			Ad Hoc Co	ode Review and Rulemaking Committee 2024 UPC Rec	ommend	ations to the Board	
				Chapter 5			
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of Committee review	Plumbing Board action/comments	(A)ccept (R)eject (M)odify
1	501.1		Applicability	Recommendation - Keep as shown in the 2024 UPC with the following revisions: 501.1 Applicability. The regulations of this chapter shall govern the construction, location, and installation of fuel-burning and other types of water heaters heating potable water, together with chimneys, vents, and their connectors. The minimum capacity for storage water heaters shall be in accordance with the first-hour rating listed in Table 501.1(2). A list of accepted water heater appliance standards is referenced in Table 501.1(1). Listed appliances shall be installed in accordance with the manufacturer's installation instructions. Unlisted water heaters shall be permitted in accordance with Section 504.3.2. Water heaters shall be installed and sized in accordance with the manufacturer's installation instructions. The final installation shall be approved by the Authority Having Jurisdiction.	4.3.2024		
2	Tabel 501.1(2)	PB0180	First Hour Rating	Recommendation - Do not accept RFA PB0180. The gallon per hour rate doesn't appear to be adequate to determine the appropriate size. The submitter can resubmit their RFA if they would like to provide different information regarding instantaneous water heaters. The gallon per hour rate doesn't appear to be adequate to determine the appropriate size.	11.6.2024		
3	502.1		General	Recommendation - Keep as shown in the 2024 UPC	4.3.2024		
4	503.0		Inspection	Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety).	4.3.2024		
5	503.1		Inspection of Chimneys and Vents.	Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety).	4.3.2024		
6	503.2		Final Water Heater Inspection	Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety).	4.3.2024		
7	504.0		Water Heater Requirements	Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety).	4.3.2024		
8	504.1		Location	Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety).	4.3.2024		
9	504.1.1		Self Closing Doors	Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety).	4.3.2024		
10	504.1.2		Gasketing	Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety).	4.3.2024		
11	504.2		Vent	Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety).	4.3.2024		
12	504.3		Clearance	Recommendation - Keep as shown in the 2024 UPC as follows: 504.3 Clearance. The clearance requirements for water heaters shall comply with Section 504.3.1 or Section 504.3.2.	4.3.2024		
13	504.3.1		Listed Water Heaters	Recommendation - Keep as shown in the 2024 UPC as follows: 504.3.1 Listed Water Heaters. The clearances shall not be such as to interfere with combustion air, draft hood clearance and relief, and accessibility for servicing. Listed water heaters shall be installed in accordance with their listings and the manufacturer's installation instructions.	4.3.2024		

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 5 Rules affected** Line # RFA No. **Brief Title** Proposal and Committee recommendation Date of Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify 504.6 14 Recommendation - Leave as amended in the 2020 MPC as follows: 504.6 Temperature, 4.3.2024 Temperature, Pressure, and Vacuum Relief Pressure, and Vacuum Relief Devices. The installation of temperature, pressure, and vacuum Devices. relief devices, or combinations thereof, shall be installed in accordance with the terms of their listings and the manufacturer's installation instructions. A shutoff valve shall not be placed between the relief valve and the water heater or on discharge pipes between the valves and the atmosphere. The hourly British thermal units (Btu) (kW•h) discharge capacity or the rated steam relief capacity of the device shall be not less than the input rating of the water heater. Discharge piping shall be installed in accordance with Section 608.5. 15 504.7 Lead Content Recommendation - Keep as shown in the 2024 UPC as follows (new): 504.7 Lead Content. 4.3.2024 Water heaters shall comply with the lead content requirements of Section 604.2. 506.0 Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 16 Air For Combusiton and Venilation 17 507.2 4.3.2024 **Sesimic Provisions** Recommendation - Leave as amended in the 2020 MPC with the following revision: 507.2 Seismic Provisions. In seismic design categories C, D, E, and F, wWater heaters shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third and lower one-third of its vertical dimensions. At the lower point, a distance of not less than 4 inches (102 mm) shall be maintained from the controls with the strapping. 18 507.6 Added or Converted Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 Equipment or Appliances 19 507.7 Type of Gases Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 20 507.8 Safety Shuttoff Devices Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 for Unllister LP-Gas **Applianes Used Indoors** 21 507.9 Use of Air or Oxygen Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 Under Pressure. 22 Protection of Gas 507.10 Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 **Appliances From Fumes** or Gases other than Products of Cumbustion. 23 507.11 4.3.2024 Process Air Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 507.12 Flammable Vapors. Recommendation - Keep as shown in the 2024 UPC with the following revision: 507.12 4.3.2024 Flammable Vapors. Appliances shall not be installed in areas where the open use, handling, or dispensing of flammable liquids occurs, unless the design, operation, or installation reduces the potential of ignition of the flammable vapors. Appliances installed in compliance with Section 507.13 through Section 507.15 shall be considered to comply with the intent of this provision. [NFPA 54:9.1.9] 25 507.14.1 Recommendation - Delete in its entirety. 507.14.1 Parking Structures. Appliances installed in 4.3.2024 Parking Structures. enclosed, basement, and underground parking structures shall be installed in accordance with NFPA 88A. [NFPA 54:9.1.11.1]

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 5** Line # **Rules affected** RFA No. **Brief Title** Proposal and Committee recommendation Date of Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify 26 507.14.2 Recommendation - Delete in its entirety. 507.14.2 Repair Garages. Appliances installed in repair 4.3.2024 **Repair Garages** garages shall be installed in accordance with NFPA 30A. [NFPA 54:9.1.11.2] 27 507.15 Installation in Aircraft Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 Hangers. 28 507.16 Venting of Flue Gases. Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety) 4.3.2024 Extra Device or 29 507.17 Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 Attachment. 507.18 Addition of Existing Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 30 System. 31 4.3.2024 507.19 Avoiding Stain on Gas Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). piping. 32 507.20 Gas Appliance Pressure Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 Regulatiors. 33 2020 MPC: 507.21 2020 MPC: Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 507.21 Venting of Gas Appliance Pressure Regulators. 34 507.21UPC Bleed Lines for Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). 4.3.2024 Diaphragm-Type Valves. 507.22 UPC 4.3.2024 35 Combination of Recommendation - Leave as amended in the 2020 MPC (Deleted in its entirety). Appliances and Equipment. 36 507.26 Clearance to Combustible Recommendation - Keep as shown in the 2024 UPC with the following revision: 507.26 4.3.2024 Materials. Clearance to Combustible Materials. Appliances and their vent connectors shall be installed with clearances from combustible material so their operation does not create a hazard to persons or property. Minimum clearances between combustible walls and the back and sides of various conventional types of appliances and their vent connectors are specified in the Minnesota Fuel Gas Code Section 509.0. [NFPA 54:9.2.2] 37 508.1 General Recommendation - Delete in its entirety. 508.1 General. Appliances on roofs shall be designed 4.3.2024 or enclosed so as to withstand climatic conditions in the area in which they are installed. Where enclosures are provided, each enclosure shall permit easy entry and movement, shall be of reasonable height, and shall have at least a 30 inch (762 mm) clearance between the entire service access panel(s) of the appliance, and the wall of the enclosure. [NFPA 54:9.4.1.1] 38 508.2 Installation of Appliances Recommendation - Delete in its entirety. 508.2 Installation of Appliances on Roofs. Appliances 4.3.2024 on Roofs. shall be installed in accordance with the manufacturer's installation instructions. [NFPA 54:9.4.2.1] 508.3 Recommendation - Delete in its entirety. 508.3 Appliances on Roofs. Appliances located on 4.3.2024 39 Appliances on Roofs. roofs or other elevated locations shall be accessible. [NFPA 54:9.4.3.1] 40 509.0 Recommendation - Delete in its entirety. 509.0 Venting of Appliances. 4.3.2024 **Venting of Appliances**

	Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board									
	Chapter 5									
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of	Plumbing Board action/comments	(A)ccept			
					Committee		(R)eject			
					review		(M)odify			
41	510.0		Sizing of Category I	Recommendation - Delete in its entirety. 510.0 Sizing of Category I Venting Systems.	4.3.2024					
			Venting Systems.							

	Chapter 3 (Reep 2024 OFC)										
	Rules		Proposal and				Date of		(A)ccept (R)eject		
Line #	affected	Brief Title		2024 UPC	2020 MPC 4714			Plumbing Board Action/ comments	(M)odify		
			recommendation	-			review		() (
1	501	General		501.0 General.	501.0 General.	TRUE	<u>4.3.2024</u>				
2	Tabel 501.1(1)	Water Heaters	Keep as shown in 2024 UPC			TRUE	4.3.2024				
3	502.0	Permits	Keep as shown in 2024 UPC	502.0 Permits.	502.0 Permits.	TRUE	4.3.2024				
4	504.3.2	Unlisted Water Heaters	Keep as shown in 2024 UPC	504.3.2 Unlisted Water Heaters. Except as otherwise permitted in this code, unlisted water heaters shall be approved by the Authority Having Jurisdiction prior to being installed. Clearance for unlisted water heaters shall be not less than 12 inches (305 mm) on all sides. Combustible floors under unlisted water heaters shall be protected in an approved manner. {NFPA 54-2018:10.27.2.2}	504.3.2 Unlisted Water Heaters. Unlisted water heaters shall be installed with a clearance of 12 inches (305 mm) on all sides and rear. Combustible floors under unlisted water heaters shall be protected in an approved manner. [NFPA 54:10.27.2.2]	FALSE	4.3.2024				
5	504.4	Pressure Limiting Devices	Keep as shown in 2024 UPC	504.4 Pressure-Limiting Devices. A water heater installation shall be provided with overpressure protection using an approved, listed device installed in accordance with the terms of its listing and the manufacturer's installation instructions. Pressure relief devices shall have a pressure setting greater than the water service pressure and not exceed 150 psi (1034 kPa) as required in Section 608.4.	504.4 Pressure-Limiting Devices. A water heater installation shall be provided with overpressure protection using an approved, listed device installed in accordance with the terms of its listing and the manufacturer's installation instructions.	FALSE	4.3.2024				
6	504.5	Temperature Limiting Devices	Keep as shown in 2024 UPC	504.5 Temperature Limiting Devices. A water heater installation or a hot water storage vessel installation shall be provided with overtemperature protection by means of an approved, listed device installed in accordance with the terms of its listing and the manufacturer's installation instructions. {NFPA 54:10.26.5}	504.5 Temperature-Limiting Devices. A water heater installation or a hot water storage vessel installation shall be provided with overtemperature protection by means of an approved, listed device installed in accordance with the terms of its listing and the manufacturer's installation instructions.	FALSE	4.3.2024				
7	505.0	Oil-Buurning	Keep as shown in 2024 UPC	505.0 Oil-Burning and Other Water Heaters.	505.0 Oil-Burning and Other Water Heaters.	TRUE	4.3.2024				

	Chapter 5 (Keep 2024 UPC)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of Committee review	Plumbing Board Action/ comments	(A)ccept (R)eject (M)odify		
8	505.1	Water Heaters	Keep as shown in 2024 UPC	505.1 Water Heaters. Water heaters deriving heat from fuels or types of energy other than gas shall comply with the standards referenced in Table 501.1(1), Section 505.3, or Section 505.4. Vents or chimneys for such appliances shall be of approved types. An adequate supply of air for combustion and for adequate ventilation of heater rooms or compartments shall be provided. Each such appliance shall be installed in a location approved by the Authority Having Jurisdiction and local and state fire-prevention agencies.	from fuels or types of energy other than gas shall comply with the standards referenced in Table 501.1(1), Section 505.3, or Section 505.4. Vents or chimneys for such appliances shall be of approved types. An adequate supply of air for combustion and for adequate ventilation of heater rooms or compartments shall be provided. Each such appliance shall be installed in alocation approved by the Authority Having Jurisdiction and local and state fire-prevention agencies.	FALSE	4.3.2024				
9	505.2	Safety Devices	Keep as shown in	505.2 Safety Devices. Storage-type water heaters and hot water boilers deriving heat from fuels or types of energy other than gas, shall be provided with, in addition to the primary temperature controls, an over-temperature safety protection device that complies with and is installed in accordance with nationally recognized applicable standards for such devices and a combination temperature and pressure-relief valve.	505.2 Safety Devices. Storage-type water heaters and hot water boilers deriving heat from fuels or types of energy other than gas, shall be provided with, in addition to the primary temperature controls, an over-temperature safety protection device that complies with and is installed in accordance with nationally recognized applicable standards for such devices and a combination temperature and pressure-relief valve.	TRUE	4.3.2024				
10	505.3	Oil-fired Water Heaters	Keep as shown in 2024 UPC	505.3 Oil-Fired Water Heaters. Oil-fired water heaters shall be installed in accordance with NFPA 31.	505.3 Oil-Fired Water Heaters . Oil-fired water heaters shall be installed in accordance with NFPA 31.	TRUE	4.3.2024				
11	505.4	Indirect-Fired Water Heaters	Keen as shown in	505.4 Indirect-Fired Water Heaters. Indirect-fired water heaters shall be in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code or shall comply with one of the other applicable standards shown in Table 501.1(1). Each water heater shall bear a label in accordance with ASME requirements, or an approved testing agency, certifying and attesting that such an appliance has been tested, inspected and meets the requirements of the applicable standards or code.	505.4 Indirect-Fired Water Heaters. Indirect-fired water heaters shall be in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code or shall comply with one of the other applicable standards shown in Table 501.1(1). Each water heater shall bear a label in accordance with ASME requirements, or an approved testing agency, certifying and attesting that such an appliance has been tested, inspected and meets the requirements of the applicable standards or code.	TRUE	4.3.2024				
12	505.4.1	Single-Wall Heat Exchangers		505.4.1 Single-Wall Heat Exchanger. An indirectfired water heater that incorporates a single-wall heat exchanger shall be in accordance with the following requirements:		FALSE	4.3.2024				

	Chapter 5 (Reep 2024 of c)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of Committee review	Plumbing Board Action/ comments	(A)ccept (R)eject (M)odify		
13				(1) The heat transfer medium shall be either potable water or contain fluids recognized as safe by the Food and Drug Administration (FDA) as food grade.	N/A	FALSE	4.3.2024				
14				 (2) Bear a label with the word "Caution," followed by the following statements: (a) The heat-transfer medium shall be potable water or other nontoxic fluid recognized as safe by the FDA. (b) The maximum operating pressure of the heat exchanger shall not exceed the maximum operating pressure of the potable water supply. 	N/A	FALSE	4.3.2024				
15				(3) The word "Caution" and the statements in letters shall have an uppercase height of not less than 0.120 of an inch (3.048 mm). The vertical spacing between lines of type shall be not less than 0.046 of an inch (1.168 mm). Lowercase letters shall be compatible with the uppercase letter size specification.	N/A	FALSE	4.3.2024				
16	507.0	Appliance and Equipment Installation Requirements	17	507.0 Appliance and Equipment Installation Requirements.	507.0 Appliance and Equipment Installation Requirements.	FALSE	4.3.2024				
17	507.1	Dielectric Insulator.		507.1 Dielectric Insulator. The Authority Having Jurisdiction shall have the authority to require the use of an approved dielectric insulator on the water piping connections of water heaters and related water heating appliances.	507.1 Dielectric Insulator. The Authority Having Jurisdiction shall have the authority to require the use of an approved dielectric insulator on the water piping connections of water heaters and related water heating appliances.	TRUE	4.3.2024				
18	507.3	Appliance Support	Keep as shown in 2024 UPC	507.3 Appliance Support. Appliances and equipment shall be furnished either with load distributing bases or with a sufficient number of supports to prevent damage to either the building structure or the appliance and the equipment. [NFPA 54:9.1.8.1]	507.3 Appliance Support. Appliances and equipment shall be furnished either with load-distributing bases or with a sufficient number of supports to prevent damage to either the building structure or the appliance and the equipment. [NFPA 54:9.1.8.1]	FALSE	4.3.2024				

	Chapter 3 (Reep 2024 OFC)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of Committee review	Plumbing Board Action/ comments	(A)ccept (R)eject (M)odify		
19	507.3.1	Structural Capacity	Keep as shown in 2024 UPC	507.3.1 Structural Capacity. At the locations selected for installation of appliances and equipment, the dynamic and static load carrying capacities of the building structure shall be checked to determine whether they are adequate to carry the additional loads. The appliances and equipment shall be supported and shall be connected to the piping so as not to exert undue stress on the connections. [NFPA 54:9.1.8.2]	507.3.1 Structural Capacity. At the locations selected for installation of appliances and equipment, the dynamic and static load carrying capacities of the building structure shall be checked to determine whether they are adequate to carry the additional loads. The appliances and equipment shall be supported and shall be connected to the piping so as not to exert undue stress on the connections. [NFPA 54:9.1.8.2]	FALSE	4.3.2024				
20	507.4	Ground Support	Keep as shown in 2024 UPC	507.4 Ground Support. A water heater supported from the earth shall rest on level concrete or other approved base extending not less than 3 inches (76 mm) above the adjoining ground level.	507.4 Ground Support. A water heater supported from the earth shall rest on level concrete or other approved base extending not less than 3 inches (76 mm) above the adjoining ground level.	TRUE	4.3.2024				
21	507.5	Drainage Pan	Keep as shown in 2024 UPC	507.5 Drainage Pan. Where a water heater is located in an attic, in or on an attic ceiling assembly, floorceiling assembly, floor-subfloor assembly or where damage results from a leaking water heater, a watertight pan of corrosion-resistant materials shall be installed beneath the water heater in accordance with the following:	507.5 Drainage Pan. Where a water heater is located in an attic, in or on an attic ceiling assembly, floor-ceiling assembly, or floor-subfloor assembly where damage results from a leaking water heater, a watertight pan of corrosion-esistant materials shall be installed beneath the water heater with not less than 3/4 of an inch (20 mm) diameter drain to an approved location. Such pan shall be not less than 1 1/2 inches (38 mm) in depth. [Note: Relief Valve Discharge. See Section 608.5.]	FALSE	4.3.2024				
22				(1) The drainage pan shall be provided with not less than 3/4 of an inch (20 mm) diameter drain to an approved location. The terminating end of the drainpipe shall be readily visible.		FALSE	4.3.2024				
23				(2) The drainage pan shall be not less than 1 1/2 inches (38mm) in depth.		FALSE	4.3.2024				
24				(3) Where a drainage pan pipe is installed, the material of the piping shall be rated for the temperature rating of the water heater and shall be approved for use with the liquid being discharged.		FALSE	4.3.2024				
25				(4) Discharge from a relief valve into a drainage pan shall be prohibited.		FALSE	4.3.2024				

	Chapter 5 (Keep 2024 UPC)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of Committee review	Plumbing Board Action/ comments	(A)ccept (R)eject (M)odify		
26	507.13	Installation in Residential Garages.	Keep as shown in 2024 UPC	507.13 Installation in Residential Garages. Appliances in residential garages and in adjacent spaces that open to the garage and are not part of the living space of a dwelling unit shall be installed so that all heating elements, switches, burners, and burner-ignition devices are located not less than 18 inches (457 mm) above the floor. Exception: Listed flammable vapor ignition resistant (FVIR) appliances. {NFPA 54:9.1.10.1}	507.13 Installation in Residential Garages. Appliances in residential garages and in adjacent spaces that open to the garage and are not part of the living space of a dwelling unit shall be installed so that all burners and burner-ignition devices are located not less than 18 inches (457 mm) above the floor unless listed as flammable vapor ignition resistant. [NFPA 54:9.1.10.1]	FALSE	4.3.2024				
27	507.13.1	Physical Damage.	Keep as shown in 2024 UPC	507.13.1 Physical Damage. Appliances installed in garages, warehouses, or other areas subject to mechanical damage shall be guarded against such damage by being installed behind protective barriers or by being elevated or located out of the normal path of vehicles.	507.13.1 Physical Damage. Appliances installed in garages, warehouses, or other areas subject to mechanical damage shall be guarded against such damage by being installed behind protective barriers or by being elevated or located out of the normal path of vehicles.	FALSE	4.3.2024				
28	507.13.2	Access from the Outside	Keep as shown in 2024 UPC	507.13.2 Access from the Outside. Where appliances are installed in a separate, enclosed space having access only from outside of the garage, such appliances shall be permitted to be installed at floor level, providing the required combustion air is taken from the exterior of the garage. [NFPA 54:9.1.10.3]	507.13.2 Access from the Outside. Where appliances are installed in a separate, enclosed space having access only from outside of the garage, such appliances shall be permitted to be installed at floor level, providing the required combustion air is taken from the exterior of the garage. [NFPA 54:9.1.10.3]	TRUE	4.3.2024				
29	507.23/4714	Installaiton Instructions.	2024 UPC	507.23 Installation Instructions. The installer shall conform to the appliance and equipment manufacturers' recommendations in completing an installation. The installer shall leave the manufacturers' installation, operating, and maintenance instructions on the premises. [NFPA 54:9.1.20]	507.24 Installation Instructions. The installing agency shall comply with the appliance and equipment manufacturer's installation instructions in completing an installation. The installing agency shall leave the manufacturer's installation, operating, and maintenance instructions in a location on the premises where they will be readily available for reference and guidance for the Authority Having Jurisdiction, service personnel, and the owner or operator. [NFPA 54:9.1.22]	FALSE	4.3.2024	Need Renumbering			

	Chapter 5 (Keep 2024 UPC)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of Committee review	IPILIMPING KOARD ACTION/ COMMENTS	(A)ccept (R)eject (M)odify		
30	507.24	Protection of Outdoor Appliances.	Keep as shown in 2024 UPC	507.24 Protection of Outdoor Appliances. Appliances not listed for outdoor installation but installed outdoors shall be provided with protection to the degree that the environment requires. Appliances listed for outdoor installation shall be permitted to be installed without protection in accordance with the manufacturer's installation instructions. [NFPA 54:9.1.21]	507.25 Protection of Outdoor Appliances. Appliances not listed for outdoor installation but installed outdoors shall be provided with protection to the degree that the environment requires. Appliances listed for outdoor installation shall be permitted to be installed without protection in accordance with the provisions of its listing and the manufacturer's installation instructions.	FALSE	4.3.2024	Need Renumbering			
31	507.25	Accesibility for Service.	Keep as shown in 2024 UPC	507.25 Accessibility for Service. All appliances shall be located with respect to building construction and other equipment so as to permit access for repair or replacement of the appliance. Clearance shall be maintained to permit removal of the appliance; cleaning of heating surfaces; the replacement of filters, blowers, motors, burners, controls, and vent connections; the lubrication of moving parts where necessary; the adjustment and cleaning of burners and pilots; and the proper functioning of explosion vents, if provided. For attic installation, the passageway and servicing area adjacent to the appliance shall be in accordance with Section 508.4. {NFPA 54:9.2.1} Unless otherwise specified, clearances of not less than 30 inches (762 mm) in depth, width, and height of working space shall be maintained.	507.26 Accessibility for Service. Appliances shall be located with respect to building construction and other equipment so as to permit access to the appliance. Sufficient clearance shall be maintained to permit cleaning of heating surfaces; the replacement of filters, blowers, motors, burners, controls, and vent connections; the lubrication of moving parts where necessary; the adjustment and cleaning of burners and pilots; and the proper functioning of explosion vents, where provided. For attic installation, the passageway and servicing area adjacent to the appliance shall be floored. [NFPA 54:9.2.1]	FALSE	4.3.2024	Need Renumbering			
32	508.4	Appliances in Attics and Under-Floor Spaces		508.4 Appliances in Attics and Under-Floor Spaces. An attic or under-floor space in which an appliance is installed shall be accessible through an opening and passageway larger than the largest component of the appliance, and not less than 22 inches by 30 inches (559 mm by 762 mm). {NFPA 54:9.5.1}	508.4 Appliances in Attics and Under-Floor Spaces. An attic or under-floor space in which an appliance is installed shall be accessible through an opening and passageway, not less than as large as the largest component of the appliance, and not less than 22 inches by 30 inches (559 mm by 762 mm).	FALSE	4.3.2024				

