials and common shaft. Section is a continuation from the 2012 IMC, Section 510.5. Items 8, 8.1 and 8.2 were added.

Section 510.7.1.1 Shaft penetrations. New section added.

Section 510.9 Duct Construction. Added text: “Where the products being exhausted are detrimental to the duct material, the ducts shall be constructed of alternative materials that are compatible with the exhaust”.

Section 513.4.7 Smoke control system interaction. New section added.

Section 513.5.3 Opening protection. Exception 3 was added. Moved 4-5 to 5-6. Must comply with Section 716 in the IBC.

Section 513.5.3.1 Group I-1, Group I-2 and Ambulatory Care Facilities. Section 513.3.1 in the 2012 IMC became Section 513.3.2 in the 2015 IMC.

Mr. Obermiller stated that he felt Section 513.5.3.1 should be listed in the IBC for all trades to view and requested that the inspections department verify the presence of the section in all trade code books. Mr. Strand stated that the section is referenced in the IBC.

Section 513.6.3 Pressurized Stairways and Elevator Hoistways.

Section 513.7 Airflow Design Method. Added text: “Smoke control systems using the airflow method shall be designed in accordance with NFPA 92”.

Section 513.11 Standby Power. Added section.

Section 514.2 Prohibited Application. Added exception.

Chapter 6 Duct Systems

Section 601.5 Return Air Openings. Section was moved from Section 918.6 under “Prohibited Sources”.

Section 602.1 General. New section added.

Section 602.2 Construction. New section added.

Section 602.2.1.5 Discrete Plumbing and Mechanical Products in Plenums. Installed by UL2043 standard.

Section 602.2.1.7 Plastic Plumbing Pipe and Tube. New section added. Installed by UL2043 standard.

Section 603.2 Duct Sizing. Added manufacturer installation instructions.

Section 603.4.1 Duct Lap. New section added. Crimp joint must be inserted to 1 inch and installed in direction of airflow

Table 603.4 New table added. Expanded from 2012 IMC.

Section 607.1 Ducts and Air Transfer Openings. Damper to protect openings.

Chapter 7 Combustion Air

Section 701.2 Attic Space. Staff recommends keeping existing local **AMENDMENT** which states that attic space shall not be used for combustion air.

Chapter 8 Chimneys and Vents

Section 802.9 Door Swing. New section added.

Chapter 9 Specific Appliances, Fireplaces and Solid Fuel-Burning Equipment

Section 903.4 Gasketed fireplace doors. New section added.

Section 908.5 Water Supply. Section was expanded. North Dakota State Plumbing Code.

Mr. Beaken inquired if a local **AMENDMENT** should be added to this section. Mr. Strand agreed.

Section 908.8 Cooling Towers. New section added.

Section 908.8.1 Conductivity or flow-based control of cycle of concentration.

Section 908.8.2 Drift Eliminator.

Chapter 10 Boilers, Water Heaters and Pressure Vessels

Section 1007.2 Operation. Staff would like to delete the existing local **AMENDMENT** as the flow switch is included in the 2015 IMC. Mr. Beaken stated this section coordinates with the IRC.

Section 1008.1 General. Text was expanded.

Section 1008.2 Mr. Strand stated that an **AMENDMENT** will need to be made to Section 1008.2. Mr. Beaken agreed.

Section 1009.2 Closed-Type Expansion Tank. Text was expanded.

Table 1009.2 Closed-Type Expansion Tank Sizing. Table was added.

Chapter 11 Refrigeration

Section 1101.10 Locking Access Port Cap. Added Exception.

Section 1102.3 Access Port Protection. New section. When servicing.

Section 1104.2 Machinery Rooms. Staff recommends keeping existing local **AMENDED** exception.

Chapter 12 Hydronic Piping

Section 1209.3.4 Polyethylene of Raised Temperature (PE-RT). Section coordinates with the IRC.

Sections 1210.1 through 1210.11 Added sections.

Chapter 13 Fuel Oil Piping and Storage

No Changes.

Chapter 14 Solar Systems

No Changes.

IFGC 2015

Chapter 1 Administrative.

Sections 101.1 Title. Staff recommends keeping existing local **AMENDMENT**.

Section 103.1 Staff recommends deleting the existing local **AMENDMENT** as the code now matches the amendment.

Section 103.4 Liability. Staff recommends keeping existing local **AMENDMENT**.

Section 106.1.1 Annual Permit. New section added.

Section 106.1.2 Annual Permit Records. New section added.

Section 106.6.2 Fee Schedule. Staff recommends keeping existing local **AMENDMENT** stating the fee schedule is established by the Fargo Board of City Commissioners.

Section 106.6.3 Fee Refunds. Staff recommends keeping existing local **AMENDMENT** issuing not more than an 80% refund for permits in which no work has been done, or the permit has been withdrawn or cancelled prior to any plan review effort being expended.

Chapter 2 Definitions.

Added air makeup definition.

Chapter 3 General Regulations.

Section 303 Prohibited locations. Staff recommends keeping existing local **AMENDMENT** deleting Items 3 and 4 and renumbering Item 5 to Item 3.

Section 304.1 General appliances equipped with power burners shall be provided with combustion, ventilation, and dilution air in accordance with the appliance manufacturer's instructions.

Section 304.6 Two Permanent-opening Method. Section 304.6.1, Figure 304.6.1(1), Figure 304.6.1(2), Figure 304.6.2, Section 304.6.2 and Section 304.11. Staff recommends keeping all existing local **AMENDMENTS** which state combustion air shall not be drawn from the attic space.

