09/22/21

### 1.1 Minnesota Plumbing Board

### 1.2 **Proposed Permanent Rules Adopting Updates to the Minnesota Plumbing Code**

- 1.3 4714.0609 INSTALLATION, TESTING, UNIONS, AND LOCATION.
- 1.4

[For text of subparts 1 to 3, see Minnesota Rules]

1.5 Subp. 4. Section 609. UPC section 609 is amended by adding the following subsection
609.11 is amended to read as follows:

1.7 609.12 609.11 Water Meters. Water meters shall be located in an approved location inside
a building as close as possible to the point of entrance of the potable water supply pipe,
installed at least 12 inches above the finished floor, and readily accessible. All water meter
installations shall be rigidly supported with a permanent support in order to prevent the
meter from vibrating when the water is passing through it.

Exceptions: Where installation inside a building is not possible, the water meter may be installed in an enclosed structure not subject to flooding, high groundwater, or surface drainage runoff, provided the meter is protected from freezing. Provisions shall be made to install the meters above grade when possible. When installed below grade, the top of the structure shall be located at least 12 inches above the finished grade, be secured, and be accessible. This structure shall not be connected to any storm or sanitary sewer system.

## 1.19 **4714.0712 TESTING.**

1.20

# [For text of subpart 1, see Minnesota Rules]

1.21 Subp. 2. Section 712. UPC section 712 is amended by adding subsections to read as1.22 follows:

1.23 **712.4 Negative Test.** Concrete manholes and sewer lines shall be tested by negative pressure

1.24 in accordance with ASTM Standards C1214-19 and C1244-17 or the Hydrostatic Test

1.25 Method in section <del>1107.2.3(B)</del> <u>1107.2(B)</u>.

4714.0712

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2.1	712.5 Finished Plumbing. After the plumbing fixtures have been set and their traps filled
2.2	with water, their connections shall be tested and proven gastight and watertight by plugging
2.3	the stack openings on the roof and the building drain where it leaves the building, and air
2.4	introduced into the system equal to the pressure of a 1 inch water column. Such pressure
2.5	shall remain constant for 15 minutes or the duration of the inspection without the introduction
2.6	of additional air.
2.7	712.6 Test Plugs or Caps. Test plugs or caps for roof terminals shall extend above or
2.8	outside the end of the vent pipe to provide a visible indication for removal after the test has
2.9	been completed.
2.10	4714.1107 TESTING.
2.11	Subpart 1. Section 1107.1. UPC section 1107.1 is amended to read as follows:
2.12	1107.1 Testing Required. Building storm drainage systems that are new and parts of existing
2.13	systems that have been altered, extended, or repaired shall be tested in accordance with

2.14 section 712 to disclose leaks and defects, except as provided in section  $\frac{1107.2.3}{1107.2}$ .

2.15 Any section of the building storm sewer that passes through contaminated soils or

2.16 contaminated water must be air tested in accordance with section 712.3.

- 2.17 Subp. 2. Subsection 1107.2.3 Section 1107.2. UPC subsection 1107.2.3 is section
  2.18 1107.2 and its subsections are amended to read as follows:
- 2.19 **1107.2.3 1107.2 Exceptions.**
- 2.20 (A) Testing is not required for:
- 2.21 (1) outside leaders;
- 2.22 (2) perforated or open drain tile; or

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3.1	(3) portions of storm drainage system and sewers that are located more than ten feet
3.2	from buildings, more than ten feet from buried water lines, and more than 50 feet from
3.3	water wells, and that do not pass through soil or water identified as being contaminated.
3.4	(B) Building storm sewers shall be tested in accordance with section 712 or the
3.5	Hydrostatic Test Method from the City Engineers Association of Minnesota. The
3.6	Hydrostatic Test Method, provisions E2 and E3, as specified in Standard Utilities
3.7	Specifications for Watermain and Service Line Installation and Sanitary Sewer and
3.8	Storm Sewer Installation, written and published by the City Engineers Association of
3.9	Minnesota, 2018 edition, is incorporated by reference, is not subject to frequent change,
3.10	and is available in the office of the commissioner of labor and industry.
3.11 4	714.1601 GENERAL.