	Chapter 5 (Reep 2024 of e)									
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of Committee review	Plumbing Board Action/ comments	(A)ccept (R)eject (M)odify	
33	508.4.1	Length of Passageway.	Keep as shown in the 2024 UPC	508.4.1 Length of Passageway. Where the height of the passageway is less than 6 feet (1829 mm), the distance from the passageway access to the appliance shall not exceed 20 feet (6096 mm) measured along the centerline of the passageway. [NFPA 54:9.5.1.1] Where the height of the passageway is 6 feet (1829 mm) or more, the distance from the passageway access to the appliance shall not exceed 50 feet (15 240 mm) measured along the centerline of the passageway.	508.4.1 Length of Passageway. Where the height of the passageway is less than 6 feet (1829 mm), the distance from the passageway access to the appliance shall not exceed 20 feet (6096 mm) measured along the centerline of the passageway. [NFPA 54:9.5.1.1]	FALSE	4.3.2024			
34	508.4.2	Width of Passageway.	Keep as shown in the 2024 UPC	508.4.2 Width of Passageway. The passageway shall be unobstructed and shall have solid flooring not less than 24 inches (610 mm) wide from the entrance opening to the appliance. [NFPA 54:9.5.1.2]	508.4.2 Width of Passageway. The passageway shall be unobstructed and shall have solid flooring not less than 24 inches (610 mm) wide from the entrance opening to the appliance. [NFPA 54:9.5.1.2]	TRUE	4.3.2024			
35	508.4.3	Work Platform	Keep as shown in the 2024 UPC	508.4.3 Work Platform. A level working platform not less than 30 inches by 30 inches (762 mm by 762 mm) shall be provided in front of the service side of the appliance. [NFPA 54:9.5.2]	508.4.3 Work Platform. A level working platform not less than 30 inches by 30 inches (762 mm by 762 mm) shall be provided in front of the service side of the appliance. [NFPA 54:9.5.2]	TRUE	4.3.2024			
36	508.4.4	Lighting and Convenience Outlet.	Keep as shown in the 2024 UPC	508.4.4 Lighting and Convenience Outlet. A permanent 120 V receptacle outlet and a luminaire shall be installed near the appliance. The switch controlling the luminaire shall be located at the entrance to the passageway. [NFPA 54:9.5.3]	508.4.4 Lighting and Convenience Outlet. A permanent 120 V receptacle outlet and a lighting fixture shall be installed near the appliance. The switch controlling the lighting fixture shall be located at the entrance to the passageway. [NFPA 54:9.5.3]	FALSE	4.3.2024			

	Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board										
				Chapter 6							
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of Committee review	Plumbing Board action/comments	(A)ccept (R)eject (M)odify				
42	2020 MPC: 601.2.2	<u>PB0190</u>	Hot Water Circulation	Recommendation - Accept RFA PB0190 with the following revisions: 601 .2.2 Hot Water Recirculation Temperature Maintenance. Hot water supply systems in four-story buildings or higher, or buildings where the developed length of hot water piping from the source of hot water supply to the farthest fixture supplied exceeds 100 feet, shall be of the return circulation type. be provided with a temperature maintenance system. Where a temperature maintenance system is required, the volume of water contained by the piping from an individual fixture to it's connection to the piping that is part of the temperature maintenance system shall not exceed 1 gallon. The water contained in the piping between the fixture shutoff and the fixture shall not be included in the maximum volume calculation.	7.2.2025						
43	601.3.3	PB0182	Alternate Water Sources	Recommendation - Accept RFA PB0182 as presented. 601.3.3 Alternate Water Sources. Alternate water source systems shall have a purple (Pantone color No. 512, 522C, or equivalent) background with uppercase lettering and shall be field or factory marked as follows: (1) Gray water systems shall be marked in accordance with this section with the words "CAUTION: NON-POTABLE GRAY WATER, DO NOT DRINK" in black white letters. (2) Reclaimed (recycled) water systems shall be marked in accordance with this section with the words: "CAUTION: NONPOTABLE RECLAIMED (RECYCLED) WATER, DO NOT DRINK" in black white letters. (3) On-site treated water systems shall be marked in accordance with this section with the words: "CAUTION:ON-SITE TREATED NONPOTABLE WATER, DO NOT DRINK" in black white letters. (4) Rainwater catchment sytems shall be marked in accordance with this section with the words: "CAU-TION: NONPOTABLE RAINWATER WATER, DO NOT DRINK" in black white letters.	2.5.2025						
44	602.2		Cross-Contamination	Recommendation - Leave as amended in the 2020 MPC: 602.2 Cross-Contamination. Unless there is provided a backflow prevention device approved for the potential hazard and maintained in accordance with this code, no person shall make a connection or allow one to exist between pipes or conduits carrying domestic water supplied by a public or private building supply system, and (1) pipes, conduits, or fixtures containing or carrying water from any other source or containing or carrying water that has been used for any purpose whatsoever, or (2) any piping carrying chemicals, liquids, gases, or substances whatsoever. Each point of use shall be separately protected where potential cross-contamination of individual units exists. Water used for cooling or heating of equipment or other purposes shall not be returned to the potable water system. Such water shall be discharged into the drainage system through an airgapped indirect waste or other approved method of disposal.	4.3.2024						
45	602.4		Approval by Authority	Recommendation - Leave as amended in the 2020 MPC: 602.4 Approval by Authority. No water piping supplied by a private water supply system shall be connected to any other source of supply without the approval of the Authority Having Jurisdiction.	4.3.2024						

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 6 Rules affected** Line # RFA No. **Brief Title** Proposal and Committee recommendation Date of Plumbing Board action/comments (A)ccept Committee (R)eject (M)odify review 603.2 46 Recommendation - Leave as amended in the 2020 MPC: 603.2 Approval of Devices or 4.3.2024 Approval of Devices or Assemblies. Assemblies. Before a device or an assembly is installed for the prevention of backflow, it shall have first been approved. Devices or assemblies shall be tested in accordance with recognized standards or other approved standards. Backflow prevention devices and assemblies shall comply with Table 603.2, except for specific applications and provisions as stated in sections 603.5.1 lthrough 603.5.23. Devices or assemblies installed in a potable water supply system for protection against backflow shall be maintained in good working condition by the person or persons having control of such devices or assemblies. The devices or assemblies shall be tested at the time of installation, repair, or relocation and not less than on an annual schedule thereafter, or more often where required by the Authority Having Jurisdiction. Where found to be defective or inoperative, the device or assembly shall be repaired or replaced. No device or assembly shall be removed from use or relocated, or other device or assembly substituted, without the approval of the Authority Having Jurisdiction. Testing shall be performed by a certified backflow assembly Itester in accordance with ASSE Series 5000. 603.5.4 (.1.2) **Heat Exchangers** Recommendation - Keep as shown in the 2024 UPC: 603.5.4 Heat Exchangers. Heat exchangers 10.3.2024 lused for heat transfer, heat recovery, or solar heating shall protect the potable water system from being contaminated by the heat-transfer medium. Single-wall heat exchangers used in indirect-fired water heaters shall meet the requirements of Section 505.4.1. Double-wall heat exchangers shall separate the potable water from the heat-transfer medium by providing a space between the two walls that are vented to the atmosphere. 48 603.5.6 Protection from Lawn Recommendation - Keep as shown in the 2024 UPC: 7.2.2025 Sprinkler and Irregation Systems 49 603.5.14 PB0175 Protection from Fire Recommendation - Accept RFA PB0175 as presented. 603.5.14 Protection from Fire Systems. 11.6.2024 Systems Except as provided in Section 603.5.14.1 and Section 603.5.14.2, potable water supplies to fire protection systems that are normally under pressure, including but not limited to standpipes and automatic sprinkler systems, except in one or two-family or townhouse residential sprinkler systems with approval from the local water purveyor, piped in materials approved for potable water distribution systems shall be protected from backpressure and backsiphonage by one of the following testable devices: 50 603.5.17 **Potable Water Outlets** Recommendation - Leave as amended in the 2020 MPC: 603.5.17 Potable Water Outlets and 4.3.2024 and Valves Valves. Potable water outlets, freeze-proof yard hydrants, combination stop-and-waste valves, or other fixtures that incorporate a stop-and-waste feature that drains into the ground shall not be installed underground except for a freeze-proof yard hydrant that is located at least two feet above the water table and at least ten feet from any sewer or similar source of contamination. Dyalysis Water Systems | Recommendation - Keep as shown in the 2024 UPC with the following revisions: 603.5.18.1 12.4.2024 51 603.5.18.1 Dialysis and other non-potable Water Systems. The individual connections of the non-potable dialysis related equipment to the dialysis pure water system shall not require additional backflow protection.

			Ad Hoc Co	ode Review and Rulemaking Committee 2024 UPC Rec	ommend	ations to the Board	
				Chapter 6			
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of Committee review	Plumbing Board action/comments	(A)ccept (R)eject (M)odify
52	603.5.19		Garbage Can Wasshers	Recommendation - Keep as shown in the 2024 MPC (new): 603.5.19 Garbage Can Washers. Where garbage can washers are connected to a potable water supply system, the connection shall be protected against backflow in accordance with Table 603.2.	4.3.2024		
53	603.5.22; MN Plumbing Code 2020		Barometric Loop	Recommendation - Leave as amended in the 2020 MPC: 603.5.22 Barometric Loop. A barometric loop is an acceptable method of protection of water connections where an actual or potential backsiphonage hazard exists that is not subject to backpressure.	4.3.2024		
54	603.5.23.(1-4); MN Plumbing Code 2020			Recommendation - Leave as amended in the 2020 MPC: 603.5.23 Installation of Testable Backflow Prevention Assembly. Testable backflow prevention assemblies meeting ASSE Standard 1013, 1015, 1020, 1047, 1048, or 1056 shall be installed, tested, maintained, and removed in accordance with sections 603.5.23.1 through 603.5.23.4.	4.3.2024		
55				Recommendation - Leave as amended in the 2020 MPC with renumbering: 603.5.23.1 Notification of Installation. The administrative authority shall be notified before installation of a testable backflow prevention assembly. The public water supplier shall be notified of the installed testable backflow preventer assembly within 30 days following installation on a community public water system.	4.3.2024		
56				Recommendation - Leave as amended in the 2020 MPC with renumbering: 603.5.23.2 Testing and Maintenance. The installation of a testable backflow prevention assembly is permitted only when a periodic testing and inspection program conducted by qualified personnel is provided by an agency acceptable to the administrative authority. Inspection intervals shall not exceed one year. The administrative authority may require more frequent testing if deemed necessary to ensure protection of the potable water. A testable backflow prevention assembly shall be inspected after initial installation to ensure that it has been properly installed and that debris resulting from the piping installation has not interfered with the functioning of the assembly.	4.3.2024		
57				Recommendation - Leave as amended in the 2020 MPC with renumbering: 603.5.23.3 Inspection and Records. A test and inspection tag shall be affixed to the testable backflow prevention assembly. The tester shall date and sign the tag and include the tester's backflow prevention tester certification number. Written records of testing and maintenance shall be maintained and submitted to the administrative authority, and to the public water supplier, within 30 days of testing if installed on a community public water system.	4.3.2024		
58				Recommendation - Leave as amended in the 2020 MPC with renumbering: 603.5.23.4 Notification of Removal. The Authority Having Jurisdiction, in addition to the public water supplier, shall be notified within 30 days following removal of a testable backflow prevention assembly from a community public water system.	4.3.2024		
59	Tabel 604.1	<u>PB0205</u>		Recommendation - Do not accept RFA PB0205, keep Table 601.1 as shown in the 2024 UPC. While the Committee recognizes that PVC may be appropriate in specific applications, it should be proposed as an alternate, accompanied by supporting documentation from the manufacturer.	7.2.2025		

			Ad Hoc C	ode Review and Rulemaking Committee 2024 UPC Rec	commend	ations to the Board	
				Chapter 6			
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of Committee review	Plumbing Board action/comments	(A)ccept (R)eject (M)odify
60	604.1.1	<u>PB0197</u>	Building Supply	Recommendation - Adopt RFA PB0197 as presented. 604.1.1 Building Supply Pipe and Fittings. Plastic piping designated for building supply purposes only may be utilized up to the water meter or pressure tank, as long as no more than 3 feet of the pipe remains exposed within the building. Particular care shall be taken to avoid sharp edges in contact with the pipe and to provide for expansion and contraction. Plastic pipe must be installed in accordance with the manufacturer's installation instructions.	6.4.2025		
61	604.5		Flexible Connectors	Recommendation - Leave as amended in the 2020 MPC: 604.5 Flexible Connectors. Flexible water connectors shall be installed in readily accessible locations, and where under continuous pressure shall comply with ASME A112.18.6/CSA B125.6. Flexible water connectors with an excess flow shutoff device shall comply with CSA B125.5/IAPMO Z600.	4.30.2024		
62	604.10.2	<u>PB0194</u>	Piping In Plenums	Recommendation - Adopt RFA PB0194 as amended at meeting: 604.10.2 Piping in Plenums. Plastic piping and tubing installed in plenums shall comply with Chapter 6 of the Minnesota Mechanical and Fuel Gas Code.	<u>3.5.2025</u>		
63	606.9	<u>PB0200</u>	Building Valve	Recommendation - Adopt RFA PB0200 as presented. 606.9 Building Valve. A full-way main control valve located inside the building near the point that the building supply enters the building.	6.4.2025		
64	607.4		Venting.	Recommendation - Leave as amended in the 2020 MPC and renumber. 607.3 Venting. Tanks used for potable water shall be tightly covered and vented in accordance with manufacturer's installation instructions. Such vent shall open downward and be screened with a corrosion-resistant material of not less than number 24 mesh. The vent opening shall not be located in an environment that can contaminate the water supply.	4.30.2024		
65	607.5		Overflow.	Recommendation - Leave as amended in the 2020 MPC and renumber. 607.5 Valves. Pressurized tanks shall be provided with a listed pressure-relief valve installed in accordance with the manufacturer's installation instructions. The relief valve shall be discharged in accordance with Section 608.5. Where a potable water supply tank is located above the fixtures, appliances, or system components it serves, it shall be equipped with a vacuum relief valve that complies with CSA Z21.22.	4.30.2024		

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board												
Chapter 6												
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of Committee review	Plumbing Board action/comments	(A)ccept (R)eject (M)odify					
66	608.5		Discharge Piping.	Recommendation - Keep as shown in the 2024 UPC with a revision to item 3, strike item 8, as follows. The discharge piping serving a temperature relief valve, pressure relief valve, or combination of both shall have no valv s, obstructions, or means of isolation and be provided with the following: (1) Not less than the size of the valve outlet and shall discharge full size to the flood level of the area receiving the discharge and pointing down. (2) Materials shall be rated at not less than the operating temperature of the system and approved for such use or shall comply with ASME A112.4.1. (3) Discharge pipe shall discharge independently by gravity through an air gap into the drainage system or outside of the building with the end of the pipe not exceeding 2 feet (610 mm) and not less than 6 inches (152 mm) above the ground and pointing downwards. (3) Discharge independently by gravity through an air gap to a safe place of disposal or within 18 inches of the floor. Relief valve drains shall not terminate in a building's crawl space; (4) Discharge in such a manner that does not cause personal injury or structural damage. (5) No part of such discharge pipe shall be trapped or subject to freezing. (6) The terminal end of the pipe shall not be threaded. (7) Discharge from a relief valve into a water heater pan shall be prohibited. (8) The discharge termination point shall be readily observable.	4.30.2024							
67	609.1		Installation.	Recommendation - Leave as amended in the 2020 MPC. 609.1 Installation. Water piping shall be adequately supported in accordance with Table 313.3. Burred ends shall be reamed to the full bore of the pipe or tube. Changes in directions shall be made by the appropriate use of fittings, except that changes in direction in copper or copper alloy tubing shall be permitted to be made with bends, provided that such bends are made with bending equipment that does not deform or create a loss in the cross-sectional area of the tubing. Changes in direction are allowed with flexible pipe and tubing without fittings in accordance with the manufacturer's instructions. Provisions shall be made for expansion in hotwater piping. Piping, equipment, appurtenances, and devices shall be installed in a workmanlike manner in accordance with the provisions and intent of this code. Building supply and yard piping shall be located not less than 12 inches (305 mm) below the maximum local frost depth, in accordance with Section 312.6, or an alternative approved by the Authority Having Jurisdiction. The cover shall be not less than 12 inches (305 mm) below finish grade.								
68	609.6.1		Water Supply Near Sources of Contamination.	Recommendation - Leave as amended in the 2020 MPC. 609.6.1 Water Supply Near Sources of Contamination. Potable water supply pipes shall not be located in, under, or above cesspools, septic tanks, septic tank drainage fields, seepage pits, soil treatment systems, contaminated soil, sewer manholes, catch basins, storm water storage tanks, buried tanks containing chemicals or petroleum products, or any other source of contamination that in the judgment of the administrative authority might contaminate the potable water supply. A horizontal separation of ten feet shall be maintained between the outer edge of the water supply pipe and the outer edge of the contamination source.	4.30.2024							
69	609.8		Pumps.	Recommendation - Keep as shown in 2024 UPC (new). 609.8 Pumps. Pumps shall be installed in accordance with the manufacturer's installation instructions.	4.30.2024							
70	609.8.1		Access.	Recommendation - Keep as shown in 2024 UPC (new). 609.8.1 Access. Pumps shall be accessible for repairs.	4.30.2024							

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 6** Line # **Rules affected** RFA No. **Brief Title** Proposal and Committee recommendation Date of Plumbing Board action/comments (A)ccept Committee (R)eject (M)odify review 71 609.8.2 Recommendation - Keep as shown in 2024 UPC (new). 609.8.2 Potable Water Pumps. Pumps 4.30.2024 Potable Water Pumps. intended to supply drinking water shall be in accordance with NSF/ANSI/CAN 61. 12.4.2024 72 609.8.3 Hot-Water Recirculating | Recommendation - Delete in its entirety from the 2024 MPC; language is in the MN Energy Code. 609.8.3 Hot-Water Recirculating Pumps. For healthcare facilities, long term care facilities, Pumps. hotels, or motels, devices that automatically turn off the recirculation pump(s) shall not be required. Recommendation - Leave as amended in the 2020 MPC. 609.11 Pipe Insulation. Insulation of 6.5.2024 73 609.11 Water Hammer. domestic hot water piping shall be in accordance with Section 609.11.1 and Section 609.11.2. 74 609.x.x PB0198 6.5.2024 Pressure Tanks Recommendation - Do not accept RFA PB0198 75 Recommendation - Delete in its entirety. 609.12 Pipe Insulation. Insulation of domestic hot-609.12 Pipe Insulation. 6.5.2024 water piping shall be in accordance with Section 609.12.1 and Section 609.12.2. 76 609.12.1 Insulation Requirements. Recommendation - Delete in its entirety. 609.12.1 Insulation Requirements. Domestic hot water 6.5.2024 piping shall be insulated. 77 609.12.2 Pipe Insulation Wall Recommendation - Delete in its entirety. 609.12.2 Pipe Insulation Wall Thickness. Hot water pipe 6.5.2024 Thickness. insulation shall have a minimum wall thickness of not less than the diameter of the pipe for a pipe up to 2 inches (50 mm) in diameter. Insulation wall thickness shall be not less than 2 inches (51 mm) for a pipe of 2 inches (50 mm) or more in diameter. Exceptions: (1) Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. (2) Hot water piping between the fixture control valve or supply stop and the fixture or appliance shall not be required to be insulated. 78 609.12: MN Recommendation - Leave as amended in the 2020 MPC. 609.12 Water Meters. Water meters 6.5.2024 Water Meters. Plumbing Code shall be located in an approved location inside a building as close as possible to the point of 2020 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. 79 610.5 7.2.2025 Sizing per Appendices A Recommendation - Keep as shown in 2024 UPC with the following revision: 610.5 Sizing per and C. Appendices A and C. Except as provided in Section 610.4, the size of each water piping system shall be determined in accordance with the procedure set forth in Appendix A. For alternate methods of sizing water supply systems, see Appendix C.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 6 Rules affected** Line # RFA No. **Brief Title** Proposal and Committee recommendation Date of Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify 80 **TABLE 610.3** WATER SUPPLY FIXTURE | Recommendation - Keep as shown in the 2024 UPC with 2020 MPC changes to lavatory and 6.5.2024 UNITS (WSFU) AND MINIMUM FIXTURE **BRANCH PIPE SIZES TABLE 610.4** 6.5.2024 FIXTURE UNIT TABLE FOR Recommendation - Keep as shown in the 2024 UPC with the following revision: "building supply **DETERMINING WATER** land branches" should read "Water Distribution Pipe." The question was raised from Scott PIPE AND METER SIZES Thompson about using PE piping after the meter, he suggested adding a note to the table. Committee discussed with Mr. Thompson and stated that note #1 for Table 604.1 should cover 82 611 Water Conditioning Recommendation - Leave as ammended in the 2020 MPC. 611.0 Water Conditioning Equipment. 6.5.2024 PB0168 83 611.1 Recommendation - Do not accept RFA PB0168. Leave as amended in the 2020 MPC. 611.1 11.6.2024 Aplication Application. Water conditioning equipment shall comply with the requirements in this section. 611.1.1 PB0168 11.6.2024 84 Manufacture and Recommendation - Adopt as amended. Manufacture and Assembly. Water conditioning Assembly equipment shall: (1) be manufactured as a complete system; or (2) be assembled as a complete system by a licensed plumbing contractor or licensed water conditioning contractor, using various types of water conditioning equipment. Wetted surface materials used in residential water conditioning equipment shall comply with ANSI/NSF 61 standards, or the equipment shall comply with the applicable ANSI/NSF standards as listed in table 1701.1: 85 Tabel 611.1 PB0168 Table 11.6.2024 Recommendation - Add Water Softeners to the table and adopt as amended in RFA PB0168. Filters (aesthetic) NSF/ANSI 42 Filters (health claims) NSF/ANSI 53 Ultraviolet Disinfection NSF/ANSI 55 Reverse Osmosis NSF/ANSI/CAN 58 Distillation NSF/ANSI 62 Alkaline Water IAPMO/IGC 322 Water Softeners NSF/ANSI 44 86 PB0168 11.6.2024 Exception Recommendation - Leave the Exception as amended in the 2020 MPC. Exception: Water conditioning equipment that treats water for nonpotable uses that are protected by an approved backflow device, assembly, or method as required in Chapter 6, as amended. 11.6.2024 87 611.1.2 PB0168 Labeling Recommendation - Do not accept RFA PB0168. Leave as amended in the 2020 MPC. 611.1.2 Labeling. All conditioning equipment shall be labeled by: (1) the manufacturer of equipment manufactured as a complete system; or (2) the licensed plumbing contractor or licensed water conditioning contractor who assembled the complete system so as to clearly identify the type of equipment and the name and address of the manufacturer, licensed plumbing contractor, or licensed water conditioning contractor. 88 611.2 PB0168 11.6.2024 Airgap Discharge Recommendation - Do not accept RFA PB0168. Leave as amended in the 2020 MPC. 611.2 Airgap Discharge. Any discharge from water conditioning equipment shall enter the drainage system through an airgap in accordance with Table 603.3.1 or an airgap device in accordance with Table 603.2, NSF 58, or IAPMO PS 65.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 6 Rules affected** Line # RFA No. **Brief Title** Proposal and Committee recommendation Date of Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify 11.6.2024 89 611.3 PB0168 Recommendation - Do not accept RFA PB0168. Leave as amended in the 2020 MPC. 611.3 **Connecting Tubing** Connection Tubing. The tubing to and from water conditioning units shall be of a size and material as recommended by the manufacturer. The tubing shall comply with the requirements of NSF 14, NSF 42, NSF 44, NSF 53, NSF 55, NSF 58, NSF 62, or the appropriate material standards referenced in Table 1701.1. 90 611.4 PB0168 Sizing of Residential Recommendation - Accept RFA PB0168 as amended. 611.4 Sizing of Residential Softeners Water 6.5.2024 Softeners. Conditioners. Residential-use point-of-use water softeners conditioners shall be sized in accordance with Table 611.4. Table 611.4 in PB0168 Recommendation - Accept RFA PB0168 as amended. Table 611.4, accepted as presented, except 3.5.2025 91 the "notes" portion. See also Appendix A Recommended Rules for Sizing the Water Supply presentation System, and Appendix C, Alternate Plumbing Systems, for alternate methods of sizing water supply systems. Recommendation - Accept RFA PB0168 as amended. 611.4.2 – accept as presented with the 92 611.4.2 PB0168 Chloride Discharge 11.6.2024 following stricken language: Chloride Discharge. Residential water softeners shall be sized, designed, and programmed for salt efficiency and to minimize excess discharge of chloride. Softeners shall include water meters, hardness sensors, or other devices designed to initiate regeneration only when media is exhausted or when protection from media fouling is required. Water softeners relying on time clocks alone for initiation of regeneration are prohibited. Water softeners shall be labeled by the installer with efficiency information, including incoming water hardness as grains per gallon, softener capacity as gallons per regeneration, method of regeneration initiation, and salt use in pounds per regeneration. 93 611.5 PB0168 11.6.2024 Scale Reduction Devices Recommendation - Accept RFA PB0168 as presented. Scale Reduction Devices. Water conditioning equipment for scale reduction other than by ion exchange water softening shall comply with IAPMO/ANSI Z 601. 94 611.6 PB0168 Isolation and By-pass Recommendation - Accpet RFA PB0168 as amended. Every water conditioning installation shall 3.5.2025 include the installation of isolation valves and a by pass valve a shut off valve. Point of entry equipment and equipment serving multiple domestic fixtures shall have a by-pass appurtenance er a by-pass valve and isolation valves on the inlet and outlet of the equipment which would allow the equipment to be serviced or removed without the need for shutting off the water service completely. Exception: A water conditioning device that serves a point of use outlet shall not be required to have a bypass. 95 612.1 - 612.7 Multipurpose Potable Recommendation - Leave as amended in 2020 MPC. 612.1 to 612.7 all state "Deleted in its 6.5.2024 Water Systems. entirety."