Section 304.11 Combustion Air Ducts. Staff recommends keeping existing local **AMENDMENT** which states ducts shall not terminate in an attic space

Section 306.6 Guards. Added exception. Section coordinates with IMC.

Section 307.6 Condensate pumps. New section added. Section coordinates with IMC.

Section 308.2 Reduction table. Added text: "Shall utilize a reduced clearance protective assembly listed and labeled in accordance with UL1618".

Section 310 Electrical Bonding.

Section 310.1.1 CSST.

Section 310.1.1.1 Point of connection.

Section 310.1.1.2 Size and material of jumper.

Section 310.1.1.3 Bonding jumper length.

Section 310.1.1.4 Bonding connections.

Section 310.1.1.5 Connection devices.

Chapter 4 Gas Piping Installations

Section 403.3 Staff recommends keeping existing local **AMENDMENT** which states a listed LPG hose may be used with natural gas when used for temporary heating at a maximum length of 50 feet.

Section 403.6 Plastic pipe, tubing and fittings. PVC and CPVC pipe and fittings shall not be used to supply fuel gas.

Section 403.10.1.1 Staff recommends keeping existing local **AMENDMENT** which states gas supply systems with pressure 5 psig or greater and gas pipe joints 2 ½ inches or larger, regardless of pressure, shall be welded.

Section 403.10.4 Metallic Fittings. Staff recommends keeping existing local **AMENDMENT** which states threaded fittings in sizes 2 ½ inches or larger shall not be used except where approved.

Section 403.12 Flanges. Clarification

Section 403.12.1 Expanded.

Section 403.12.2

Section 403.12.3

Section 403.12.4

Section 403.13.1 Metallic gaskets. New standard.

Section 403.13.2 Non-metallic gaskets. New standard.

Section 404.18 Pipe Cleaning. New section added. Mr. Erickson stated that this section was added during a national disaster in which large power plants were using methods to clean pipes in which fatalities occurred.

Section 406.4 Test pressure measurement. Staff recommends keeping existing local **AMENDMENT** which states dial gauges used to measure test pressures shall be performed with gauges of 2 psi incrimination or less and have a range not exceeding 100 psi unless otherwise approved.

Section 406.4.1 Test pressure. Staff recommends keeping existing local **AMENDMENT** which states test pressure to be used shall be no less than 1 ½ times the proposed maximum working pressure, but not less than 25 psig irrespective of design pressure.

Section 408.2 Drips. Staff recommends keeping existing local **AMENDMENT** which states where wet gas exists, a drip shall be provided at any point in the line of pipe where condensate could collect.

Section 410 Flow Controls.

Section 410.2 MP Regulators. Item 7 was added.

Section 411 Appliance and Manufactured Home Connections.

Section 411.1 Connecting appliances. Item 8 was added.

Section 411.1.1 Commercial cooking appliance

Section 411.2 Manufactured Home Connections. Staff recommends keeping existing local **AMENDMENT** which states manufactured homes shall be connected to the distribution piping system by listed and labeled connectors in compliance with ANSI Z21.75/CAS 6.27 and installed in accordance with the manufacturer's installation instructions.

Section 411.1.4 Movable Appliances. New standard added. Tethering.

Section 412.6 Location.

Section 412.7 Additional requirements for LP gas dispensers and equipment. Language is the same. Text added: "shall be protected in accordance with Section 312 of the International Fire Code".

Section 415.1 Interval of Support. Staff recommends keeping existing local **AMENDMENT** adding to the requirements of Table 415.1, piping and tubing shall be supported within 2 feet of every bend or angle.

Section 416.1 Overpressure Protection Device. Section reworded.

Section 416.3 Device Maintenance. Language is the same.

Chapter 5 Chimney and Vents

Section 501.8 Staff recommends keeping existing local **AMENDMENT** removing unvented appliances.

Section 501.12 Staff recommends keeping existing local **AMENDMENT** which states flue liners must comply with ASTM C 315 or equivalent.

Section 502.7.1 Door Swing.

Section 503.4.1 Plastic piping. New section added.

Section 503.5.3 Masonry Chimneys. Staff recommends keeping existing local **AMENDMENT** which states masonry chimneys shall be built and installed in accordance with NFPA 211 and shall be lined as per Section 501.12.

Section 503.5.6.1 Chimney Lining. Staff recommends keeping existing local **AMENDMENT** which states chimneys shall be lined in accordance with NFPA 211 and Section 501.12. Text was added to exception: “when, in more than one appliance venting system the secondary appliance, such as a water heater, is replaced and the primary heating appliance remains.

Section 503.6.9.3 Category II, III and IV Appliances. Manufacturer has to list what kind of PVC pipe is used in addition to installation instructions.

Section 503.8 Venting system termination location. Item 5 was added.

Chapter 6 Specific Appliances

Section 614.5 Dryer Exhaust Duct Power Ventilators. Added new section.

Section 614.8.2 Duct Installation. Staff recommends deleting text: “ducts shall not be joined with screws”.

Section 612.8.4.3 Dryer Exhaust Duct Power Ventilator Length.

Section 621.1 Staff recommends keeping existing local **AMENDMENT** deleting this section as it applies to unvented room heaters.

Section 623.2 Prohibited Locations. Added exception.

Chapter 7

No Changes.

Chapter 8

No Changes.

Respectfully submitted,

Ron C. Strand
Board Secretary