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3.12

[For text of subpart 1, see State Register, volume 45, page 1007]

Subp. 2. Sections 1601.2 and 1601.3. UPC sections 1601.2 and 1601.3 are deleted 3.13

in their entirety. 3.14

#### Subp. 3. Table 1601.5. UPC Table 1601.5 is amended to read as follows: 3.15

TABLE 1601.5			
Minimum Alternate Water Source Testing, Inspection, and Maintenance Frequency			
Description	Minimum Frequency		
Inspect and clean filters and screens, and replace.	Every three months.		
Inspect and verify that required disinfection, filters, and water quality treatment devices and systems are operational and maintaining minimum water quality requirements in Table 1602.9.6.	After initial installation and monthly thereafter. Exception: Every 12 months thereafter when electronically monitored.		
Inspect and clear debris from rainwater gutters, downspouts, and roof washers.	At the beginning of seasonal usage and monthly during seasonal usage.		

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Inspect and clear debris from roof or other aboveground	<u>v                                </u>	
rainwater collection surfaces.	and monthly during seasonal	
	usage.	
Remove tree branches and vegetation overhanging roof	As needed.	
r other aboveground rainwater collection surfaces.		
Inspect pumps and verify operation.	After initial installation and every	
	12 months thereafter.	
Inspect valves and verify operation.	After initial installation and every	
	12 months thereafter.	
Inspect pressure tanks and verify operation.	After initial installation and every	
	12 months thereafter.	
Clear debris from and inspect storage tanks and locking		
devices and verify operation.	12 months thereafter.	
Inspect caution labels and marking.	After initial installation and every	
	12 months thereafter.	
Cross-connection inspection and test.*	After initial installation and	
	thereafter in accordance with	
	Section 1602.5.	
*The cross-connection inspection and test shall be perfor	med in accordance with this chapter	
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by a plumber licensed under Minnesota Statutes, sectio	ii 520B.40, and certified to ASSE	
Standard 5120.		
Subp. 4. Section 1601.7. UPC section 1601.7 is a	mended to read as follows:	
Subp. 4. Section 1001.7. OFC section 1001.7 is a	intended to read as follows.	
1601.7 Minimum Water Quality Requirements. The m	ninimum water quality for rainwater	
catchment systems shall comply with the applicable wa	ter quality requirements for the	
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ntended application as determined by the Authority Ha		
nonpotable rainwater catchment systems shall comply	with section 1602.9.6.	
Subp. 2. 5. Section 1601.11. UPC section 1601.1	1 is amended to read as follows:	
1601.11 Abandonment. All rainwater catchment system	ms that are no longer in use and fai	
to be maintained in accordance with section 1601.5 shall be considered abandoned.		
Abandoned rainwater catchment systems are subject to sections 1601.11.1 and 1601.11.2		
Adangoned rainwater calchment systems are subject to	sections 1001.11.1 and 1001.11.2.	

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5.1 1601.11.1 General. Every abandoned rainwater catchment system or part thereof
5.2 covered under the scope of this chapter, as amended in this code, shall be disconnected
5.3 from any remaining systems and drained, plugged, and capped per the requirements
5.4 of this code. Storm drainage systems of abandoned rainwater catchment systems must
5.5 comply with chapter 11, Storm Drainage, as amended.

5.6 1601.11.2 Underground Tank. Every underground water storage tank that has been
5.7 abandoned or otherwise discontinued from use in a rainwater catchment system covered
5.8 under the scope of this chapter, as amended in this code, shall be completely drained
5.9 and filled with earth, sand, gravel, or concrete or removed in a manner approved by
5.10 the administrative authority.