11.10.2025											
		А	d Hoc Code F	Review and Rulemaking Committ	ee 2024 UPC Recommendations	to the	Board				
Chapter 6 (Keep 2024 UPC)											
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		4.3.2024	Plumbing Board action/comments	(A)ccept (R)eject (M)odify		
1	601.0	General	Keep as shown in 2024 UPC			TRUE	4.3.2024				
2						TRUE	4.3.2024				
3	601.1	Applicability		601.1 Applicability. This chapter shall govern the materials, design, and installation of water supply systems, including methods and devices used for backflow prevention.	601.1 Applicability. This chapter shall govern the materials, design, and installation of water supply systems, including methods and devices used for backflow prevention.	TRUE	4.3.2024				
4	601.2	Water Supply and Flushing	Keen as shown in 2024	601.2 Water Supply and Flushing. Each plumbing fixture shall be provided with an adequate supply of potable running water piped thereto in an approved manner, so arranged as to flush and keep it in a clean and sanitary condition without danger of backflow or cross-connection. Water closets and urinals shall be flushed using an approved flush tank or flushometer valve.	601.2 General. Each plumbing fixture shall be provided with an adequate supply of potable running water piped to it in an approved manner, so arranged as to flush and keep the fixture in a clean and sanitary condition without danger of backflow or cross-connection. Water closets and urinals shall be flushed by means of an approved flush tank or flushometer valve. Exception: Listed fixtures that do not require water for their operation and are not connected to the water supply.	FALSE	4.3.2024				
5				Exceptions: (1) Listed fixtures that do not require water for their operation and are not connected to the water supply.		FALSE	4.3.2024				
6				(2) Where not deemed necessary for safety and sanitation by the Authority Having Jurisdiction.		FALSE	4.3.2024				
7	601.3	Identificaiton of a Potable and Nonpotable Water System.	IKEEN AS SHOWN IN 2012	601.3 Identification of a Potable and Nonpotable Water System. In buildings where potable water and nonpotable water systems are installed, each system shall be clearly identified in accordance with Section 601.3.1 through Section 601.3.5.	601.3 Identification of a Potable and Nonpotable Water System. In buildings where potable water and nonpotable water systems are installed, each system shall be clearly identified in accordance with Section 601.3.1 through Section 601.3.5.	TRUE	4.3.2024				
8	601.3.1	Potable Water	I	601.3.1 Potable Water . Green background with white lettering.	601.3.1 Potable Water. Green background with white lettering.	TRUE	4.3.2024				
9	601.3.2	Color and Information	Keep as shown in 2024	601.3.2 Color and Information. Each system shall be identified with a colored pipe or band and coded with paints, wraps, and materials compatible with the piping.	601.3.2 Color and Information. Each system shall be identified with a colored pipe or band and coded with paints, wraps, and materials compatible with the piping.	FALSE	4.3.2024				
10				Except as required by Section 601.3.3, nonpotable water systems shall have a yellow background with black uppercase lettering, with the words "CAUTION: NONPOTABLE WATER, DO NOT DRINK." Each nonpotable system shall be identified to designate the liquid being conveyed, and the direction of normal flow shall be clearly shown. The minimum size of the letters and length of the color field shall comply with Table 601.3.2.	Except as required by Section 601.3.3, nonpotable water systems shall have a yellow background with black uppercase lettering, with the words "CAUTION: NONPOTABLE WATER, DO NOT DRINK." Each nonpotable system shall be identified to designate the liquid being conveyed, and the direction of normal flow shall be clearly shown. The minimum size of the letters and length of the color field shall comply with Table 601.3.2.	FALSE	4.3.2024				

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board **Proposal and** (A)ccept Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify The background color and required information The background color and required information shall be 4.3.2024 shall be indicated every 20 feet (6096 mm) but not less indicated every 20 feet (6096 mm) but not less than once FALSE 11 than once per room, and shall be visible from the floor per room, and shall be visible from the floor level. evel. 4.3.2024 Minimum Length of Color Keep as shown in 2024 Tabel 601.3.2 TRUE 12 Field and Size of Letters UPC 4.3.2024 601.3.4 Fixtures. Where vacuum breakers or backflow 601.3.4 Fixtures. Where vacuum breakers or backflow preventers are installed with fixtures listed in Table 1701.1, Keep as shown in 2024 preventers are installed with fixtures listed in Chapter 17. 13 601.3.4 FALSE Fixtures UPC identification of the discharge side shall be permitted to be identification of the discharge side shall be permitted to be omitted. 4.3.2024 601.3.5 Outlets. Each outlet on the nonpotable water line 601.3.5 Outlets. Each outlet on the nonpotable water line Keep as shown in 2024 that is used for special purposes shall be posted with black that is used for special purposes shall be posted with black TRUE 14 601.3.5 Outlets **UPC** uppercase lettering as follows: "CAUTION: NONPOTABLE uppercase lettering as follows: "CAUTION: NONPOTABLE WATER, DO NOT DRINK," WATER. DO NOT DRINK." 4.3.2024 Keep as shown in 2024 602.0 Unlawful Connections. 602.0 Unlawful Connections. TRUE 15 602.0 **Unlawful Connections** UPC 4.3.2024 **602.1 Prohibited Installation.** No installation of potable **602.1 Prohibited Installation.** No installation of potable water supply piping, or part thereof, shall be made in such a water supply piping, or part thereof, shall be made in such a manner that it will be possible for used, unclean, polluted, manner that it will be possible for used, unclean, polluted, or contaminated water, mixtures, or substances to enter a or contaminated water, mixtures, or substances to enter a portion of such piping from a tank, receptor, equipment, or portion of such piping from a tank, receptor, equipment, Keep as shown in 2024 602.1 **Prohibited Installation** FALSE 16 plumbing fixture by reason of backsiphonage, suction, or orplumbing fixture by reason of backsiphonage, suction, or UPC other cause, either during normal use and operation other cause, either during normal use and operation thereof, or where such tank, receptor, equipment, or thereof, or where such tank, receptor, equipment, or plumbing fixture is flooded or subject to pressure exceeding plumbing fixture is flooded or subject to pressure exceeding the operating pressure in the hot or cold water piping. the operating pressure in the hot or cold water piping. Each point of use shall be separately protected where 4.3.2024 potential cross-contamination of individual units exists. Water used for cooling or heating of equipment or other 17 FALSE purposes shall not be returned to the potable water system. Such water shall be discharged into the drainage system through an airgapped indirect waste or other approved method of disposal.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 4.3.2024 602.3 Backflow Prevention. No plumbing fixture, device, or 602.3 Backflow Prevention. No plumbing fixture, device, or construction shall be installed or maintained, or shall be construction shall be installed or maintained, or shall be connected to a domestic water supply, where such connected to a domestic water supply, where such installation or connection provides a possibility of polluting installation or connection provides a possibility of polluting Keep as shown in 2024 such water supply or cross-connection between a such water supply or cross-connection between a TRUE 602.3 18 Backflow Prevention. UPC. distributing system of water for drinking and domestic distributing system of water for drinking and domestic purposes and water that becomes contaminated by such purposes and water that becomes contaminated by such plumbing fixture, device, or construction unless there is plumbing fixture, device, or construction unless there is provided a backflow prevention device approved for the provided a backflow prevention device approved for the potential hazard. potential hazard. 4.3.2024 Keep as shown in 2024 603.0 Cross-Connection Control. 603.0 Cross-Connection Control FALSE 19 603.0 Cross-Connection Contro UPC 603.1 General. Cross-connection control shall be provided 603.1 General. Cross-connection control shall be provided in 4.3.2024 in accordance with the provisions of this chapter. No person accordance with the provisions of this chapter. No person shall install a water-operated equipment or mechanism, or shall install a water-operated equipment or mechanism, or use a water-treating chemical or substance, where it is use a water-treating chemical or substance, Keep as shown in 2024 found that such equipment, mechanism, chemical, or where it is found that such equipment, mechanism, 20 FALSE 603.3.1 General UPC substance causes pollution or contamination of the chemical, or substance causes pollution or contamination of domestic water supply. Such equipment or mechanism shall the domestic water supply. Such equipment or mechanism be permitted where equipped with an approved backflow shall be permitted where equipped with an approved prevention device or assembly. backflow prevention device or assembly. 603.3 Backflow Prevention Devices, Assemblies, and 603.3 Backflow Prevention Devices, Assemblies, and 4.3.2024 **Backflow Prevention** Methods. Backflow prevention devices, assemblies, and Keep as shown in 2024 Methods. Backflow prevention devices, assemblies, and FALSE 21 603.3 Devices, Assemblies, and UPC methods shall comply with Section 603.3.1 through Section methods shall comply with Section 603.3.1 through Section Methods. 603.3.9 603.3.12. 603.3.1 Air Gap. The minimum air gap to afford backflow **603.3.1 Air Gap.** The minimum air gap to afford backflow 4.3.2024 Keep as shown in 2024 TRUE 22 603.3.1 Air Gap. protection shall be in accordance with Table 603.3.1. protection shall be in accordance with Table 603.3.1. UPC 603.3.2 Atmospheric Vacuum Breaker (AVB). An 603.3.2 Atmospheric Vacuum Breaker (AVB). An 4.3.2024 Atmospheric Vacuum Keep as shown in 202 23 603.3.2 atmospheric vacuum breaker consists of a body, a checking atmospheric vacuum breaker consists of a body, a checking TRUE Braker (AVB) UPC member, and an atmospheric port. member, and an atmospheric port. 603.3.3 Hose Connection Backflow Preventer. A hose 603.3.3 Hose Connection Backflow Preventer. A hose 4.3.2024 connection backflow preventer consists of two independent connection backflow preventer consists of two independent Keep as shown in 202 **Hose Connection** 24 603.3.3 TRUE check valves with an independent atmospheric vent check valves with an independent atmospheric vent **Backflow Preventer** UPC between and a means of field testing and draining. between and a means of field testing and draining. 603.3.4 Double Check Valve Backflow Prevention 603.3.4 Double Check Valve Backflow Prevention Assembly 4.3.2024 Assembly (DC). A double check valve backflow prevention (DC). A double check valve backflow prevention assembly Douoble Check Valve Keep as shown in 202 25 603.3.4 assembly consists of two independently acting internally consists of two independently acting internally loaded check TRUE **UPC** Backflow Preventer (DC) loaded check valves, four properly located test cocks, and valves, four properly located test cocks, and two isolation two isolation valves. valves.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board **Proposal and** (A)ccept Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 603.3.5 Pressure Vacuum Breaker Backflow Prevention 4.3.2024 603.3.5 Pressure Vacuum Breaker Backflow Prevention Assembly (PVB). A pressure vacuum breaker backflow Assembly (PVB). A pressure vacuum breaker backflow prevention assembly consists of a loaded air inlet valve, an prevention assembly consists of a loaded air inlet valve, an Pressure Vacuum Breaker Keep as shown in 2024 26 603.3.5 FALSE internally loaded check valve, two properly located test internally loaded check valve, two properly located test (PVB) UPC. cocks, and two isolation valves. This device shall be cocks, and two isolation valves. This device shall be permitted to be installed indoors where provisions for permitted to be installed indoors where provisions for spillage are provided. spillage are provided. 603.3.6 Spill-Resistant Pressure Vacuum Breaker (SVB). A 603.3.6 Spill-Resistant Pressure Vacuum 4.3.2024 pressure-type vacuum breaker backflow prevention **Breaker (SVB).** A pressure-type vacuum breaker backflow assembly consists of one check valve force loaded closed prevention assembly consists of one check valve force-Keep as shown in 2024 FALSE 27 603.3.6 SVB and an air inlet vent valve force loaded open to loaded closed and an air inlet vent valve forceloaded open UPC atmosphere, positioned downstream of the check valve and to atmosphere, positioned downstream of the check valve located between and including two tightly closing shutoff and located between and including two tightly closing valves and test cocks shutoff valves and test cocks. 4.3.2024 603.3.7 Reduced-Pressure Principle Backflow 603.3.7 Reduced-Pressure Principle Backflow Prevention Assembly (RP). A reduced-pressure principle Prevention Assembly (RP). A reduced-pressure principle Keep as shown in 2024 backflow prevention assembly consists of two backflow prevention assembly consists of two TRUE RPZ 28 603.3.7 UPC independently acting internally loaded check valves, a independently acting internally loaded check valves, a differential pressure relief valve, four properly located test differential pressure relief valve, four properly located test cocks, and two isolation valves. cocks, and two isolation valves. 603.3.8 Double Check Detector Fire Protection 603.3.8 Double Check Detector Fire Protection 4.3.2024 Backflow Prevention Assembly. A double check Backflow Prevention Assembly. A double check Keep as shown in 2024 29 603.3.8 DCFP valve backflow prevention assembly with a parallel detector valve backflow prevention assembly with a parallel detector UPC assembly consisting of a water meter and a double check assembly consisting of a water meter and a double check valve backflow prevention assembly (DC). valve backflow prevention assembly (DC). 4.3.2024 603.3.9 Reduced Pressure Detector Fire Protection 603.3.9 Reduced Pressure Detector Fire Protection **Backflow Prevention Assembly.** A reduced pressure Backflow Prevention Assembly. A reduced pressure Keep as shown in 2024 principle backflow prevention assembly with a parallel principle backflow prevention assembly with a parallel 30 RPFP TRUE 603.3.9 UPC. detector assembly consisting of a water meter and a detector assembly consisting of a water meter and a reduced-pressure principle backflow prevention assembly reduced-pressure principle backflow prevention assembly (RP). 603.3.10 Dual Check Backflow Preventer. A dual check N/A 4.3.2024 Keep as shown in 202 FALSE 31 603.3.10 DC packflow preventer consists of two independently acting UPC check valves, force loaded to a normally closed position. Keep as shown in 2024 4.3.2024 **Backflow Prevention** 32 TRUE Table 603.2 **UPC Devices** Keep as shown in 2024 4.3.2024 33 Table 603.3.1 Minimum Air Gaps TRUE UPC N/A 4.3.2024 603.3.11 Laboratory Faucet Backflow Preventers.

aboratory faucet backflow preventers shall comply with

FALSE

Laboratory Faucet

Backflow Preventers

34

603.3.11

Keep as shown in 202

UPC

ASSE 1035

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board **Proposal and** (A)ccept Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 603.3.12 Backflow Preventer with Intermediate N/A 4.3.2024 Atmospheric Vent. A backflow preventer with intermediate Backflow Preventer with atmospheric vent consists of two independently acting Keep as shown in 2024 35 603.3.12 FALSE Itermediate check valves, force loaded to a normally closed position, UPC. Atmoshpheric Vent. and an intermediate chamber with a means for automatically venting to atmosphere, force loaded to a normally open position. 603.4 General Requirements. Assemblies shall comply with 603.4 General Requirements. Assemblies shall comply with 4.3.2024 Keep as shown in 202 listed standards and be acceptable to the Authority Having listed standards and be acceptable to the Authority Having 36 603.4 TRUE **General Requirements** UPC Jurisdiction, with jurisdiction over the selection and Jurisdiction, with jurisdiction over the selection and installation of backflow prevention assemblies. installation of backflow prevention assemblies. 603.4.1 Backflow Prevention Valve. Where more than one 603.4.1 Backflow Prevention Valve. Where more than one 4.3.2024 backflow prevention valve is installed on a single premise, backflow prevention valve is installed on a single premise, **Backflow Prevention** Keep as shown in 2024 and the valves are installed in one location, each separate and the valves are installed in one location, each separate TRUE 37 603.4.1 Valve UPC. valve shall be permanently identified by the permittee in a valve shall be permanently identified by the permittee in a manner satisfactory to the Authority Having Jurisdiction. manner satisfactory to the Authority Having Jurisdiction. 4.3.2024 603.4.2 Testing. The premise owner or responsible person 603.4.2 Testing. The premise owner or responsible person shall have the backflow prevention assembly tested by a shall have the backflow prevention assembly tested by a certified backflow assembly tester at the time of certified backflow assembly tester at the time of installation, repair, or relocation and not less than on an installation, repair, or relocation and not less than on an Keep as shown in 2024 annual schedule thereafter, or more often where required annual schedule thereafter, or more often where required 38 603.4.2 FALSE Testing UPC by the Authority Having Jurisdiction. The periodic testing by the Authority Having Jurisdiction. The periodic testing shall be performed in accordance with the procedures shall be performed in accordance with the procedures referenced in ASSE/IAPMO/ANSI Series 5000 by a tester referenced in ASSE Series 5000 by a tester qualified in gualified in accordance with those standards. The field test accordance with those standards. kit used shall comply with ASSE 1064. 4.3.2024 603.4.3 Access and Clearance. Access and clearance shall 603.4.3 Access and Clearance. Access and clearance shall be be provided for the required testing, maintenance, and provided for the required testing, maintenance, and repair. repair. Access and clearance shall be in accordance with the Access and clearance shall be in accordance with the manufacturer's instructions, and not less than 12 inches manufacturer's instructions, and not less than 12 inches Keep as shown in 202 39 603.4.3 FALSE Access and Clearance (305 mm) between the lowest portion of the assembly and (305 mm) between the lowest portion of the assembly and UPC grade, floor, or platform. Installations elevated that exceed grade, floor, or platform. Installations elevated that exceed 5 feet (1524 mm) above thefloor or grade shall be provided 5 feet (1524 mm) above the floor or grade shall be provided with a platform capable of supporting a tester or with a platform capable of supporting a tester or maintenance person. maintenance person.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 4.3.2024 603.4.4 Connections. Direct connections between potable 603.4.4 Connections. Direct connections between potable water piping and sewer-connected wastes shall not be water piping and sewer-connected wastes shall not be permitted to exist un der any condition with or without permitted to exist un der any condition with or without backflow protection. Where potable water is discharged to backflow protection. Where potable water is discharged to the drainage system, it shall be by means of an approved air the drainage system, it shall be by means of an approved air gap of two pipe diameters of the supply inlet, but in no case gap of two pipe diameters of the supply inlet, but in no case Keep as shown in 202 shall the gap be less than 1 inch (25.4 mm). Connection shall the gap be less than 1 inch (25.4 mm). Connection shall TRUE 40 603.4.4 Connections UPC shall be permitted to be made to the inlet side of a trap be permitted to be made to the inlet side of a trap provided provided that an approved vacuum breaker is installed not that an approved vacuum breaker is installed not less than 6 less than 6 inches (152 mm), or the distance according to inches (152 mm), or the distance according to the device's the device's listing, above the flood-level rim of such listing, above the flood-level rim of such trapped fixture, so trapped fixture, so that at no time will such device be that at no time will such device be subjected to subjected to backpressure. backpressure. 4.3.2024 603.4.5 Hot Water Backflow Preventers. Backflow 603.4.5 Hot Water Backflow Preventers. Backflow preventers for hot water exceeding 110°F (43°C) shall be a preventers for hot water exceeding 110°F (43°C) shall be a Hot Water Backflow Keep as shown in 202 41 603.4.5 TRUE type designed to operate at temperatures exceeding 110°F type designed to operate at temperatures exceeding 110°F UPC Preventers (43°C) without rendering a portion of the assembly (43°C) without rendering a portion of the assembly inoperative. inoperative. 603.4.6 Integral Backflow Preventers. Fixtures, 603.4.6 Integral Backflow Preventers. Fixtures, 4.3.2024 appliances, or appurtenances with integral backflow appliances, or appurtenances with integral backflow Intergeral Backflow Keep as shown in 2024 42 603.4.6 preventers or integral air gaps manufactured as a unit shall preventers or integral air gaps manufactured as a unit shall FALSE Preventers UPC be installed in accordance with their listing requirements be installed in accordance with their listing requirements and the manufacturer's installation instructions. and the manufacturer's installation instructions. 4.3.2024 603.4.7 Freeze Protection. In cold climate areas, backflow **603.4.7 Freeze Protection.** In cold climate areas, backflow assemblies and devices shall be protected from freezing assemblies and devices shall be protected from freezing Keep as shown in 202 43 603.4.7 Freeze Protection with an outdoor enclosure that complies with ASSE 1060 or with an outdoor enclosure that complies with ASSE 1060 or TRUE UPC by a method acceptable to the Authority Having by a method acceptable to the Authority Having Jurisdiction Jurisdiction. 4.3.2024 603.4.8 Drain Lines. Drain lines serving backflow devices or 603.4.8 Drain Lines. Drain lines serving backflow devices or Keep as shown in 2024 assemblies shall be sized in accordance with the discharge assemblies shall be sized in accordance with the discharge 44 603.4.8 **Drain Lines** TRUE UPC rates of the manufacturer's flow charts of such devices or rates of the manufacturer's flow charts of such devices or 603.4.9 Prohibited Locations. Backflow prevention devices 603.4.9 Prohibited Locations. Backflow prevention devices 4.3.2024 with atmospheric vents or ports shall not beinstalled in pits, with atmospheric vents or ports shall not beinstalled in pits, Keep as shown in 202 45 603.4.9 **Prohibited Locations** underground, or submerged locations. Backflow preventers underground, or submerged locations. Backflow preventers TRUE UPC shall not be located in an area containing fumes that are shall not be located in an area containing fumes that are toxic, poisonous, or corrosive. toxic, poisonous, or corrosive. 603.5 Specific Requirements. Specific requirements for 4.3.2024 603.5 Specific Requirements. Specific requirements for Keep as shown in 202 46 603.5 Specific Requirements backflow prevention shall comply with Section 603.5.1 backflow prevention shall comply with Section 603.5.1 **FALSE** UPC through Section 603.5.22. through Section 603.5.21.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board **Proposal and** (A)ccept Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 603.5.1 Atmospheric Vacuum Breaker. Water 603.5.1 Atmospheric Vacuum Breaker. Water 4.3.2024 closet and urinal flushometer valves shall be protected closet and urinal flushometer valves shall be protected against backflow by an approved backflow prevention against backflow by an approved backflow prevention assembly, device, or method. Where the valves are assembly, device, or method. Where the valves are Atmoshpheric Vacuum Keep as shown in 2024 equipped with an atmospheric vacuum breaker, the equipped with an atmospheric vacuum breaker, the vacuum TRUF 47 603.5.1 Breaker. UPC. vacuum breaker shall be installed on the discharge side of breaker shall be installed on the discharge side of the the flushometer valve with the critical level not less than 6 flushometer valve with the critical level not less than 6 inches (152 mm), or the distance according to its listing, inches (152 mm), or the distance according to its listing, above the overflow rim of a water closet bowl or the above the overflow rim of a water closet bowl or the highest highest part of a urinal. part of a urinal 4.3.2024 **603.5.2** Ballcock. Water closet and urinal tanks shall be 603.5.2 Ballcock. Water closet and urinal tanks shall be equipped with a ballcock. The ballcock shall be installed with equipped with a ballcock. The ballcock shall be installed with the critical level not less than 1 inch (25.4 mm) above the critical level not less than 1 inch (25.4 mm) above the Keep as shown in 2024 48 603.5.2 Ballcock TRUE the full opening of the overflow pipe. In cases where the full opening of the overflow pipe. In cases where the UPC ballcock has no hush tube, the bottom of the water supply ballcock has no hush tube, the bottom of the water supply inlet shall be installed 1 inch (25.4 mm) above the full inlet shall be installed 1 inch (25.4 mm) above the full opening of the overflow pipe. opening of the overflow pipe. 4.3.2024 603.5.3 Backflow Prevention. Water closet flushometer **603.5.3 Backflow Prevention.** Water closet flushometer Keep as shown in 202 49 603.5.3 **Backflow Prevention** tanks shall be protected against backflow by an approved tanks shall be protected against backflow by an approved TRUE UPC backflow prevention assembly, device, or method. backflow prevention assembly, device, or method. 4.3.2024 603.5.5 Water Supply Inlets. Water supply inlets to tanks, 603.5.5 Water Supply Inlets. Water supply inlets to tanks, Keep as shown in 2024 50 603.5.5 TRUE Water Supply Inlets vats, sumps, swimming pools, and other receptors shall be vats, sumps, swimming pools, and other receptors shall be UPC protected by one of the following means: protected by one of the following means: 51 FALSE 4.3.2024 (1) An approved air gap. (1) An approved air gap. (2) A listed vacuum breaker installed on the discharge side (2) A listed vacuum breaker installed on the discharge side 4.3.2024 52 of the last valve with the critical level not less than 6 inches of the last valve with the critical level not less than 6 inches TRUE (152 mm) or in accordance with its listing. (152 mm) or in accordance with its listing. (3) A backflow preventer suitable for the degree of hazard, (3) A backflow preventer suitable for the degree of hazard, 4.3.2024 FALSE 53 installed in accordance with the requirements for that type installed in accordance with the requirements for that type of device or assembly as set forth in this chapter. of device or assembly as set forth in this chapter. 603.5.6.1 Systems with Pumps. Where sprinkler and **603.5.6.1 Systems with Pumps.** Where sprinkler and 4.3.2024 rrigation systems have pumps, connections for pumping irrigation systems have pumps, connections for pumping equipment, or auxiliary air tanks, or are otherwise capable equipment, or auxiliary air tanks, or are otherwise capable Keep as shown in 2024 54 603.5.6.1 Systems with Pumps of creating backpressure, the potable water supply shall be TRUE of creating backpressure, the potable water supply shall be **UPC** protected by the following type of device where the protected by the following type of device where the backflow device is located upstream from the source of backflow device is located upstream from the source of (1) Reduced-pressure principle backflow prevention (1) Reduced-pressure principle backflow prevention 4.3.2024 55 TRUE assembly (RP) assembly (RP)

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 603.5.6.2 Systems with Backflow Devices. Where systems 603.5.6.2 Systems with Backflow Devices. Where systems 4.3.2024 Systems with Backflow Keep as shown in 2024 have a backflow device installed downstream from a have a backflow device installed downstream from a potable TRUE 56 603.5.6.2 UPC potable water supply pump or a potable water supply pump water supply pump or a potable water supply pump **Devices** connection, the device shall be one of the following: connection, the device shall be one of the following: 57 TRUE 4.3.2024 (1) Atmospheric vacuum breaker (AVB) (1) Atmospheric vacuum breaker (AVB) (2) Pressure vacuum breaker backflow prevention assembly (2) Pressure vacuum breaker backflow prevention assembly 4.3.2024 TRUE 58 (PVB) (PVB) (3) Spill-resistant pressure vacuum breaker (SVB) 59 (3) Spill-resistant pressure vacuum breaker (SVB) FALSE 4.3.2024 (4) Reduced-pressure principle backflow prevention 4.3.2024 (4) Reduced-pressure principle backflow prevention 60 FALSE assembly (RP) assembly (RP) 603.5.6.3 Systems with Chemical Injectors. 603.5.6.3 Systems with Chemical Injectors. 4.3.2024 Where systems include a chemical injector or provisions for Where systems include a chemical injector or provisions for Systems with Chemical Keep as shown in 202 61 603.5.6.3 chemical injection, the potable water supply shall be chemical injection, the potable water supply shall be TRUE Injectors UPC protected by a reduced-pressure principle backflow protected by a reduced-pressure principle backflow prevention assembly (RP). prevention assembly (RP). 603.5.7 Outlets with Hose Attachments. Potable water 603.5.7 Outlets with Hose Attachments. Potable 4.3.2024 outlets with hose attachments, other than water heater water outlets with hose attachments, other than water drains, boiler drains, and clothes washer connections, shall heater drains, boiler drains, and clothes washer be protected by a nonremovable hose bibbtype backflow connections, shall be protected by a nonremovable hose preventer, a nonremovable hose bibb-type vacuum bibbtype backflow preventer, a nonremovable hose bibb-Keep as shown in 2024 breaker, or by an atmospheric vacuum breaker installed not Outlets with Hose type vacuum breaker, or by an atmospheric vacuum breaker 62 603.5.7 Attachments **UPC** less than 6 inches (152 mm) above the highest point of installed not less than 6 inches (152 mm) above the highest usage located on the discharge side of the last valve. In point of usage located on the discharge side of the last climates where freezing temperatures occur, a listed selfvalve. In climates where freezing temperatures occur, a draining frost-proof hose bibb with an integral backflow listed self-draining frost-proof hose bibb with an integral preventer or vacuum breaker shall be used. backflow preventer or vacuum breaker shall be used. 603.5.8 Water-Cooled Equipment. Water-cooled 603.5.8 Water-Cooled Equipment. Water-cooled 4.3.2024 compressors, degreasers, or other water-cooled equipment compressors, degreasers, or other water-cooled equipment shall be protected by a backflow preventer installed in shall be protected by a backflow preventer installed in Water-Cooled Keep as shown in 202 63 603.5.8 accordance with the requirements of this chapter. Wateraccordance with the requirements of this chapter. Water-FALSE Equipment. UPC cooled equipment that produces backpressure shall be cooled equipment that produces backpressure shall be equipped with the appropriate protection. equipped with the appropriate protection. 4.3.2024 603.5.9 Aspirators. Water inlets to water-supplied 603.5.9 Aspirators. Water inlets to water-supplied aspirators shall be equipped with a vacuum breaker aspirators shall be equipped with a vacuum breaker installed in accordance with its listing requirements and this installed in accordance with its listing requirements and this Keep as shown in 202 64 603.5.9 chapter. The discharge shall drain through an air gap. chapter. The discharge shall drain through an air gap. Where TRUE **Aspirators UPC** Where the tailpiece of a fixture to receive the discharge of the tailpiece of a fixture to receive the discharge of an an aspirator is used, the air gap shall be located above the aspirator is used, the air gap shall be located above the flood flood-level rim of the fixture. level rim of the fixture.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 4.3.2024 603.5.10 Steam or Hot Water Boilers. Potable water 603.5.10 Steam or Hot Water Boilers. Potable water connections to steam or hot water boilers shall be connections to steam or hot water boilers shall be protected protected from backflow by a double check valve backflow from backflow by a double check valve backflow prevention prevention assembly, backflow preventer with intermediat assembly or reduced pressure principle backflow prevention Steam or Hot Water Keep as shown in 2024 atmospheric vent and pressure reducing valve, or reduced assembly in accordance with Table 603.2. Where chemicals FALSE 65 603.5.10 **Boilers** UPC pressure principle backflow prevention assembly in are introduced into the system a reduced pressure principle accordance with Table 603.2. Where chemicals are backflow prevention assembly shall be provided in introduced into the system a reduced pressure principle accordance with Table 603.2. backflow prevention assembly shall be provided in accordance with Table 603.2. 4.3.2024 **603.5.11 Nonpotable Water Piping.** In cases where it is 603.5.11 Nonpotable Water Piping. In cases where it is impractical to correct individual cross-connections on the impractical to correct individual cross-connections on the domestic waterline, the line supplying such outlets shall be domestic waterline, the line supplying such outlets shall be considered a nonpotable water line. No drinking or considered a nonpotable water line. No drinking or domestic domestic water outlets shall be connected to the water outlets shall be connected to the nonpotable Keep as shown in 2024 nonpotable waterline. Where possible, portions of the waterline. Where possible, portions of the nonpotable 66 603.5.11 Nonpotable Water Piping TRUE nonpotable waterline shall be exposed, and exposed waterline shall be exposed, and exposed portions shall be UPC. portions shall be properly identified in a manner properly identified in a manner satisfactory to the Authority satisfactory to the Authority Having Jurisdiction. Each outlet Having Jurisdiction. Each outlet on the nonpotable waterline on the nonpotable waterline that is permitted to be used that is permitted to be used for drinking or domestic for drinking or domestic purposes shall be posted: purposes shall be posted: "CAUTION: NONPOTABLE WATER "CAUTION: NONPOTABLE WATER. DO NOT DRINK." DO NOT DRINK." 4.3.2024 **603.5.12 Beverage Dispensers.** Potable water supply to **603.5.12 Beverage Dispensers.** Potable water supply to carbonated beverage dispensers shall be protected by an beverage dispensers, carbonated beverage dispensers, or air gap or a vented backflow preventer that complies with coffee machines shall be protected by an air gap or a vented ASSE 1022. For carbonated beverage dispensers, piping backflow preventer in accordance with ASSE 1022. For Keep as shown in 2024 material installed downstream of the backflow preventer carbonated beverage dispensers, piping materials installed 67 603.5.12 FALSE **Beverage Dispensers** UPC shall not be affected by carbon dioxide gas. Non-carbonated downstream of the backflow preventer shall not be made of copper and not be affected by carbon dioxide gas. beverage dispensers, such as ice makers and coffee machines, shall be protected by an air gap or dual check backflow preventer that comply with ASSE 1032 or ASSE 603.5.13 Deck-Mounted and Equipment Mounted Vacuum 603.5.13 Deck-Mounted and Equipment-Mounted Vacuum 4.3.2024 Breakers. Deck-mounted or equipment-mounted vacuum Breakers. Deck-mounted or equipment-mounted vacuum Deck-Mounted and Keep as shown in 2024 breakers shall be installed in accordance with their listing breakers shall be installed in accordance with their listing FALSE 68 603.5.13 **Equipment-Mounted UPC** and the manufacturer's installation instructions, with the and the manufacturer's installation instructions, with the Vacuum Breakers. critical level not less than 1 inch (25.4 mm) above the flood critical level not less than 1 inch (25.4 mm) above the floodlevel rim. level rim.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board **Proposal and** (A)ccept Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 603.5.14.1 Fire Department Connection. Where fire 603.5.14.1 Fire Department Connection. 4.3.2024 protection systems supplied from a potable water system Where fire protection systems supplied from a include a fire department (siamese) connection that is potable water system include a fire department Fire Department Keep as shown in 2024 located less than 1700 feet (518.2 m) from a nonpotable (siamese) connection that is located less than 1700 feet 69 603.5.14.1 FALSE Connectio UPC water source that is capable of being used by the fire (518.2 m) from a nonpotable water source that is capable of being used by the fire department as a secondary water department as a secondary water supply, the potable water supply shall be protected by one of the following: supply, the potable water supply shall be protected by one of the following: (1) Reduced pressure principle backflow prevention (1) Reduced pressure principle backflow prevention 4.3.2024 70 FALSE assembly (RP) (2) Reduced pressure detector fire protection backflow 4.3.2024 (2) Reduced pressure detector fire protection backflow FALSE 71 prevention assembly prevention assembly Nonpotable water sources include fire department vehicles Nonpotable water sources include fire department vehicles 4.3.2024 carrying water of questionable quality or water that is carrying water of questionable quality or water that is TRUE 72 treated with antifreeze, corrosion inhibitors, or treated with antifreeze, corrosion inhibitors, or extinguishing agents. extinguishing agents. 603.5.14.2 Chemicals. Where antifreeze, corrosion 603.5.14.2 Chemicals. Where antifreeze, corrosion 4.3.2024 inhibitors, or other chemicals are added to a fire protection inhibitors, or other chemicals are added to a fire protection Keep as shown in 2024 system supplied from a potable water supply, the potable system supplied from a potable water supply, the potable FALSE 73 603.5.14.2 Chemicals UPC water system shall be protected by one of the following: water system shall be protected by one of the following: (1) Reduced pressure principle backflow prevention 4.3.2024 (1) Reduced pressure principle backflow prevention 74 FALSE (2) Reduced pressure detector fire protection backflow (2) Reduced pressure detector fire protection backflow 4.3.2024 FALSE 75 prevention assembly prevention assembly 603.5.14.3 Hydraulic Design. Where a backflow 603.5.14.3 Hydraulic Design. Where a backflow 4.3.2024 device is installed in the potable water supply to a fire device is installed in the potable water supply to a fire protection system, the hydraulic design of the system shall protection system, the hydraulic design of the system shall account for the pressure drop through the backflow device. account for the pressure drop through the backflow device. Keep as shown in 2024 76 603.5.14.3 Hydraulic Design Where such devices are retrofitted for an existing fire Where such devices are retrofitted for an existing fire TRUE UPC protection system, the hydraulics of the sprinkler system protection system, the hydraulics of the sprinkler system design shall be checked to verify that there will be sufficient design shall be checked to verify that there will be sufficient water pressure available for satisfactory operation of the water pressure available for satisfactory operation of the fire sprinklers. 603.5.15 Health Care or Laboratory Areas. Vacuum 603.5.15 Health Care or Laboratory Areas. Vacuum 4.3.2024 breakers for washer-hose bedpans shall be located not less breakers for washer-hose bedpans shall be located not less Health Care or Keep as shown in 202 77 603.5.15 than 5 feet (1524 mm) above the floor. Hose connections in than 5 feet (1524 mm) above the floor. Hose connections in TRUE **Laboratory Areas** UPC health care or laboratory areas shall be not less than 6 feet health care or laboratory areas shall be not less than 6 feet (1829 mm) above the floor. (1829 mm) above the floor.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 603.5.16 Special Equipment. Portable cleaning 603.5.16 Special Equipment. Portable cleaning 4.3.2024 equipment and dental vacuum pumps shall be protected equipment and dental vacuum pumps shall be protected Keep as shown in 202 78 603.5.16 TRUE Special Equipment from backflow by an air gap, an atmospheric vacuum from backflow by an air gap, an atmospheric vacuum UPC breaker, a spill-resistant vacuum breaker, or a reduced breaker, a spill-resistant vacuum breaker, or a reduced pressure principle backflow preventer. pressure principle backflow preventer. 4.3.2024 603.5.18 Pure Water Process Systems. The water supply to 603.5.18 Pure Water Process Systems. The water supply to a pure water process system, such as dialysis water a pure water process system, such as dialysis water systems **Pure Water Process** Keep as shown in 2024 systems, semiconductor washing systems, and similar semiconductor washing systems, and similar process piping TRUE 603.5.18 79 Systems UPC process piping systems, shall be protected from systems, shall be protected from backpressure and backpressure and backsiphonage by a reduced-pressure backsiphonage by a reduced-pressure principle backflow principle backflow preventer. preventer. 4.3.2024 603.5.20 Plumbing Fixture Fittings. Plumbing fixture fittings 603.5.19 Plumbing Fixture Fittings. Plumbing fixture fittings Keep as shown in 202 Plumbing Fixture Fittings with integral backflow protection shall comply with ASME 80 603.5.20 with integral backflow protection shall comply with ASME FALSE UPC A112.18.1/CSA B125.1. A112.18.1/CSA B125.1. 603.5.21 Swimming Pools, Spas, and Hot Tubs. 603.5.20 Swimming Pools, Spas, and Hot Tubs. 4.3.2024 Potable water supply to swimming pools, spas, and hot tubs Potable water supply to swimming pools, spas, and hot tubs Swimming Pools, Spas, Keep as shown in 202 603.5.21 FALSE 81 shall be protected by an air gap or a reduced pressure shall be protected by an air gap or a reduced pressure And Hot Tubs. UPC principle backflow preventer in accordance with the principle backflow preventer in accordance with the following: following: 82 (1) The unit is equipped with a submerged fill line. (1) The unit is equipped with a submerged fill line. **FALSE** 4.3.2024 4.3.2024 (2) The potable water supply is directly connected to the (2) The potable water supply is directly connected to the 83 FALSE unit circulation system. unit circulation system 603.5.22 Chemical Dispensers. The water supply to 603.5.21 Chemical Dispensers. The water supply 4.3.2024 chemical dispensers shall be protected against backflow by to chemical dispensers shall be protected against backflow. Keep as shown in 2024 84 603.5.22 FALSE **Chemical Dispensers** one of the following: The chemical dispenser shall comply with ASSE 1055 or the UPC

methods:

(1) Air gap

(1) The chemical dispenser shall comply with

vacuum breaker device.

methods: (a) Air gap

assembly (PVB)

assembly (RP)

85

86

87

88

89

90

91

ANSI/CAN/ASSE/IAPMO 1055. Where an installation involves a water source coming from a faucet with an

integrated vacuum breaker device, a pressure bleed device conforming to IAPMO PS 104 shall be used to protect the

(2) Water supply shall be protected by one of the following

FALSE

FALSE

4.3.2024

4.3.2024

water supply shall be protected by one of the following

(2) Atmospheric vacuum breaker (AVB)