# 5.11 4714.1602 NONPOTABLE RAINWATER CATCHMENT SYSTEMS.

5.12

[For text of subparts 1 to 6, see Minnesota Rules]

5.13 Subp. 6a. Subsection 1602.9.4. UPC subsection 1602.9.4 is deleted in its entirety.

5.14

[For text of subparts 7 and 8, see Minnesota Rules]

### 5.15 4714.1701 REFERENCED STANDARDS.

5.16

Subpart 1. Table 1701.1. UPC Table 1701.1 is modified to add the following:

5.17 5.18	STANDARD NUMBER	STANDARD TITLE	APPLICATION	REFERENCED SECTIONS
5.19 5.20 5.21	ASSE 1084-2018	Water Heaters with Temperature Limiting Capacity	11	407.3, 409.4, 410.3
5.22 5.23 5.24	ASSE 1085-2018	Water Heaters for Emergency Equipment	Appliances	416.2
5.25 5.26 5.27	ASTM Standards C1214-19	Concrete Pipe Sewerlines by Negative Air Pressure		712.4

	(Vacuum) Test Method		
ASTM Standards C1244-17	Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill		712.4
CSA B125.3-2018	Plumbing Fittings	Fittings	409.4, 410.3
Hydrostatic Test Method (City Engineers Association of Minnesota) - 2018		Storm Drainage	1107.2.3(B) 1107.2(B)

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Subp. 2. <u>Table 1701.1.</u> UPC Table 1701.1 is modified by amending the following:

STANDARD NUMBER	STANDARD TITLE	APPLICATION	REFERENCED SECTIONS
ASME A112.3.1-2007	Stainless Steel Drainage Systems for Sanitary DWV, Storm, and Vacuum Applications, Above- and Below-Ground	<u>Piping</u>	<u>418.1, 423.1, Table</u> 701.2, 705.7.2, 1102.1
ASME A112.6.3-2001	Floor and Trench Drains	Fixtures	418.1, 423.1
ASME A112.6.9-2005	Siphonic Roof Drains	DWV Components	1106.2.3, 1106.2.8
ASME A112.18.1 - 2018 / CSA B125.1 - 2018	Plumbing Supply Fittings	Fittings	408.3, 417.1, 417.2, 417.3, 417.4, 417.6, 603.5.19
ASPE Standard 45	Siphonic Roof Drainage	Roof Drainage	1106.2.2 1106.2.5, 1106.2.9, 1106.3.1, 1106.3.2
ASSE 1023-2019	Electrically Heated or Cooled Water Dispensers	Appliances	417.6

7.1 7.2 7.3	NSF 14-2016	Plastics Piping System Components and Related Materials	Miscellaneous	301.2.3, 604.1, 611.3
7.4 7.5	NSF 42-2015	Drinking Water Treatment Units - Aesthetic Effects	Appliances	<u>611.1, 611.3</u>
7.6 7.7	NSF 44-2015	Residential Cation Exchange Water Softeners	Appliances	<u>611.1, 611.3</u>
7.8 7.9	NSF 53-2015	Drinking Water Treatment Units - Health Effects	Appliances	<u>611.1, 611.3</u>
7.10 7.11	NSF 55-2016	Ultraviolet Microbiological Water Treatment Systems	Appliances	<u>611.1, 611.3</u>
7.12 7.13	NSF 58-2015	Reverse Osmosis Drinking Water Treatment Systems	Appliances	611.1, 611.2, 611.3
7.14 7.15 7.16	NSF 61-2016	Drinking Water System Components - Health Effects	Miscellaneous	<u>415.1, 417.1, 604.1,</u> <u>604.9, 606.1, 607.2,</u> <u>608.2, 611.1.1</u>
7.17 7.18	NSF 62-2015	Drinking Water Distillation Systems	Appliances	<u>611.1, 611.3</u>

# 7.19 Unless amended above, all other entries in UPC Table 1701.1 are not amended.

7.20

[For text of subparts 3 and 4, see Minnesota Rules]

# 7.21 **EFFECTIVE DATE.** These amendments are effective December 17, 2021, or five working

- 7.22 days after publication of the amendments' notice of adoption in the State Register, whichever
- 7.23 <u>is later.</u>