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify Keep as shown in 2024 604.0 Materials. 604.0 Materials. 4.3.2024 92 604.0 Materials FALSE UPC 604.1 Pipe, Tube, and Fittings. Pipe, tube, fittings, solvent 604.1 Pipe, Tube, and Fittings. Pipe, tube, fittings, solvent 4.3.2024 cement, thread sealants, solders, and flux used in potable cement, thread sealants, solders, and flux used in potable water systems intended to supply drinking water shall water systems intended to supply drinking water shall Keep as shown in 2024 comply with NSF/ANSI/CAN 61. Where pipe fittings and comply with NSF 61. Where fittings and valves are made FALSE 93 604.1 Pipe, Tube, And Fittings from copper alloys containing more than 15 percent zinc by UPC valves are made from copper alloys containing more than 15 percent zinc by weight and are used in plastic piping weight and are used in plastic piping systems, they shall be systems, they shall be resistant to dezincification and stress resistant to dezincification and stress corrosion cracking in corrosion cracking in compliance with NSF/ANSI 14. compliance with NSF 14. 4.3.2024 Materials used in the water supply system, except valves Materials used in the water supply system, except valves Keep as shown in 2024 and similar devices, shall be of a like material, except where and similar devices, shall be of a like material, except where FALSE 94 UPC otherwise approved by the Authority Having Jurisdiction. otherwise approved by the Authority Having Jurisdiction. Materials for building water piping and building supply Materials for building water piping and building supply 4.3.2024 Keep as shown in 202 95 piping shall comply with the applicable standards piping shall comply with the applicable standards referenced TRUE UPC referenced in Table 604.1. in Table 604.1. 604.2 Lead Content. The maximum allowable lead content **604.2 Lead Content.** The maximum allowable lead content 4.3.2024 in pipes, pipe fittings, plumbing fittings, and fixtures in pipes, pipe fittings, plumbing fittings, and fixtures intended to convey or dispense water for human intended to convey or dispense water for human consumption shall be not more than a weighted average of consumption shall be not more than a weighted average of 0.25 percent with respect to the wetted surfaces of pipes, 0.25 percent with respect to the wetted surfaces of pipes, Keep as shown in 202 96 604.2 pipe fittings, plumbing fittings, and fixtures. For solder and FALSE **Lead Content** pipe fittings, plumbing fittings, and fixtures. For solder and UPC flux, the lead content shall be not more than 0.2 percent flux, the lead where used in piping systems that convey or dispense content shall be not more than 0.2 percent where used in water for human consumption. piping systems that convey or dispense water for human **Exceptions:** consumption. **Exceptions:** (1) Pipes, pipe fittings, plumbing fittings, fixtures, or (1) Pipes, pipe fittings, plumbing fittings, fixtures, or 4.3.2024 backflow preventers used for nonpotable services such as backflow preventers used for nonpotable services such as 97 FALSE manufacturing, industrial processing, irrigation, outdoor manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where the water is not used for watering, or any other uses where the water is not used for human consumption. human consumption. 4.3.2024 (2) Flush valves, fill valves, flushometer valves, tub fillers, (2) Flush valves, fill valves, flushometer valves, tub fillers, shower valves, service saddles, or water distribution main shower valves, service saddles, or water distribution main ALSE gate valves that are 2 inches (50 mm) in diameter or larger. gate valves that are 2 inches (50 mm) in diameter or larger. 4.3.2024 604.2.1 Lead Content of Water Supply Pipe and 604.2.1 Lead Content of Water Supply Pipe and Fittings. Pipes, pipe fittings, valves, and faucets utilized in **Fittings.** Pipes, pipe fittings, valves, and faucets utilized in Lead Content of Water Keep as shown in 202 604.2.1 the water supply system for non-drinking water applications FALSE 99 the water supply system for non-drinking water UPC Supply Pipe and Fittings applications shall have a maximum of 8 percent lead shall have a maximum of 8 percent lead content. content.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 604.3 Copper or Copper Alloy Tube. Copper or copper alloy 604.3 Copper or Copper Alloy Tube. Copper or copper alloy 4.3.2024 tube for water piping shall have a weight of not less than tube for water piping shall have a weight of not less than Copper or Copper Alloy Keep as shown in 2024 Type L. Exception: Type M copper or copper alloy tubing Type L. **Exception:** Type M copper or copper alloy tubing FALSE 100 604.3 Tube. UPC shall be permitted to be used for water piping where piping shall be permitted to be used for water piping where piping is aboveground in, or on, a building or underground outside is aboveground in, or on, a building or underground outside of structures. of structures. 4.3.2024 604.4 Hard-Drawn Copper or Copper Alloy Tubing. Hard-604.4 Hard-Drawn Copper or Copper Alloy Tubing. Harddrawn copper or copper alloy tubing for water supply and drawn copper or copper alloy tubing for water supply and Hard-Drawn Copper or Keep as shown in 2024 distribution in addition to the required incised marking shall distribution in addition to the required incised marking shall 101 604.4 FALSE Copper Alloy Tubing UPC be marked in accordance with ASTM B88. The colors shall be marked in accordance with ASTM B88. The colors shall be: Type K, green; Type L, blue; and Type M, red. be: Type K, green; Type L, blue; and Type M, red. 604.6 Cast-Iron Fittings. Cast-iron fittings up to and 604.6 Cast-Iron Fittings. Cast-iron fittings up to and 4.3.2024 Keep as shown in 2024 including 2 inches (50 mm) in size, where used in including 2 inches (50 mm) in size, where used in connection TRUE 102 604.6 Cast-Iron Fittings UPC connection with potable water piping, shall be galvanized. with potable water piping, shall be galvanized. Keep as shown in 202 604.7 Malleable Iron Fittings. Malleable iron water fittings **604.7 Malleable Iron Fittings.** Malleable iron water fittings 4.3.2024 103 604.7 Maaeable Iron Fittings ALSE UPC shall be galvanized. shall be galvanized. 604.8 Previously Used Piping and Tubing. Piping and tubing 604.8 Previously Used Piping and Tubing. Piping and tubing 4.3.2024 Keep as shown in 202 **Previously Used Piping** 604.8 TRUE 104 hat has previously been used for a purpose other than for that has previously been used for a purpose other than for and Tubing UPC potable water systems shall not be used. potable water systems shall not be used. 4.3.2024 604.9 Epoxy Coating. The epoxy coating used on existing, **604.9 Epoxy Coating.** The epoxy coating used on existing, Keep as shown in 2024 105 604.9 FALSE **Epoxy Coating** underground steel building supply piping shall comply with underground steel building supply piping shall comply with UPC NSF/ANSI/CAN 61 and AWWA C210. NSF 61 and AWWA C210. 604.10 Plastic Materials. Approved plastic materials shall be 4.3.2024 **604.10 Plastic Materials.** Approved plastic materials shall permitted to be used in building supply piping, provided that be permitted to be used in building supply piping, provided that where metal building supply piping is used for where metal building supply piping is used for electrical electrical grounding purposes, replacement piping, grounding purposes, replacement piping, therefore, shall be Keep as shown in 202 106 604.10 Plastic Materials therefore, shall be of like materials. of like materials. FALSE UPC. **Exception:** Where a grounding system acceptable to the **Exception:** Where a grounding system acceptable to the Authority Having Jurisdiction is installed, inspected, and Authority Having Jurisdiction is installed, inspected, and approved, the metallic pipe shall be permitted to be approved, the metallic pipe shall be permitted to be replaced with nonmetallic pipe. replaced with nonmetallic pipe. 604.10.1 Tracer Wire. Plastic materials for building supply **604.10.1 Tracer Wire.** Plastic materials for building supply 4.3.2024 piping outside underground shall have an electrically piping outside underground shall have an electrically continuous corrosion-resistant blue insulated copper tracer continuous corrosion-resistant blue insulated copper tracer wire, or other approved conductor installed adjacent to the wire, or other approved conductor installed adjacent to the Keep as shown in 202 604.10.1 FALSE 107 Tracer Wire piping. Access shall be provided to the tracer wire, or the piping. Access shall be provided to the tracer wire, or the **UPC** tracer wire shall terminate aboveground at each end of the tracer wire shall terminate aboveground at each end of the nonmetallic piping. The tracer wire size shall be not less nonmetallic piping. The tracer wire size shall be not less than 14 AWG, and the insulation type shall be suitable for than 14 AWG, and the insulation type shall be suitable for direct burial. direct burial. Keep as shown in 2024 604.11 Solder. Solder shall comply with the requirements 604.11 Solder. Solder shall comply with the requirements of 4.3.2024 FALSE 108 604.11 Solder UPC of Section 604.2. Section 604.2.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 604.12 Flexible Corrugated Connectors. Flexible corrugated 604.12 Flexible Corrugated Connectors. Flexible corrugated 4.3.2024 Flexible Corrugated Keep as shown in 2024 connectors of copper, copper alloy, or stainless steel shall connectors of copper, copper alloy, or stainless steel shall be 604.12 109 UPC be limited to the following connector lengths: limited to the following connector lengths: Connectors. 110 (1) Fixture Connectors – 30 inches (762 mm) (1) Fixture Connectors - 30 inches (762 mm) FALSE 4.3.2024 (2) Washing Machine Connectors – 72 inches (1829 mm) (2) Washing Machine Connectors – 72 inches (1829 mm) FALSE 4.3.2024 111 4.3.2024 (3) Dishwasher and Icemaker Connectors – 120 inches (3) Dishwasher and Icemaker Connectors – 120 inches FALSE 112 (3048 mm) (3048 mm) 4.3.2024 604.13 Water Heater Connectors. Flexible metallic (copper 604.13 Water Heater Connectors. Flexible metallic (copper and stainless steel), reinforced flexible, braided stainless and stainless steel), reinforced flexible, braided stainless steel, or polymer braided with EPDM core connectors that steel, or polymer braided with EPDM core connectors that connect a water heater to the piping system shall comply connect a water heater to the piping system shall comply Keep as shown in 202 with ASME A112.18.6/CSA B125.6. Copper, copper alloy, or with ASME A112.18.6/CSA B125.6. Copper, copper alloy, or 113 604.13 Water Heater Connectors UPC stainless steel flexible connectors shall not exceed 24 stainless steel flexible connectors shall not exceed 24 inches inches (610 mm). PEX, PEX-AL-PEX, PE-AL-PE, or PE-RT (610 mm). PEX, PEX-AL-PEX, PE-AL-PE, or PE-RT tubing shall tubing shall not be installed within the first 18 inches (457 not be installed within the first 18 inches (457 mm) of piping mm) of piping connected to a water heater. connected to a water heater. Keep as shown in 2024 605.0 Joints and Connections. 605.0 Joints and Connections. 4.3.2024 TRUE 114 605.0 Joints and Connections UPC 4.3.2024 605.1 Copper or Copper Alloy Pipe, Tubing, and Joints. 605.1 Copper or Copper Alloy Pipe, Tubing, and Joining methods for copper or copper alloy pipe, tubing, Joints. Joining methods for copper or copper alloy pipe, Copper or Copper Alloy Keep as shown in 2024 115 605.1 and fittings shall be installed in accordance with the tubing, and fittings shall be installed in accordance with the FALSE Pipe, Tubing, and Joints. UPC manufacturer's installation instructions and shall comply manufacturer's installation instructions and shall comply with Section 605.1.1 through Section 605.1.5. with Section 605.1.1 through Section 605.1.5. 4.3.2024 **605.1.1 Brazed Joints.** Brazed joints between copper or **605.1.1 Brazed Joints.** Brazed joints between copper or copper alloy pipe or tubing and fittings shall be made with copper alloy pipe or tubing and fittings shall be made with brazing alloys having a liquid temperature above 1000°F brazing alloys having a liquid temperature above 1000°F (538°C). The joint surfaces to be brazed shall be cleaned (538°C). The joint surfaces to be brazed shall be cleaned bright by either manual or mechanical means. Tubing shall bright by either manual or mechanical means. Tubing shall Keep as shown in 202 605.11 FALSE 116 **Brazed Joints** be cut square and reamed to full inside diameter. Brazing be cut square and reamed to full inside diameter. Brazing UPC flux shall be applied to the joint surfaces where required by flux shall be applied to the joint surfaces where required by manufacturer's recommendation. Brazing filler metal shall manufacturer's recommendation. Brazing filler metal shall conform to AWS A5.8 and shall be applied at the point conform to AWS A5.8 and shall be applied at the point where the pipe or tubing enters the socket of the fitting. where the pipe or tubing enters the socket of the fitting. 605.1.2 Flared Joints. Flared joints for soft copper or copper 605.1.2 Flared Joints. Flared joints for soft copper or copper 4.3.2024 alloy water tubing shall be made with fittings that comply alloy water tubing shall be made with fittings that comply with the applicable standards referenced in Table 604.1. with the applicable standards referenced in Table 604.1. Keep as shown in 2024 FALSE 117 605.1.2 Flared Joints Pipe or tubing shall be cut square using an appropriate Pipe or tubing shall be cut square using an appro-priate UPC tubing cutter. The tubing shall be reamed to full inside tubing cutter. The tubing shall be reamed to full inside diameter, resized to round, and expanded with a proper diameter, resized to round, and expanded with a proper flaring tool. flaring tool.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 605.1.3 Mechanical Joints. Mechanical joints shall include, 4.3.2024 605.1.3 Mechanical Joints. Mechanical joints shall Keep as shown in 202 605.1.3 FALSE 118 Mechanical Joints. but are not limited to, compression, flanged, grooved, include, but are not limited to, compression, flanged, UPC pressed, and push fit fittings. grooved, pressed, and push fit fittings. 4.3.2024 605.1.3.1 Mechanically Formed Tee Fittings. 605.1.3.1 Mechanically Formed Tee Fittings. Mechanically formed tee fittings shall have extracted collars that Mechanically formed tee fittings shall have extracted collars that shall be formed in a continuous operation consisting of drilling a shall be formed in a continuous operation consisting of drilling a pilot hole and drawing out the pipe or tube surface to form a pilot hole and drawing out the pipe or tube surface to form a collar having a height not less than three times the thickness of collar having a height not less than three times the thickness of the branch tube wall. The branch pipe or tube shall be notched to the branch tube wall. The branch pipe or tube shall be notched to conform to the inner curve of the run pipe or tube and shall have conform to the inner curve of the run pipe or tube and shall have two dimple depth stops to ensure that penetration of the branch two dimple depth stops to ensure that penetration of the branch Mechanically Formed Tee Keep as shown in 2024 605.1.3.1 119 pipe or tube into the collar is of a depth for brazing and that the pipe or tube into the collar is of a depth for brazing and that the TRUE Fittings. **UPC** branch pipe or tube does not obstruct the flow in the main line branch pipe or tube does not obstruct the flow in the main line pipe or tube. Dimple depth stops shall be in line with the run of pipe or tube. Dimple depth stops shall be in line with the run of the pipe or tube. The second dimple shall be ¼ of an inch (6.4) the pipe or tube. The second dimple shall be \(\frac{1}{2} \) of an inch (6.4 mm) mm) above the first and shall serve as a visual point of inspection. above the first and shall serve as a visual point of inspection. Fittings and joints shall be made by brazing. Soldered joints shall Fittings and joints shall be made by brazing. Soldered joints shall not be permitted. not be permitted. 605.1.3.2 Press-Connect Fittings. Press-connect 605.1.3.2 Press-Connect Fittings. Press-connect 4.3.2024 fittings for copper or copper alloy pipe or tubing shall have an fittings for copper or copper alloy pipe or tubing elastomeric o-ring that forms the joint. The pipe or tubing shall be shall have an elastomeric o-ring that forms the joint. The pipe or fully inserted into the fitting, and the pipe or tubing marked at tubing shall be fully inserted into the fitting, and the pipe or tubing Keep as shown in 2024 the shoulder of the fitting. Pipe or tubing shall be cut square, marked at the shoulder of the fitting. Pipe or tubing shall be cut 120 605.1.3.2 **Press-Connect Fittings** FALSE chamfered, and reamed to full inside diameter. The fitting square, chamfered, and reamed to full inside diameter. The fitting alignment shall be checked against the mark on the pipe or tubing alignment shall be checked against the mark on the pipe or tubing to ensure the pipe or tubing is inserted into the fitting. The joint to ensure the pipe or tubing is inserted into the fitting. The joint shall be pressed using the tool recommended by the shall be pressed using the tool recommended by the manufacturer. manufacturer. 605.1.3.3 Push Fit Fittings. Removable and nonremovable push 605.1.3.3 Push Fit Fittings. Removable and nonremovable push fit 4.3.2024 fit fittings for copper or copper alloy tubing or pipe that employ fittings for copper or copper quick assembly push fit connectors shall comply with ASSE 1061. alloy tubing or pipe that employ quick assembly push fit Push fit fittings for copper or copper alloy pipe or tubing shall connectors shall comply with ASSE 1061. Push fit fittings for copper or copper alloy pipe or tubing shall have an approved have an approved elastomeric o-ring that forms the joint. Pipe or Keep as shown in 2024 tubing shall be cut square, chamfered, and reamed to full inside elastomeric o-ring that forms the joint. Pipe or tubing shall be cut square, chamfered, and reamed to full inside diameter. The tubing FALSE 121 605.1.3.3 Push Fit Fittings. diameter. The tubing shall be fully inserted into the fitting, and UPC the tubing marked at the shoulder of the fitting. The fitting shall be fully inserted into the fitting, and the tubing marked at the alignment shall be checked against the mark on the tubing to shoulder of the fitting. The fitting alignment shall be checked ensure the tubing is inserted into the fitting and gripping against the mark on the tubing to ensure the tubing is inserted mechanism has engaged on the pipe. into the fitting and gripping mechanism has engaged on the pipe.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 605.1.4 Soldered Joints. Soldered joints between copper or 605.1.4 Soldered Joints. Soldered joints between 4.3.2024 copper alloy pipe or tubing and fittings shall be made in copper or copper alloy pipe or tubing and fittings shall be made in accordance with ASTM B828 with the following sequence of joint accordance with ASTM B828 with the following sequence of joint preparation and operation as follows: measuring and cutting, preparation and operation as follows: measuring and cutting, reaming, cleaning, fluxing, assembly and support, heating, reaming, cleaning, fluxing, assembly and support, heating, applying the solder, cooling and cleaning. Pipe or tubing shall be applying the solder, cooling and cleaning. Pipe or tubing shall be cut square and reamed to the full inside diameter including the cut square andreamed to the full inside diameter including the removal of burrs on the outside of the pipe or tubing. Surfaces to removal of burrs on the outside of the pipe or tubing. Surfaces to be joined shall be cleaned bright by manual or mechanical means. be joined shall be cleaned bright by manual or mechanical means. Flux shall be applied to pipe or tubing and fittings and shall Flux shall be applied to pipe or tubing and fittings and shall conform to ASTM B813, and shall become noncorrosive and conform to ASTM B813, and shall become noncorrosive and nontoxic after soldering. Insert pipe or tubing into the base of the nontoxic after soldering. Insert pipe or tubing into the base of the fitting and remove excess flux. Pipe or tubing and fitting shall be fitting and remove excess flux. Pipe or tubing and fitting shall be Keep as shown in 2024 supported to ensure a uniform capillary space around the joint. supported to ensure a uniform capillary space around the joint. FALSE 122 605.1.4 Soldered Joints. UPC Heat shall be applied using an air or fuel torch with the flame Heat shall be applied using an air or fuel torch with the flame perpendicular to the pipe or tubing using acetylene or an LP gas. perpendicular to the pipe or tubing using acetylene or an LP gas. Preheating shall depend on the size of the joint. The flame shall Preheating shall depend on the size of the joint. The flame shall be be moved to the fitting cup and alternate between the pipe or moved to the fitting cup and alternate between the pipe or tubing tubing and fitting. Solder conforming to ASTM B32 shall be and fitting. Solder conforming to ASTM B32 shall be applied to the applied to the joint surfaces until capillary action draws the joint surfaces until capillary action draws the molten solder into molten solder into the cup. Solder and fluxes with a lead content the cup. Solder and fluxes with a lead content that exceeds 0.2 that exceeds 0.2 percent shall be prohibited in piping systems percent shall be prohibited in piping systems conveying potable conveying potable water. Joint surfaces shall not be disturbed water. Joint surfaces shall not be disturbed until cool and any until cool and any remaining flux residue shall be cleaned. remaining flux residue shall be cleaned. 605.1.5 Threaded Joints. Threaded joints for copper 605.1.5 Threaded Joints. Threaded joints for copper 4.3.2024 or copper alloy pipe shall be made with pipe threads that or copper alloy pipe shall be made with pipe threads that Keep as shown in 2024 comply with ASME B1.20.1. Thread sealant tape or comply with ASME B1.20.1. Thread sealant tape or FALSE 123 605.1.5 Threaded Joints. UPC compound shall be applied only on male threads, and such compound shall be applied only on male threads, and such material shall be of approved types, insoluble in water, and material shall be of approved types, insoluble in water, and 4.3.2024 605.2 CPVC Plastic Pipe and Joints. CPVC plastic pipe and 605.2 CPVC Plastic Pipe and Joints. CPVC plastic pipe and fitting joining methods shall be installed in accordance with fitting joining methods shall be installed in accordance with **CPVC Plastic Pipe and** Keep as shown in 202 124 605.2 **FALSE** the manufacturer's installation instructions and shall the manufacturer's installation instructions and shall comply UPC Joints. comply with Section 605.2.1 through Section 605.2.3. with Section 605.2.1 through Section 605.2.3. 605.2.1 Mechanical Joints. Mechanical joints shall 605.2.1 Mechanical Joints. Mechanical joints shall 4.3.2024 Keep as shown in 2024 125 605.2.1 FALSE Mechanical Joints. include compression, flanged, grooved and push fit fittings. include compression, flanged, grooved and push fit fittings. UPC 605.2.1.1 Push Fit Fittings. Removable and nonremovable 605.2.1.1 Push Fit Fittings. Removable and nonremovable 4.3.2024 Keep as shown in 202 push fit fittings that employ a quick assembly push fit push fit fittings that employ a quick assembly push fit 126 605.2.1.1 Push Fit Fittings. **FALSE** UPC connector shall comply with ASSE 1061. connector shall comply with ASSE 1061.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify **605.2.2 Solvent Cement Joints.** Solvent cement joints for CPVC 605.2.2 Solvent Cement Joints. Solvent cement 4.3.2024 pipe and fittings shall be clean from dirt and moisture. Solvent joints for CPVC pipe and fittings shall be clean from dirt and cements shall comply with ASTM F493, requiring the use of a moisture. Solvent cements shall comply with ASTM F493, primer shall be orange in color. The primer shall be colored and requiring the use of a primer shall be orange in color. The primer shall comply with ASTM F656. Listed solvent cement that shall be colored and shall comply with ASTM F656. Listed solvent complies with ASTM F493 and that does not require the use of cement that complies with ASTM F493 and that does not require the use of primers, yellow or red in color, shall be permitted for primers, yellow, green, or red in color, shall be permitted for pipe and fittings that comply with ASTM D2846, 1/2 of an inch (15 pipe and fittings that comply with ASTM D2846, 1/2 of an inch (15 Keep as shown in 2024 127 605.2.2 mm) through 2 inches (50 mm) in diameter or ASTM F442, 1/2 of mm) through 2 inches (50 mm) in diameter or ASTM F442, 1/2 of FALSE Solvent Cement Joints UPC an inch (15 mm) through 3 inches (80 mm) in diameter. Apply an inch (15 mm) through 3 inches (80 mm) in diameter. Apply primer where required inside the fitting and to the depth of the primer where required inside the fitting and to the depth of the fitting on pipe. Apply liberal coat of cement to the outside surface fitting on pipe. Apply liberal coat of cement to the outside surface of pipe to depth of fitting and inside of fitting. Place pipe inside of pipe to depth of fitting and inside of fitting. Place pipe inside fitting to forcefully bottom the pipe in the socket and hold fitting to forcefully bottom the pipe in the socket and hold together until joint is set. together until joint is set. 4.3.2024 605.2.3 Threaded Joints. Threads shall comply with 605.2.3 Threaded Joints. Threads shall comply with ASME B1.20.1. A minimum of Schedule 80 shall be permitted to ASME B1.20.1. A minimum of Schedule 80 shall be per-mitted to be threaded; however, the pressure rating shall be reduced by 50 be threaded; however, the pressure rating shall be reduced by 50 percent. The use of molded fittings shall not result in a 50 percent percent. The use of molded fittings shall not result in a 50 percent reduction in the pressure rating of the pipe provided that the reduction in the pressure rating of the pipe provided that the molded fittings shall be fabricated so that the wall thickness of molded fittings shall be fabricated so that the wall thickness of the the material is maintained at the threads. Thread sealant material is maintained at the threads. Thread sealant compound Keep as shown in 2024 128 605.2.3 Threaded Joints. compound that is compatible with the pipe and fitting, insoluble that is compatible with the pipe and fitting, insoluble in water, and FALSE UPC in water, and nontoxic shall be applied to male threads. Caution nontoxic shall be applied to male threads. Caution shall be used during assembly to prevent over tightening of the CPVC shall be used during assembly to prevent over tightening of the CPVC components once the thread sealant has been applied. components once the thread sealant has been applied. Female Female CPVC threaded fittings shall be used with plastic male CPVC threaded fittings shall be used with plastic male threads threads only. only. 605.3 CPVC/AL/CPVC Plastic Pipe and Joints. Chlorinated 605.3 CPVC/AL/CPVC Plastic Pipe and Joints. Chlorinated 4.3.2024 polyvinyl chloride/aluminum/chlorinated polyvinyl chloride polyvinyl chloride/aluminum/chlorinated polyvinyl chloride CPVC/AL/CPVC Plastic Keep as shown in 2024 (CPVC/AL/CPVC) plastic pipe and fitting joining methods (CPVC/AL/CPVC) plastic pipe and fitting joining methods 129 605.3 FALSE Pipe and Joints. UPC shall be installed in accordance with the manufacturer's shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section installation instructions and shall comply with Section 605.3.1 or Section 605.3.2. 605.3.1 or Section 605.3.2.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 605.3.1 Solvent Cement Joints. Solvent cement joints for 605.3.1 Solvent Cement Joints. Solvent cement joints for 4.3.2024 CPVC/AL/CPVC pipe and fittings shall be CPVC/AL/CPVC pipe and fittings shall be clean from dirt and moisture. Solvent cements that comply with clean from dirt and moisture. Solvent cements that comply with ASTM F493, requiring the use of a primer shall be orange in color ASTM F493, requiring the use of a primer shall be orange in color. The primer shall be colored and shall comply with ASTM F656. The primer shall be colored and shall comply with ASTM F656. Listed solvent cement that complies with ASTM F493 and that Listed solvent cement that complies with ASTM F493 and that does not require the use of primers, yellow in color, shall be does not require the use of primers, yellow in color, shall be Keep as shown in 2024 permitted to join pipe that comply with ASTM F2855 and fittings permitted to join pipe that comply with ASTM F2855 and fittings 130 605.3.1 Solvent Cement Joints. FALSE that comply with ASTM D2846, 1/2 of an inch (15 mm) through 2 that comply with ASTM D2846, 1/2 of an inch (15 mm) through 2 nches (50 mm) in diameter. Apply primer where required inside nches (50 mm) in diameter. Apply primer where required inside the fitting and to the depth of the fitting on pipe. Apply liberal the fitting and to the depth of the fitting on pipe. Apply liberal coat of cement to the outside surface of pipe to depth of fitting coat of cement to the outside surface of pipe to depth of fitting and inside of fitting. Place pipe inside fitting to forcefully bottom and inside of fitting. Place pipe inside fitting to forcefully bottom the pipe in the socket and hold together until joint is set. the pipe in the socket and hold together until joint is set. Keep as shown in 2024 605.3.2 Mechanical Joints. Mechanical joints shall **605.3.2 Mechanical Joints.** Mechanical joints shall 4.3.2024 TRUE 131 605.3.2 Mechanical Joints. UPC include flanged, grooved, and push fit fittings. include flanged, grooved, and push fit fittings. 4.3.2024 605.3.2.1 Push Fit Fittings. Removable and nonremovable 605.3.2.1 Push Fit Fittings. Removable and nonremovable Keep as shown in 202 push fit fittings that employ a quick assembly push fit push fit fittings that employ a quick assembly push fit 132 605.3.2.1 Push Fit Fittings. FALSE UPC connector shall comply with ASSE 1061. connector shall comply with ASSE 1061. 605.4 Ductile Iron Pipe and Joints. Ductile iron pipe and 4.3.2024 605.4 Ductile Iron Pipe and Joints. Ductile iron pipe and Ductile Iron Pipe and Keep as shown in 2024 fitting joining methods shall be installed in accordance with fitting joining methods shall be installed in accordance with FALSE 133 605.4 UPC Joints. the manufacturer's installation instructions and shall the manufacturer's installation instructions and shall comply comply with Section 605.4.1 or Section 605.4.2. with Section 605.4.1 or Section 605.4.2. 4.3.2024 605.4.1 Mechanical Joints. Mechanical joints for 605.4.1 Mechanical Joints. Mechanical joints for ductile iron pipe and fittings shall consist of a bell that is ductile iron pipe and fittings shall consist of a bell that is cast cast integrally with the pipe or fitting and provided with an integrally with the pipe or fitting and provided with an exterior flange having bolt holes and a socket with annular exterior flange having bolt holes and a socket with annular Keep as shown in 2024 134 605.4.1 FALSE Mechanical Joints. recesses for the sealing gasket and the plain end of the pipe recesses for the sealing gasket and the plain end of the pipe UPC or fitting. The elastomeric gasket shall comply with AWWA or fitting. The elastomeric gasket shall comply with AWWA C111. Lubricant recommended for potable water C111. Lubricant recommended for potable water application application by the pipe manufacturer shall be applied to the by the pipe manufacturer shall be applied to the gasket and

plain end of the pipe.

gasket and plain end of the pipe.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 4.3.2024 605.4.2 Push-On Joints. Push-on joints for ductile 605.4.2 Push-On Joints. Push-on joints for ductile iron pipe and fittings shall consist of a single elastomeric iron pipe and fittings shall consist of a single elastomeric gasket that shall be assembled by positioning the gasket that shall be assembled by positioning the elastomeric gasket in an annular recess in the pipe or fitting elastomeric gasket in an annular recess in the pipe or socket and forcing the plain end of the pipe or fitting into fittingsocket and forcing the plain end of the pipe or fitting Keep as shown in 2024 the socket. The plain end shall compress the elastomeric into the socket. The plain end shall compress the FALSE 135 605.4.2 Push-On Joints. UPC gasket to form a positive seal and shall be designed so that elastomeric gasket to form a positive seal and shall be the elastomeric gasket shall be locked in place against designed so that the elastomeric gasket shall be locked in displacement. The elastomeric gasket shall comply with place against displacement. The elastomeric gasket shall AWWA C111. Lubricant recommended for potable water comply with AWWA C111. Lubricant recommended for application by the pipe manufacturer shall be applied to the potable water application by the pipe manufacturer shall be gasket and plain end of the pipe. applied to the gasket and plain end of the pipe. 605.5 Galvanized Steel Pipe and Joints. Galvanized steel 605.5 Galvanized Steel Pipe and Joints. Galvanized steel 4.3.2024 pipe and fitting joining methods shall be installed in pipe and fitting joining methods shall be installed in Galvanized Steel Pipe and Keep as shown in 202 136 accordance with the manufacturer's installation instructions FALSE 605.5 accordance with the manufacturer's installation UPC. Joints instructions and shall comply with Section 605.5.1 or and shall comply with Section 605.5.1 or Section 605.5.2. Section 605.5.2. 4.3.2024 Keep as shown in 2024 605.5.1 Mechanical Joints. Mechanical joints shall 605.5.1 Mechanical Joints. Mechanical joints shall 137 605.5.1 Mechanical Joints. FALSE UPC be made with an approved and listed elastomeric gasket. be made with an approved and listed elastomeric gasket. 605.5.2 Threaded Joints. Threaded joints shall be 605.5.2 Threaded Joints. Threaded joints shall be 4.3.2024 made with pipe threads that comply with ASME B1.20.1. made with pipe threads that comply with ASME B1.20.1. Keep as shown in 202 FALSE 138 605.5.2 Threaded Joints. Thread sealant tape or compound shall be applied only on Thread sealant tape or compound shall be applied only on UPC male threads, and such material shall be of approved types, male threads, and such material shall be of approved types, insoluble in water, and nontoxic. insoluble in water, and nontoxic. 4.3.2024 605.6 PE Plastic Pipe/Tubing and Joints. PE plastic pipe or 605.6 PE Plastic Pipe/Tubing and Joints. PE plastic pipe or tubing and fitting joining methods shall be installed in tubing and fitting joining methods shall be installed in Keep as shown in 202 PE Plastic Pipe/Tubing 139 605.6 accordance with the manufacturer's installation accordance with the manufacturer's installation instructions FALSE and Joints. UPC instructions and shall comply with Section 605.6.1 or and shall comply with Section 605.6.1 or Section 605.6.2. Section 605.6.2. 605.6.1 Heat-Fusion Joints. Heat-fusion joints between PE 605.6.1 Heat-Fusion Joints. Heat-fusion joints 4.3.2024 pipe or tubing and fittings shall be assembled in accordance between PE pipe or tubing and fittings shall be assembled in Keep as shown in 202 FALSE 140 605.6.1 with Section 605.6.1.1 through Section 605.6.1.3 using butt, accordance with Section 605.6.1.1 through Section Heat-Fusion Joints. UPC socket, or electro-fusion heat methods. 605.6.1.3 using butt, socket, and electro-fusion heat 4.3.2024 605.6.1.1 Butt-Fusion Joints. Butt-fusion joints shall be **605.6.1.1 Butt-Fusion Joints**. Butt-fusion joints made in accordance with ASTM F2620. Joints shall be made shall be made in accordance with ASTM F2620. by heating the squared ends of two pipes, pipe and fitting, Joints shall be made by heating the squared ends of Keep as shown in 202 141 605.6.1.1 FALSE **Butt-Fusion Joints** or two fittings by holding ends against a heated element. two pipes, pipe and fitting, or two fittings by holding ends UPC The heated element shall be removed where the proper against a heated element. The heated element shall be melt is obtained and joined ends shall be placed together removed where the proper melt is obtained and joined ends with applied force. shall be placed together with applied force.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 4.3.2024 605.6.1.2 Electro-Fusion Joints. Electro-fusion joints shall 605.6.1.2 Electro-Fusion Joints. Electro-fusion be heated internally by a conductor at the interface of the joints shall be heated internally by a conductor at the joint. Align and restrain fitting to pipe to prevent movement interface of the joint. Align and restrain fitting to Keep as shown in 202 142 FALSE 605.6.1.2 Electro-Fusion Joints. and apply electric current to the fitting. Turn off the current pipe to prevent movement and apply electric current UPC. when the proper time has elapsed to heat the joint. The to the fitting. Turn off the current when the proper joint shall fuse together and remain undisturbed until cool. time has elapsed to heat the joint. The joint shall fuse together and remain undisturbed until cool. 4.3.2024 **605.6.1.3 Socket-Fusion Joints.** Socket-fusion joints shall be **605.6.1.3 Socket-Fusion Joints.** Socket-fusion made in accordance with ASTM F2620. Joints shall be made lioints shall be made in accordance with ASTM by simultaneously heating the outside surface of a pipe end F2620. Joints shall be made by simultaneously heating the Keep as shown in 2024 and the inside of a fitting socket. Where the proper melt is outside surface of a pipe end and the inside of a fitting 143 FALSE 605.6.1.3 **Socket-Fusion Joints** UPC obtained, the pipe and fitting shall be joined by inserting socket. Where the proper melt is obtained, the pipe and one into the other with applied force. The joint shall fuse fitting shall be joined by inserting one into the other with together and remain undisturbed until cool. applied force. The joint shall fuse together and remain undisturbed until cool. 4.3.2024 605.6.2 Mechanical Joints. Mechanical joints between PE pipe or 605.6.2 Mechanical Joints. Mechanical joints between PE pipe or tubing and fittings shall include insert and mechanical tubing and fittings shall include compression fittings that provide a pressure seal resistance to insert and mechanical compression fittings that provide a pressure pullout. Joints for insert fittings shall be made by cutting the pipe seal resistance to pullout. Joints for insert fittings shall be made by square, using a cutter designed for plastic piping, and removal of cutting the pipe square, using acutter designed for plastic piping, sharp edges. Two stainless steel clamps shall be placed over the and removal of sharp edges. Two stainless steel clamps shall be end of the pipe. Fittings shall be checked for proper size based on placed over the end of the pipe. Fittings shall be checked for the diameter of the pipe. The end of pipe shall be placed over the proper size based on the diameter of the pipe. The end of pipe barbed insert fitting, making contact with the fitting shoulder. shall be placed over the barbed insert fitting, making contact with Keep as shown in 2024 Clamps shall be positioned equal to 180 degrees (3.14 rad) apart the fitting shoulder. Clamps shall be positioned equal to 180 144 605.6.2 **Mechanical Joints FALSE** and shall be tightened to provide a leak tight joint. Compression degrees (3.14 rad) apart and shall be tightened to provide a leak UPC type couplings and fittings shall be permitted for use in joining PE tight joint. Compression type couplings and fittings shall be piping and tubing. Stiffeners that extend beyond the clamp or nut permitted for use in joining PE piping and tubing. Stiffeners that shall be prohibited. Bends shall be not less than 30 pipe extend beyond the clamp or nut shall be prohibited. Bends shall diameters, or the coil radius where bending with the coil. Bends be not less than 30 pipe diameters, or the coil radius where shall not be permitted closer than 10 pipe diameters of a fitting bending with the coil. Bends shall not be permitted closer than 10 or valve. Mechanical joints shall be designed for their intended pipe diameters of a fitting or valve. Mechanical joints shall be use. designed for their intended use. 605.7 PE-AL-PE Plastic Pipe/Tubing and Joints. PEAL-PE 605.7 PE-AL-PE Plastic Pipe/Tubing and Joints. PEAL-PE 4.3.2024 plastic pipe or tubing and fitting joining methods shall be plastic pipe or tubing and fitting joining methods shall be PE-AL-PE Plastic Keep as shown in 202 TRUE 145 605.7 installed in accordance with the manufacturer's installation installed in accordance with the manufacturer's installation Pipe/Tubing and Joints. UPC instructions and shall comply with Section 605.7.1 and instructions and shall comply with Section 605.7.1 and Section 605.7.1.1. Section 605.7.1.1.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 605.7.1 Mechanical Joints. Mechanical joints for PEAL-PE pipe or 605.7.1 Mechanical Joints. Mechanical joints for PEAL-PE pipe or 4.3.2024 tubing and fittings shall be either of the metal insert fittings with tubing and fittings shall be either of the metal insert fittings with a a split ring and compression nut or metal insert fittings with split ring and compression nut or metal insert fittings with copper copper crimp rings. Metal insert fittings shall comply with ASTM crimp rings. Metal insert fittings shall comply with ASTM F1974. F1974. Crimp insert fittings shall be joined to the pipe by placing Crimp insert fittings shall be joined to the pipe by placing the the copper crimp ring around the outer circumference of the copper crimp ring around the outer circumference of the pipe, pipe, forcing the pipe material into the space formed by the ribs forcing the pipe material into the space formed by the ribs on the Keep as shown in 2024 on the fitting until the pipe contacts the shoulder of the fitting. fitting until the pipe contacts the shoulder of the fitting. The crimp 146 605.7.1 Mechanical Joints. UPC. The crimp ring shall then be positioned on the pipe so the edge of ring shall then be positioned on the pipe so the edge of the crimp the crimp ring is 1/8 of an inch (3.2mm) to 1/4 of an inch (6.4 ring is 1/8 of an inch (3.2mm) to 1/4 of an inch (6.4 mm) from the end of the pipe. The jaws of the crimping tool shall be centered mm) from the end of the pipe. The jaws of the crimping tool shall be centered over the crimp ring and tool perpendicular to the over the crimp ring and tool perpendicular to the barb. The jaws barb. The jaws shall be closed around the crimp ring and shall not shall be closed around the crimp ring and shall not be crimped be crimped more than once. more than once. **605.7.1.1 Compression Joints**. Compression joints for PE-AL-PE 605.7.1.1 Compression Joints. Compression 4.3.2024 pipe or tubing and fittings shall be joined through the joints for PE-AL-PE pipe or tubing and fittings shall be joined compression of a split ring, by a compression nut around the through the compression of a split ring, by a compression nut circumference of the pipe. The compression nut and split ring around the circumference of the pipe. The compression nut and Keep as shown in 2024 shall be placed around the pipe. The ribbed end of the fitting shall split ring shall be placed around the pipe. The ribbed end of the 147 FALSE 605.7.1.1 Compression Joints. UPC be inserted into the pipe until the pipe contacts the shoulder of fitting shall be inserted into the pipe until the pipe contacts the the fitting. Position and compress the split ring by tightening the shoulder of the fitting. Position and compress the split ring by compression nut onto the insert fitting. tightening the compression nut onto the insert fitting. 605.8 PE-RT. Polyethylene of raised temperature (PE-RT) **605.8 PE-RT.** Polyethylene of raised temperature (PE-RT) 4.3.2024 Keep as shown in 202 148 PE-RT. FALSE 605.8 tubing and fitting joining methods and shall comply with tubing and fitting joining methods and shall comply with UPC Section 605.8.1. Section 605.8.1. 605.8.1 Mechanical Joints. Fittings for PE-RT tubing shall 605.8.1 Mechanical Joints. Fittings for PE-RT tubing shall 4.3.2024 comply with the applicable standards listed in Table 604.1. comply with the applicable standards listed in Table 604.1. Keep as shown in 202 149 605.8.1 FALSE Mechanical Joints. Mechanical joints for PE-RT tubing shall be installed in Mechanical joints for PE-RT tubing shall be installed in UPC accordance with the manufacturer's installation accordance with the manufacturer's installation instructions. 605.9 PEX Plastic Tubing and Joints. PEX plastic tubing and 605.9 PEX Plastic Tubing and Joints. PEX plastic tubing and 4.3.2024 Keep as shown in 202 fitting joining methods shall be installed in accordance with fitting joining methods shall be installed in accordancewith PEX Plastic Tubing and 150 605.9 **FALSE** the manufacturer's installation instructions and shall comply the manufacturer's installation instructions and shall Joints. UPC comply with Section 605.9.1 through Section 605.9.3. with Section 605.9.1 through Section 605.9.3. 605.9.1 Fittings. Fittings for PEX tubing shall comply with **605.9.1 Fittings**. Fittings for PEX tubing shall comply with 4.3.2024 the applicable standards referenced in Table 604.1. PEX the applicable standards referenced in Table 604.1. PEX Keep as shown in 2024 tubing that complies with ASTM F876 shall be marked with tubing that complies with ASTM F876 shall be marked with 151 605.9.1 Fittings. **FALSE** UPC the applicable standard designation for the fittings, specified the applicable standard designation for the fittings, specified by the tubing manufacturer for use with the by the tubing manufacturer for use with the tubing. tubing

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 605.9.2 Mechanical Joints. Mechanical joints shall be 605.9.2 Mechanical Joints. Mechanical joints shall 4.3.2024 Keep as shown in 2024 605.9.2 FALSE 152 Mechanical Joints. nstalled in accordance with the manufacturer's installation be installed in accordance with the manufacturer's UPC installation instructions. instructions. **605.9.3 Push Fit Fittings.** Removable and nonremovable 605.9.3 Push Fit Fittings. Removable and nonremovable 4.3.2024 Keep as shown in 202 153 605.9.3 **Push Fit Fittings** push fit fittings that employ a quick assembly push fit push fit fittings that employ a quick assembly push fit FALSE UPC connector shall comply with ASSE 1061. connector shall comply with ASSE 1061. 605.10 PEX-AL-PEX Plastic Tubing and Joints. PEXAL-PEX 4.3.2024 605.10 PEX-AL-PEX Plastic Tubing and Joints. PEXAL-PEX plastic pipe or tubing and fitting joining methods shall be plastic pipe or tubing and fitting joining methods shall be PEX-AL-PEX Plastic Tubing Keep as shown in 2024 154 605.10 TRUE installed in accordance with the manufacturer's installation installed in accordance with the manufacturer's installation UPC and Joints. instructions and shall comply with Section 605.10.1 and instructions and shall comply with Section 605.10.1 and Section 605.10.1.1. Section 605.10.1.1. 4.3.2024 605.10.1 Mechanical Joints. Mechanical joints 605.10.1 Mechanical Joints. Mechanical joints between PEX-AL-PEX tubing and fittings shall include between PEX-AL-PEX tubing and fittings shall include mechanical and compression type fittings and insert fittings mechanical and compression type fittings and insert fittings with a crimping ring. Insert fittings utilizing a crimping ring with a crimping ring. Insert fittings utilizing a crimping ring Keep as shown in 2024 shall comply with ASTM F1974 or ASTM F2434. Crimp joints shall comply with ASTM F1974 or ASTM F2434. Crimp joints 155 **FALSE** 605.10.1 Mechanical Joints. UPC for crimp insert fittings shall be joined to PEX-AL-PEX pipe for crimp insert fittings shall be joined to PEX-AL-PEX pipe by by the compression of a crimp ring around the outer the compression of a crimp ring around the outer circumference of the pipe, forcing the pipe material into circumference of the pipe, forcing the pipe material into annular spaces formed by ribs on the fitting. annular spaces formed by ribs on the fitting. 4.3.2024 **605.10.1.1 Compression Joints.** Compression joints shall 605.10.1.1 Compression Joints. Compression include compression insert fittings and shall be joined to joints shall include compression insert fittings and shall be Keep as shown in 2024 PEX-AL-PEX pipe through the compression of a split ring or joined to PEX-AL-PEX pipe through the compression of a FALSE 156 605.10.1.1 Compression Joints. UPC compression nut around the outer circumference of the split ring or compression nut around the outer pipe, forcing the pipe material into the annular space circumference of the pipe, forcing the pipe material into the formed by the ribs on the fitting. annular space formed by the ribs on the fitting. 4.3.2024 605.11 Polypropylene (PP) Piping and Joints. PP pipe and 605.11 Polypropylene (PP) Piping and Joints. PP pipe and Polypropylene (PP) Piping Keep as shown in 202 4 fittings shall be installed in accordance with the fittings shall be installed in accordance with the 157 605.11 FALSE and Joints. UPC manufacturer's installation instructions and shall comply manufacturer's installation instructions and shall comply with Section 605.11.1 through Section 605.11.3. with Section 605.11.1 through Section 605.11.3. 4.3.2024 605.11.1 Heat-Fusion Joints. Heat-fusion joints for 605.11.1 Heat-Fusion Joints. Heat-fusion joints for polypropylene (PP) pipe and fitting joints shall be installed polypropylene (PP) pipe and fitting joints shall be installed with socket-type heat-fused polypropylene fittings, fusion with socket-type heat-fused polypropylene fittings, fusion Keep as shown in 2024 outlets, butt-fusion polypropylene fittings or pipe, or outlets, butt-fusion polypropylene fittings or pipe, or electro-FALSE 158 605.11.1 **Heat-Fusion Joints** UPC electro-fusion polypropylene fittings. Joint surfaces shall be fusion polypropylene fittings. Joint surfaces shall be clean and free from moisture. The joint shall be undisturbed until clean and free from moisture. The joint shall be undisturbed until cool. Joints shall be made in accordance cool. Joints shall be made in accordance with ASTM F2389 with ASTM F2389 or CSA B137.11. or CSA B137.11. 605.11.2 Mechanical and Compression Sleeve 4.3.2024 605.11.2 Mechanical and Compression Sleeve Mechanical and Keep as shown in 2024 Joints. Mechanical and compression sleeve joints shall be Joints. Mechanical and compression sleeve joints shall be ALSE 159 605.11.2 **Compression Sleeve** UPC installed in accordance with the manufacturer's installation installed in accordance with the manufacturer's installation Joints. instructions. instructions.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 605.11.3 Threaded Joints. PP pipe shall not be 605.11.3 Threaded Joints. PP pipe shall not be 4.3.2024 Keep as shown in 2024 threaded. PP transition fittings for connection to other threaded. PP transition fittings for connection to other 160 605.11.3 FALSE Threaded Joints. UPC piping materials shall only be threaded by use of copper piping materials shall only be threaded by use of copper alloy or stainless steel inserts molded in the fitting. alloy or stainless steel inserts molded in the fitting. 605.12 PVC Plastic Pipe and Joints. PVC plastic pipe and 605.12 PVC Plastic Pipe and Joints. PVC plastic pipe and 4.3.2024 fitting joining methods shall be installed in accordance with fitting joining methods shall be installed in accordance with the manufacturer's installation instructions and shall the manufacturer's installation instructions and shall comply comply with Section 605.12.1 through Section 605.12.3. with Section 605.12.1 through Section 605.12.3. PVC piping Keep as shown in 2024 PVC piping shall not be exposed to direct sunlight. **PVC Plastic Pipe and** shall not be exposed to direct sunlight unless the piping 161 605.12 FALSE UPC does not exceed 24 inches (610 mm) and is wrapped with Joints. Exception: PVC piping in a location exposed to direct sunlight shall not exceed 24 inches (610 mm) in length and not less than 0.04 of an inch (1.02 mm) thick tape or be wrapped with not less than 0.04 of an inch (1.02 mm) otherwise protected from UV degradation. thick UV resistant tape or otherwise protected from UV degradation. 4.3.2024 605.12.1 Mechanical Joints. Mechanical joints shall be 605.12.1 Mechanical Joints. Mechanical joints shall be designed to provide a permanent seal and shall be of the designed to provide a permanent seal and shall be of the mechanical or push-on joint. The mechanical joint shall mechanical or push-on joint. The mechanical joint shall include a pipe spigot that has a wall thickness to withstand include a pipe spigot that has a wall thickness to withstand without deformation or collapse; the compressive force without deformation or collapse; the compressive force Keep as shown in 2024 exerted where the fitting is tightened. The push-on joint exerted where the fitting is tightened. The push-on joint 605.12.1 FALSE 162 **Mechanical Joints UPC** shall have a minimum wall thickness of the bell at any point shall have a minimum wall thickness of the bell at any point between the ring and the pipe barrel. The elastomeric between the ring and the pipe barrel. The elastomeric gasket shall comply with ASTM D3139, and be of such size gasket shall comply with ASTM D3139, and be of such size and shape as to provide a compressive force against the and shape as to provide a compressive force against the spigot and socket after assembly to provide a positive seal. spigot and socket after assembly to provide a positive seal. 605.12.2 Solvent Cement Joints. Solvent cement 605.12.2 Solvent Cement Joints. Solvent cement 4.3.2024 joints for PVC pipe and fittings shall be clean from dirt and joints for PVC pipe and fittings shall be clean from dirt and moisture. Pipe shall be cut square and pipe shall be moisture. Pipe shall be cut square and pipe shall be deburred. Where surfaces to be joined are cleaned and free deburred. Where surfaces to be joined are cleaned and free of dirt, moisture, oil, and other foreign material, apply of dirt, moisture, oil, and other foreign material, apply Keep as shown in 2024 primer purple in color that complies with ASTM F656. primer purple in color that complies with ASTM F656. 163 605.12.2 Solvent Cement Joints TRUE Primer shall be applied to the surface of the pipe and fitting Primer shall be applied to the surface of the pipe and fitting UPC is softened. Solvent cement that complies with ASTM is softened. Solvent cement that complies with ASTM D2564 D2564 shall be applied to all joint surfaces. Joints shall be shall be applied to all joint surfaces. Joints shall be made made while both the inside socket surface and outside while both the inside socket surface and outside surface of surface of pipe are wet with solvent cement. Hold joint in pipe are wet with solvent cement. Hold joint in place and place and undisturbed for 1 minute after assembly. undisturbed for 1 minute after assembly.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 605.12.3 Threaded Joints. Threads shall comply with ASME 605.12.3 Threaded Joints. Threads shall comply with ASME 4.3.2024 B1.20.1. A minimum of Schedule 80 shall be permitted to B1.20.1. A minimum of Schedule 80 shall be permitted to be be threaded; however, the pressure rating shall be reduced threaded; however, the pressure rating shall be reduced by by 50 percent. The use of molded fittings shall not result in 50 percent. The use of molded fittings shall not result in a 50 a 50 percent reduction in the pressure rating of the pipe percent reduction in the pressure rating of the pipe provided that the molded fittings shall be fabricated so that provided that the molded fittings shall be fabricated so that Keep as shown in 2024 the wall thickness of the material is maintained at the the wall thickness of the material is maintained at the FALSE 164 605.12.3 Threaded Joints. UPC threads. Thread sealant compound that is compatible with threads. Thread sealant compound that is compatible with the pipe and fitting, insoluble in water and nontoxic shall be the pipe and fitting, insoluble in water and nontoxic shall be applied to male threads. Caution shall be used during applied to male threads. Caution shall be used during assembly to prevent over tightening of the PVC assembly to prevent over tightening of the PVC components components once the thread sealant has been applied. once the thread sealant has been applied. Female PVC Female PVC threaded fittings shall be used with plastic male threaded fittings shall be used with plastic male threads 605.13 Stainless Steel Pipe and Joints. Joining methods for 605.13 Stainless Steel Pipe and Joints. Joining methods for 4.3.2024 stainless steel pipe and fittings shall be installed in stainless steel pipe and fittings shall be installed in Keep as shown in 202 Stainless Steel Pipe and 605.13 accordance with the manufacturer's installation instructions FALSE 165 accordance with the manufacturer's installation UPC Joints. instructions and shall comply with Section 605.13.1 or and shall comply with Section 605.13.1 or Section 605.13.2. Section 605.13.2. 605.13.1 Mechanical Joints. Mechanical joints shall be 605.13.1 Mechanical Joints. Mechanical joints shall be 4.3.2024 Keep as shown in 2024 designed for their intended use. Such joints shall include designed for their intended use. Such joints shall include 166 605.13.1 Mechanical Joints. FALSE UPC compression, flanged, grooved, press-connect, and compression, flanged, grooved, press-connect, and **605.13.2 Welded Joints.** Welded joints shall be either 605.13.2 Welded Joints. Welded joints shall be either fusion 4.3.2024 fusion or resistance welded based on the selection of the or resistance welded based on the selection of the base Keep as shown in 2024 FALSE 167 605.13.2 Welded Joints. base metal. The chemical composition of the filler metal metal. The chemical composition of the filler metal shall UPC shall comply with AWS A5.9 based on the alloy content of comply with AWS A5.9 based on the alloy content of the the piping material. piping material. 605.14 Slip Joints. In water piping, slip joints shall be 4.3.2024 Keep as shown in 202 4 605.14 Slip Joints. In water piping, slip joints shall be FALSE 168 605.14 Slip Joints. UPC permitted to be used only on the exposed fixture supply. permitted to be used only on the exposed fixture supply. 4.3.2024 605.15 Dielectric Unions. Dielectric unions where installed 605.15 Dielectric Unions. Dielectric unions where Keep as shown in 2024 at points of connection where there is a dissimilarity of installed at points of connection where there is a 169 605.15 Dielectric Unions. FALSE UPC metals shall be in accordance with ASSE 1079 or IAPMO PS dissimilarity of metals shall be in accordance with ASSE 4.3.2024 605.16 Joints Between Various Materials. Joints between 605.16 Joints Between Various Materials. Joints various materials shall be installed in accordance with the between various materials shall be installed in accordance Keep as shown in 202 Joints Between Various FALSE 170 605.16 manufacturer's installation instructions and shall comply with the manufacturer's installation instructions and shall UPC Materials. with Section 605.16.1 through Section 605.16.3. comply with Section 605.16.1 through Section 605.16.3.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 4.3.2024 605.16.1 Copper or Copper Alloy Pipe or Tubing to 605.16.1 Copper or Copper Alloy Pipe or Tubing Threaded Pipe Joints. Joints from copper or copper alloy to Threaded Pipe Joints. Joints from copper or copper alloy pipe or tubing to threaded pipe shall be made using copper pipe or tubing to threaded pipe shall be made using copper alloy adapter, copper alloy nipple [minimum 6 inches (152 alloy adapter, copper alloy nipple [minimum 6 inches (152 Copper or Copper Alloy Keep as shown in 2024 mm)], dielectric fitting, or dielectric union in accordance mm)], dielectric fitting, or dielectric union in accordance 171 605.16.1 Pipe or Tubing FALSE with ASSE 1079 or IAPMO PS 66. The joint between the with ASSE 1079. The joint between the copper or copper UPC to Threaded Pipe Joints. copper or copper alloy pipe or tubing and the fitting shall be alloy pipe or tubing and the fitting shall be a soldered, a soldered, brazed, flared, or press-connect joint and the brazed, flared, or press-connect joint and the connection connection between the threaded pipe and the fitting shall between the threaded pipe and the fitting shall be made be made with a standard pipe size threaded joint. with a standard pipe size threaded joint. 4.3.2024 605.16.2 Plastic Pipe to Other Materials. Where connecting 605.16.2 Plastic Pipe to Other Materials. Where Plastic Pipe to Other Keep as shown in 2024 plastic pipe to other types of piping, approved types of connecting plastic pipe to other types of piping, approved 172 605.16.2 FALSE Materials. **UPC** adapter or transition fittings designed for the specific types of adapter or transition fittings designed for the transition intended shall be used. specific transition intended shall be used. 605.16.3 Stainless Steel to Other Materials. 605.16.3 Stainless Steel to Other Materials. 4.3.2024 Where connecting stainless steel pipe to other types of Where connecting stainless steel pipe to other types of Keep as shown in 2024 piping, mechanical joints of the compression type, dielectric piping, mechanical joints of the compression type, dielectric Stainless Steel to Other FALSE 173 605.16.3 Materials. UPC fitting, or dielectric union in accordance with ASSE 1079 or fitting, or dielectric union in accordance with ASSE 1079 and IAPMO PS 66 and designed for the specific transition designed for the specific transition intended shall be used. intended shall be used. Keep as shown in 2024 606.0 Valves. 606.0 Valves. 4.3.2024 TRUE 174 606.0 Valves UPC 606.1 General. Valves up to and including 2 inches (50 mm) in 606.1 General. Valves up to and including 2 inches (50 mm) in size 4.3.2024 size shall be copper alloy or other approved material. Sizes shall be copper alloy or other approved material. Sizes exceeding 2 exceeding 2 inches (50 mm) shall be permitted to have bodies of inches (50 mm) shall be permitted to have cast iron or copper cast iron, copper alloy, or other approved materials. Each gate or alloy bodies. Each gate or ball valve shall be a fullway or full-port ball valve shall be a fullway or full-port type with working parts of type with working parts of the non-corrosive the non-corrosive material. Where valves are made from copper material. Valves carrying water used in potable water systems alloys containing more than 15 percent zinc by weight and are intended to supply drinking water shall comply with the used in plastic piping systems, they shall be resistant to requirements of NSF 61 and ASME A112.4.14, ASME B16.34, ASTM F1970, ASTM F2389, AWWA C500, AWWA C504, AWWA dezincification and stress corrosion cracking in compliance with Keep as shown in 2024 NSF/ANSI 14. Valves carrying water used in potable water C507, IAPMO Z1157, MSS SP-67, MSS SP-70, MSS SP-71, MSS SP-175 606.1 FALSE General. UPC systems shall comply with the requirements of ASME 72, MSS SP-78, MSS SP-80, MSS SP-110, MSS SP-122, or NSF 359. A112.4.14/CSA B124.14, ASME B16.34, ASTM F1970, ASTM F2389, AWWA C500, AWWA C504, AWWA C507, IAPMO/ANSI Z1157, MSS SP-67, MSS SP-70, MSS SP-71, MSS SP-72, MSS SP-78, MSS SP-80, MSS SP-110, MSS SP-122, or NSF/ANSI 359. Valves intended to supply drinking water shall also comply with the requirements of NSF/ANSI/CAN 61.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify **606.2 Fullway Valve.** A fullway valve controlling outlets 606.2 Fullway Valve. A fullway valve controlling outlets shall 4.3.2024 shall be installed on the discharge side of each water meter be installed on the discharge side of each water meter and and each unmetered water supply. Water piping supplying each unmetered water supply. Water piping supplying more more than one building on one premise shall be equipped than one building on one premise shall be equipped with a with a separate fullway valve to each building, so arranged separate fullway valve to each building, so arranged that that the water supply can be turned on or off to an thewater supply can be turned on or off to an individual or Keep as shown in 2024 individual or separate building provided; however, that separate building provided; however, that supply piping to a 176 **FALSE** 606.2 Fullway Valve. supply piping to a single-family residence and building single-family residence and building accessory thereto shall UPC accessory thereto shall be permitted to be controlled by be permitted to be controlled by one valve. Such shutoff one valve. Such shutoff valves shall be accessible. A fullway valves shall be accessible. A fullway valve shall be installed valve shall be installed on the discharge piping from water on the discharge piping from water supply tanks at or near supply tanks at or near the tank. A fullway valve shall be the tank. A fullway valve shall be installed on the cold water installed on the cold water supply pipe to each water supply pipe to each water heater at or near the water heater at or near the water heater. 606.3 Multidwelling Units. In multidwelling units, one or 606.3 Multidwelling Units. In multidwelling units, one or 4.3.2024 more shutoff valves shall be provided in each dwelling unit more shutoff valves shall be provided in each dwelling unit so that the water supply to a plumbing fixture or group of so that the water supply to a plumbing fixture or group of Keep as shown in 2024 177 606.3 TRUE Multidwelling Units. fixtures in that dwelling unit can be shut off without fixtures in that dwelling unit can be shut off without UPC stopping water supply to fixtures in other dwelling units. stopping water supply to fixtures in other dwelling units. These valves shall be accessible in the dwelling unit that These valves shall be accessible in the dwelling unit that they control. they control. 606.4 Multiple Openings. Valves used to control two or **606.4 Multiple Openings.** Valves used to control two or 4.3.2024 Keep as shown in 2024 more openings shall be fullway gate valves, ball valves, or more openings shall be fullway gate valves, ball valves, or 178 606.4 Multiple Openings. TRUE UPC other approved valves designed and approved for the other approved valves designed and approved for the service intended. service intended. 606.5 Control Valve. A control valve shall be installed 606.5 Control Valve. A control valve shall be installed 4.3.2024 immediately ahead of each water-supplied appliance and immediately ahead of each water-supplied appliance and immediately ahead of each slip joint or appliance supply. immediately ahead of each slip joint or appliance supply. Parallel water distribution systems shall provide a control Parallel water distribution systems shall provide a control valve either immediately ahead of each fixture being valve either immediately ahead of each fixture being Keep as shown in 202 179 supplied or installed at the manifold, and shall be identified supplied or installed at the manifold, and shall be identified FALSE 606.5 Control Valve. UPC with thefixture being supplied. Where parallel water with the fixture being supplied. Where parallel water distribution system manifolds are located in attics, crawl distribution system manifolds are located in attics, crawl spaces, or other locations not readily accessible, a separate spaces, or other locations not readily accessible, a separate shutoff valve shall be required immediately ahead of each shutoff valve shall be required immediately ahead of each individual fixture or appliance served. individual fixture or appliance served. 4.3.2024 606.5.1 Manifolds. Field installed manifolds for water distribution shall conform with the applicable requirements Keep as shown in 202 FALSE 180 606.5.1 Manifolds for valves, pipes, and fittings as referenced in this code. UPC Manufactured water distribution manifolds shall be in accordance with IAPMO IGC 109.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board **Proposal and** (A)ccept Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify Keep as shown in 2024 606.6 Accessible. Required shutoff or control valves shall be 606.6 Accessible. Required shutoff or control valves shall be 4.3.2024 181 606.6 Accessible. TRUE UPC accessible. 606.7 Multiple Fixtures. A single control valve shall be 606.7 Multiple Fixtures. A single control valve shall be 4.3.2024 Keep as shown in 2024 installed on a water supply line ahead of an automatic TRUE 182 606.7 Multiple Fixtures. installed on a water supply line ahead of an automatic UPC metering valve that supplies a battery of fixtures. metering valve that supplies a battery of fixtures. 4.3.2024 606.8 Check Valve Required. All systems that circulate Keep as shown in 2024 water by means of a pump or other mechanical device or FALSE 183 606.8 Check Valve Required. UPC method shall have a check valve(s) or equal device(s) installed so as to ensure the direction of flow. 606.9 Leak Detection Devices. Where leak detection N/A 4.3.2024 Keep as shown in 202 FALSE 184 606.9 Leak Detection Devices devices for water supply and distribution are installed, they UPC shall comply with ANSI/CAN/IAPMO Z1349. **Potable Water Supply** 607.0 Potable Water Supply Tanks 607.0 Potable Water Supply Tanks 4.3.2024 607.0 TRUE 185 Tanks 607.1 General. Potable water supply tanks shall be installed 607.1 General. Potable water supply tanks shall be installed 4.3.2024 Keep as shown in 2024 in accordance with the manufacturer's installation in accordance with the manufacturer's installation 186 TRUE 607.1 General. UPC instructions and supported in accordance with the building instructions and supported in accordance with the building code. code. 4.3.2024 607.2 Private Well Water Tanks. Pressurized potable water N/A Private Well Water Keep as shown in 202 187 607.2 tanks for private well water systems shall comply with ASSE FALSE UPC Tanks. 1099/WSC-PST 2000. 4.3.2024 607.3 Potable Water Tanks. Potable water supply tanks, 607.2 Potable Water Tanks. Potable water supply tanks, Keep as shown in 202 188 607.3 interior tank coatings, or tank liners intended to supply interior tank coatings, or tank liners intended to supply FALSE Potable Water Tanks. UPC drinking water shall comply with NSF/ANSI/CAN 61. drinking water shall comply with NSF 61 4.3.2024 607.6 Valves. Pressurized tanks shall be provided with a **607.5 Valves.** Pressurized tanks shall be provided with a listed pressure-relief valve installed in accordance with the listed pressure-relief valve installed in accordance with the manufacturer's installation instructions. The relief valve manufacturer's installation instructions. The relief valve shall be discharged in accordance with Section 608.5. Where Keep as shown in 2024 shall be discharged in accordance with Section 608.5. FALSE 189 607.6 Valves. UPC Where a potable water supply tank is located above the a potable water supply tank is located above the fixtures, fixtures, appliances, or system components it serves, it shal appliances, or system components it serves, it shall be be equipped with a vacuum relief valve that complies with equipped with a vacuum relief valve that complies with CSA ANSI Z21.22/CSA 4.4. Z21.22. Water Pressure, Pressure 608.0 Water Pressure, Pressure Regulators, Pressure Relief 608.0 Water Pressure, Pressure Regulators, Pressure Relief 4.3.2024 Regulators, Pressure Valves, and Vacuum Relief Valves. Valves, and Vacuum Relief Valves. TRUE 190 608.0 Relief Valves, and Vacuum Relief Valves.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 4.3.2024 **608.1 Inadequate Water Pressure.** Where the water 608.1 Inadequate Water Pressure. Where the water pressure in the main or other source of supply will not pressure in the main or other source of supply will not provide a residual water pressure of not less than 15 provide a residual water pressure of not less than 15 pounds pounds force per square inch (psi) (103 kPa), after allowing force per square inch (psi) (103 kPa), after allowing for Inadequate Water Keep as shown in 2024 for friction and other pressure losses, a tank and a pump or friction and other pressure losses, a tank and a pump or FALSE 191 608.1 Pressure. UPC. other means that will provide said 15 psi (103 kPa) pressure other means that will provide said 15 psi (103 kPa) pressure shall be installed Where fixtures, fixture fittings, or both are shall be installed. Where fixtures, fixture fittings, or both are installed that, require a residual pressure exceeding 15 psi installed that, require residual pressure exceeding 15 psi (103 kPa), that minimum residual pressure shall be (103 kPa), that minimum residual pressure shall be provided. provided. 608.2 Excessive Water Pressure. Where static water pressure in 4.3.2024 608.2 Excessive Water Pressure. Where static water pressure in the water supply piping exceeds 80 psi (552 kPa), an approvedthe water supply piping is exceeding 80 psi (552 kPa), an approved type pressure regulator preceded by an adequate strainer shall be type pressure regulator preceded by an adequate strainer shall be nstalled and the static pressure reduced to 80 psi (552 kPa) or installed and the static pressure reduced to 80 psi (552 kPa) or less. Pressure regulators for potable water distribution systems less. Pressure regulator(s) equal to or exceeding 11/2 inches (40 shall comply with ASSE 1003 or AWWA C530. Pressure mm) shall not require a strainer. Such regulator(s) shall control the regulator(s) equal to or exceeding 11/2 inches (40 mm) shall not pressure to water outlets in the building unless otherwise require a strainer. Such regulator(s) shall control the pressure to approved by the Authority Having Jurisdiction. Each such regulator Keep as shown in 2024 water outlets in the building unless otherwise approved by the and strainer shall be accessibly located aboveground or in a vault **Excessive Water** 192 FALSE 608.2 Authority Having Jurisdiction. Each such regulator and strainer equipped with a properly sized and sloped boresighted drain to UPC Pressure. shall be accessibly located aboveground or in a vault equipped daylight, shall be protected from freezing, and shall have the with a properly sized and sloped boresighted drain to daylight, strainer readily accessible for cleaning without removing the shall be protected from freezing, and shall have the strainer regulator or strainer body or disconnecting the supply piping. readily accessible for cleaning without removing the regulator or strainer body or disconnecting the supply piping. Pipe size determinations shall be based on 80 percent of the Pipe size determinations shall be based on 80 percent of the 4.3.2024 reduced pressure where using Table 610.4. reduced pressure where using Table 610.4. An approved expansion tank shall be installed in the cold water An approved expansion tank shall be installed in the cold water distribution piping downstream of each such regulator to prevent distribution piping downstream of each such regulator to prevent pressure exceeding 80 psi from developing due tothermal excessive pressure from developing due to thermal expansion and to maintain the pressure setting of the regulator. Expansion tanks expansion. Expansion tanks used in potable water systems used in potable water systems intended to supply drinking water intended to supply drinking water shall comply with NSF/ANSI/CAN 61. The expansion tank shall be properly sized, shall comply with NSF 61. The expansion tank shall be properly **FALSE** 193 securely fastened to the structure, and installed in accordance sized and installed in accordance with the manufacturer's with the manufacturer's installation instructions and listing. nstallation instructions and listing. Systems designed by Systems designed by a licensed plumbing contractor or registered registered design professionals shall be permitted to use approved design professionals shall be permitted to use approved pressure pressure relief valves in lieu of expansion tanks provided such relief valves in lieu of expansion tanks provided such relief valves relief valves have a maximum pressure relief setting of 100 psi have a maximum pressure relief setting of 100 psi (689 kPa) or (689 kPa) or less. less.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 608.3 Expansion Tanks, and Combination Temperature and 608.3 Expansion Tanks, and Combination Temperature and 4.3.2024 Pressure-Relief Valves. A water system provided with a check Pressure-Relief Valves. A water system provided with a check valve, backflow preventer, or other normally closed device that valve, backflow preventer, or other normally closed device that prevents dissipation of building pressure back into the water prevents dissipation of building pressure back into the water main main, independent of the type of water heater used, shall be independent of the type of water heater used, shall be provided provided with an approved, listed, and adequately sized with an approved, listed, and adequately sized expansion tank or Expansion Tanks, and expansion tank or other approved device having a similar function other approved device having a similar function to control thermal Keep as shown in 2024 Combination 194 608.3 to control thermal expansion. Prepressurized water expansion expansion. Such expansion tank or other approved device shall be FALSE Temperature and UPC tanks shall comply with IAPMO/ANSI Z1088. Such expansion tank installed on the building side of the check valve, backflow Pressure-Relief Valves or other approved device shall be installed on the building side of preventer, or other device and shall be sized and installed in the check valve, backflow preventer, or other device and shall be accordance with the manufacturer's installation instructions. sized, securely fastened to the structure, and installed in accordance with the manufacturer's installation instructions. A water system containing storage water heating equipment shall A water system containing storage water heating equipment shall 4.3.2024 be provided with an approved, listed, adequately sized be provided with an approved, listed, adequately sized combination temperature and pressure-relief valve, except for combination temperature and pressure-relief valve, except for listed nonstorage instantaneous heaters having an inside listed nonstorage instantaneous heaters having an inside diameter diameter of not more than 3 inches (80 mm). Each such approved of not more than 3 inches (80 mm). Each such approved combination temperature and pressure-relief valve shall be combination temperature and pressure-relief valve shall be nstalled on the water-heating device in an approved location installed on the water-heating device in an approved location 195 FALSE based on its listing requirements and the manufacturer's based on its listing requirements and the manufacturer's installation instructions. Each such combination temperature and installation instructions. Each such combination temperature and pressure-relief valve shall be provided with a drain in accordance pressure-relief valve shall be provided with a drain in accordance with Section 608.5. with Section 608.5. expansion tank shall not be required for an instantaneous nonstorage water heater. 608.4 Pressure Relief Valves. Each pressure relief valve 4.3.2024 608.4 Pressure Relief Valves. Each pressure relief valve shall shall be an approved automatic type with drain, and each be an approved automatic type with drain, and each such Keep as shown in 202 such relief valve shall be set at a pressure of not more than TRUE 196 608.4 Pressure Relief Valves. relief valve shall be set at a pressure of not more than 150 UPC 150 psi (1034 kPa). No shutoff valve shall be installed psi (1034 kPa). No shutoff valve shall be installed between between the relief valve and the system. the relief valve and the system. 4.3.2024 608.6 Water-Heating Devices. A water-heating device **608.6 Water-Heating Devices.** A water-heating device Keep as shown in 2024 connected to a separate storage tank and having valves connected to a separate storage tank and having valves TRUE 197 608.6 Water-Heating Devices. UPC between said heater and tank shall be provided with an between said heater and tank shall be provided with an approved water pressure relief valve. approved water pressure relief valve. 608.7 Vacuum Relief Valves. Where a hot-water storage 4.3.2024 **608.7 Vacuum Relief Valves.** Where a hot-water storage tank or an indirect water heater is located at an elevation tank or an indirect water heater is located at an elevation Keep as shown in 202 198 608.7 Vacuum Relief Valves. above the fixture outlets in the hot-water system, a vacuum above the fixture outlets in the hot-water system, a vacuum FALSE relief valve that complies with ANSI Z21.22/CSA 4.4 shall be relief valve that complies with CSA Z21.22 shall be installed installed on the storage tank or heater. on the storage tank or heater. 609.0 Installation, Testing, Unions, and Location. 609.0 Installation, Testing, Unions, and Location. 4.3.2024 Installation, Testing, TRUE 199 609.0 Unions, and Location.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 4.3.2024 **609.2 Trenches.** Water pipes shall not be run or laid in the **609.2 Trenches.** Water pipes shall not be run or laid in the same trench as building sewer or drainage piping con same trench as building sewer or drainage piping con Keep as shown in 202 200 structed of clay or materials that are not approved for use TRUE 609.2 Trenches. structed of clay or materials that are not approved for use UPC within a building unless both of the following conditions are within a building unless both of the following conditions are (1) The bottom of the water pipe shall be not less than 12 (1) The bottom of the water pipe shall be not less than 12 4.3.2024 201 TRUE inches (305 mm) above the top of the sewer or drain line. inches (305 mm) above the top of the sewer or drain line. (2) The water pipe shall be placed on a solid shelf excavated (2) The water pipe shall be placed on a solid shelf excavated 4.3.2024 at one side of the common trench with a clear horizontal at one side of the common trench with a clear horizontal distance of not less than 12 inches (305 mm) from the distance of not less than 12 inches (305 mm) from the sewer sewer or drain line. Water pipes crossing sewer or drainage or drain line. Water pipes crossing sewer or drainage piping 202 FALSE piping constructed of clay or materials that are not constructed of clay or materials that are not approved for approved for use within a building shall be laid not less than use within a building shall be laid not less than 12 inches 12 inches (305 mm) above the sewer or drainpipe. (305 mm) above the sewer or drain pipe. 609.3 Under Concrete Slab. Water piping installed within a 609.3 Under Concrete Slab. Water piping installed within a 4.3.2024 Keep as shown in 2024 building and in or under a concrete floor slab resting on the building and in or under a concrete floor slab resting on the TRUE 203 609.3 Under Concrete Slab. UPC ground shall be installed in accordance with the following ground shall be installed in accordance with the following requirements: requirements: (1) Ferrous piping shall have a protective coating of an (1) Ferrous piping shall have a protective coating of an 4.3.2024 approved type; machine applied and in accordance with approved type; machine applied and in accordance with recognized standards. Field wrapping shall provide recognized standards. Field wrapping shall provide equivalent protection and shall be restricted to those short equivalent protection and shall be restricted to those short TRUE 204 sections and fittings necessarily stripped for threading. Zinc sections and fittings necessarily stripped for threading. Zinc coating (galvanizing) shall not be deemed adequate coating (galvanizing) shall not be deemed adequate protection for piping or fittings. Approved nonferrous protection for piping or fittings. Approved nonferrous piping piping shall not be required to be wrapped. shall not be required to be wrapped. (2) Copper or copper alloy tubing shall be installed without 4.3.2024 (2) Copper or copper alloy tubing shall be installed without joints where possible. Where joints are permitted, they joints where possible. Where joints are permitted, they shall 205 shall be brazed, and fittings shall be wrought copper. For be brazed, and fittings shall be wrought copper. For the TRUE the purpose of this section, "within a building" shall mean purpose of this section, "within a building" shall mean within the fixed limits of the building foundation. within the fixed limits of the building foundation. 609.4 Testing. Upon completion of a section or of the entire **609.4 Testing.** Upon completion of a section or of the entire 4.3.2024 hot and cold water supply system, the system shall be hot and cold water supply system, the system shall be tested with water or air. The potable water test pressure tested with water or air. The potable water test pressure shall be greater than or equal to the working pressure shall be greater than or equal to the working pressure under Keep as shown in 2024 TRUE 206 under which the system is to be used. The air pressure shall which the system is to be used. The air pressure shall be a UPC be a minimum of 50 psi (345 kPa). Plastic pipe shall not be minimum of 50 psi (345 kPa). Plastic pipe shall not be tested tested with air. The piping system shall withstand the test with air. The piping system shall withstand the test pressure without showing evidence of leakage for a period of not less pressure without showing evidence of leakage for a period of not less than 15 minutes. than 15 minutes.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify Exception: PEX, PP or PE-RT tube shall be permitted to be Exception: PEX, PP or PE-RT tube shall be permitted to be 4.3.2024 207 TRUE tested with air where permitted by the manufacturer's tested with air where permitted by the manufacturer's instructions. 609.5 Unions. Unions shall be installed in the water supply **609.5 Unions.** Unions shall be installed in the water supply 4.3.2024 piping not more than 12 inches (305 mm) of regulating piping not more than 12 inches (305 mm) of regulating Keep as shown in 2024 equipment, water heating, conditioning tanks, and similar equipment, water heating, conditioning tanks, and similar TRUE 208 609.5 Unions. UPC equipment that requires service by removal or replacement equipment that requires service by removal or replacement in a manner that will facilitate its ready removal. in a manner that will facilitate its ready removal. 609.6 Location. Except as provided in Section 609.7, no 609.6 Location. Except as provided in Section 609.7, no 4.3.2024 Keep as shown in 2024 building supply shall be located in a lot other than the lot building supply shall be located in a lot other than the lot 209 609.6 FALSE Location. that is the site of the building or structure served by the UPC. that is the site of the building or structure served by such building supply. building supply. Keep as shown in 2024 609.7 Abutting Lot. Nothing contained in this code shall be **609.7 Abutting Lot.** Nothing contained in this code shall be 4.3.2024 TRUE 210 609.7 Abutting Lot. UPC construed to prohibit the use of an abutting lot to: construed to prohibit the use of an abutting lot to: (1) Provide access to connect a building supply to an (1) Provide access to connect a building supply to an 4.3.2024 available public water service where proper cause and legal available public water service where proper cause and legal TRUE 211 easement not in violation of other requirements have been easement not in violation of other requirements have been first established to the satisfaction of the Authority Having first established to the satisfaction of the Authority Having Jurisdiction. Jurisdiction. (2) Provide additional space for a building supply where the (2) Provide additional space for a building supply where the 4.3.2024 proper cause, transfer of ownership, or change of boundary proper cause, transfer of ownership, or change of boundary not in violation of other requirements have been first not in violation of other requirements have been first established to the satisfaction of the Authority Having established to the satisfaction of the Authority Having Jurisdiction. The instrument recording such action shall Jurisdiction. The instrument recording such action shall constitute an agreement with the Authority Having constitute an agreement with the Authority Having Jurisdiction, which shall clearly state and show that the Jurisdiction, which shall clearly state and show that the 212 areas so joined or used shall be maintained as a unit during areas so joined or used shall be maintained as a unit during the time they are so used. Such an agreement shall be the time they are so used. Such an agreement shall be recorded in the office of the County Recorder as a part of recorded in the office of the County Recorder as a part of the conditions of ownership of said properties, and shall be the conditions of ownership of said properties, and shall be binding on heirs, successors, and assigns to such properties. binding on heirs, successors, and assigns to such properties. A copy of the instrument recording such proceedings shall A copy of the instrument recording such proceedings shall be filed with the Authority Having Jurisdiction. be filed with the Authority Having Jurisdiction.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board **Proposal and** (A)ccept Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 609.9 Low-Pressure Cutoff Required on Booster 4.3.2024 609.8 Low-Pressure Cutoff Required on Booster Pumps for Water Distribution Systems. Where a booster Pumps for Water Distribution Systems. Where a booster pump (excluding a fire pump) is connected to a building pump (excluding a fire pump) is connected to a building Low-Pressure Cutoff supply or underground water pipe, a low-pressure cutoff supply or underground water pipe, a low-pressure cutoff Required on Booster Keep as shown in 2024 213 609.9 switch on the inlet side of the pump shall be installed not switch on the inlet side of the pump shall be installed not FALSE **Pumps for Water** UPC more than 5 feet (1524 mm) of the inlet. The cutoff switch more than 5 feet (1524 mm) of the inlet. The cutoff switch Distribution Systems. shall be set for not less than 10 psi (69 kPa). A pressure shall be set for not less than 10 psi (69 kPa). A pressure gauge shall be installed between the shutoff valve and the gauge shall be installed between the shutoff valve and the 609.10 Disinfection of Potable Water System. New or 609.9 Disinfection of Potable Water System. New or 4.3.2024 repaired potable water systems shall be disinfected prior to repaired potable water systems shall be disinfected prior to use where required by the Authority Having Jurisdiction. The Disinfection of Potable Keep as shown in 2024 use where required by the Authority Having Jurisdiction. 609.10 214 Water System. UPC method to be followed shall be that prescribed by the The method to be followed shall be that prescribed by the Health Authority or, in case no method is prescribed by it, Health Authority or, in case no method is prescribed by it, the following: the following: (1) The pipe system shall be flushed with clean, potable (1) The pipe system shall be flushed with clean, potable 4.3.2024 TRUE 215 water until potable water appears at the points of the water until potable water appears at the points of the outlet. outlet. (2) The system or parts thereof shall be filled with a (2) The system or parts thereof shall be filled with a 4.3.2024 waterchlorine solution containing not less than 50 parts per waterchlorine solution containing not less than 50 parts per million of chlorine, and the system or part thereof shall be million of chlorine, and the system or part thereof shall be 216 valved-off and allowed to stand for 24 hours; or, the system valved-off and allowed to stand for 24 hours; or, the system or part thereof shall be filled with a water-chlorine solution or part thereof shall be filled with a water-chlorine solution containing not less than 200 parts per million of chlorine containing not less than 200 parts per million of chlorine and allowed to stand for 3 hours. and allowed to stand for 3 hours. 4.3.2024 (3) Following the allowed standing time, the system shall be (3) Following the allowed standing time, the system shall be flushed with clean, potable water until the chlorine residual flushed with clean, potable water until the chlorine residual TRUE 217 in the water coming from the system does not exceed the in the water coming from the system does not exceed the chlorine residual in the flushing water. chlorine residual in the flushing water. (4) The procedure shall be repeated where it is shown by a (4) The procedure shall be repeated where it is shown by a 4.3.2024 218 TRUE bacteriological examination made by an approved agency bacteriological examination made by an approved agency that contamination persists in the system. that contamination persists in the system. 6.5.2024 **609.11.1 Mechanical Devices.** Where listed mechanical 609.10.1 Mechanical Devices. Where listed mechanical Keep as shown in 202 219 609.11.1 Mechanical Devices. devices are used, the manufacturer's specifications as to FALSE devices are used, the manufacturer's specifications as to UPC location and method of installation shall be followed. location and method of installation shall be followed. 6.5.2024 Size of Potable Water Keep as shown in 2024 610.0 Size of Potable Water Piping. 610.0 Size of Potable Water Piping. TRUE 220 610.0 UPC Piping.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 6.5.2024 610.1 Size. The size of each water meter and each potable 610.1 Size. The size of each water meter and each potable water supply pipe from the meter or other source of supply water supply pipe from the meter or other source of supply to the fixture supply branches, risers, fixtures, connections, to the fixture supply branches, risers, fixtures, connections, outlets, or other uses shall be based on the total demand outlets, or other uses shall be based on the total demand Keep as shown in 2024 221 610.1 Size. and shall be determined according to the methods and and shall be determined according to the methods and TRUE UPC procedures outlined in this section. Water piping systems procedures outlined in this section. Water piping systems shall be designed to ensure that the maximum velocities shall be designed to ensure that the maximum velocities allowed by the code and the applicable standard are not allowed by the code and the applicable standard are not exceeded. exceeded 610.2 Pressure Loss. Where a water filter, water softener, 610.2 Pressure Loss. Where a water filter, water softener, 6.5.2024 backflow prevention device, tankless water heater, or similar backflow prevention device, tankless water heater, or similar device is installed in a water supply line, the pressure loss device is installed in a water supply line, the pressure loss through through such devices shall be included in the pressure loss such devices shall be included in the pressure loss calculations of calculations of the system, and the water supply pipe and meter the system, and the water supply pipe and meter shall be shall be adequately sized to provide for such a pressure loss. No adequately sized to provide for such a pressure loss. No water water filter, water softener, backflow prevention device, or filter, water softener, backflow prevention device, or similar similar device regulated by this code shall be installed in a potable device regulated by this code shall be installed in a potable water water supply piping where the installation of such device supply piping where the installation of such device produces an produces an excessive pressure drop in such water supply piping. excessive pressure drop in such water supply piping. In the Keep as shown in 2024 absence of specific pressure drop information, the diameter of the TRUE In the absence of specific pressure drop information, the 222 610.2 Pressure Loss. UPC diameter of the inlet or outlet of such device or its connecting inlet or outlet of such device or its connecting piping shall be not piping shall be not less than the diameter of such water less than the diameter of such water distribution piping to the distribution piping to the fixtures served by the device. fixtures served by the device. Such devices shall be of a type approved by the Authority Having Such devices shall be of a type approved by the Authority Having Jurisdiction and shall be tested for flow rating and pressure loss Jurisdiction and shall be tested for flow rating and pressure loss by an approved laboratory or recognized testing agency to standards by an approved laboratory or recognized testing agency to standards consistent with the intent of this chapter. consistent with the intent of this chapter. 610.3 Quantity of Water. The quantity of water required to 610.3 Quantity of Water. The quantity of water required to 6.5.2024 be supplied to every plumbing fixture shall be represented be supplied to every plumbing fixture shall be represented Keep as shown in 2024 223 610.3 TRUE Quantity of Water. by fixture units, as shown in Table 610.3. Equivalent fixture by fixture units, as shown in Table 610.3. Equivalent fixture UPC values shown in Table 610.3 include both hot and cold values shown in Table 610.3 include both hot and cold water water demand. 610.4 Sizing Water Supply and Distribution Systems. 6.5.2024 610.4 Sizing Water Supply and Distribution Systems. Systems within the range of Table 610.4 shall be permitted Systems within the range of Table 610.4 shall be permitted to be sized from that table or by the method in accordance to be sized from that table or by the method in accordance Sizing Water Supply and Keep as shown in 2024 with Section 610.5. with Section 610.5. 224 610.4 TRUE Distribution Systems. **UPC** Listed parallel water distribution systems shall be installed Listed parallel water distribution systems shall be installed in accordance with their listing, but at no time shall a in accordance with their listing, but at no time shall a portion of the system exceed the maximum velocities portion of the system exceed the maximum velocities allowed by the code. allowed by the code.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board **Proposal and** (A)ccept Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 6.5.2024 610.6 Friction and Pressure Loss. Except where the type of 610.6 Friction and Pressure Loss. Except where the type of pipe used and the water characteristics are such that no pipe used and the water characteristics are such that no decrease in capacity due to the length of service (age of decrease in capacity due to the length of service (age of system) is expected, friction-loss data shall be obtained system) is expected, friction-loss data shall be obtained from the "Fairly Rough" or "Rough" charts in Appendix A of from the "Fairly Rough" or "Rough" charts in Appendix A of Friction and Pressure Keep as shown in 202 610.6 this code. Friction or pressure losses in a water meter, valve, FALSE 225 this code. Friction or pressure losses in a water meter, UPC Loss. valve, and fittings shall be obtained from the same sources. andfittings shall be obtained from the same sources. Pressure losses through water-treating equipment, Pressure losses through water-treating equipment, backflow backflow prevention devices, or other flow-restricting prevention devices, or other flow-restricting devices shall be devices shall be computed in accordance with Section computed in accordance with Section 610.2. 610.2. 610.7 Conditions for Using Table 610.4. On a proposed 6.5.2024 610.7 Conditions for Using Table 610.4. On a proposed Conditions for Using Keep as shown in 202 226 610.7 water piping installation sized using Table 610.4, the water piping installation sized using Table 610.4, the TRUE Table 610.4. UPC following conditions shall be determined: following conditions shall be determined: 6.5.2024 (1) Total number of fixture units as determined from Table (1) Total number of fixture units as determined from Table 227 610.3, Equivalent Fixture Units, for the fixtures to be 610.3, Equivalent Fixture Units, for the fixtures to be TRUE (2) Developed length of supply pipe from meter to the most (2) Developed length of supply pipe from meter to the most 6.5.2024 TRUE 228 remote outlet. remote outlet. (3) Difference in elevation between the meter or other (3) Difference in elevation between the meter or other 6.5.2024 229 TRUE source of supply and the highest fixture or outlet. source of supply and the highest fixture or outlet. 6.5.2024 (4) Pressure in the street main or another source of supply (4) Pressure in the street main or another source of supply TRUE 230 at the locality where the installation is to be made. at the locality where the installation is to be made. 6.5.2024 (5) In localities where there is a fluctuation of pressure in (5) In localities where there is a fluctuation of pressure in the main throughout the day, the water piping system shall the main throughout the day, the water piping system shall 231 TRUE be designed on the basis of the minimum pressure be designed on the basis of the minimum pressure available available. Size of Meter and 610.8 Size of Meter and Building Supply Pipe Using Table 610.8 Size of Meter and Building Supply Pipe Using Table 6.5.2024 Keep as shown in 202 232 610.8 TRUE **Building Supply Pipe 610.4.** The size of the meter and the building supply pipe **610.4.** The size of the meter and the building supply pipe UPC Using Table 610.4. shall be determined as follows: shall be determined as follows: 6.5.2024 (1) Determine the available pressure at the water meter or (1) Determine the available pressure at the water meter or TRUE 233 other source of supply. other source of supply. (2) Add or subtract depending on positive or negative (2) Add or subtract depending on positive or negative 6.5.2024 elevation change, 1/2 psi (3.4 kPa) for each foot (305 mm) elevation change, 1/2 psi (3.4 kPa) for each foot (305 mm) of 234 of difference in elevation between such source of supply difference in elevation between such source of supply and TRUE and the highest water supply outlet in the building or on the highest water supply outlet in the building or on the the premises. (3) Use the "pressure range" group within which this (3) Use the "pressure range" group within which this 6.5.2024 235 TRUE pressure will fall using Table 610.4. pressure will fall using Table 610.4. (4) Select the "length" column that is equal to or longer (4) Select the "length" column that is equal to or longer than 6.5.2024 TRUE 236 than the required length. the required length.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 6.5.2024 (5) Follow down the column to a fixture unit value equal to (5) Follow down the column to a fixture unit value equal to 237 TRUE or exceeding the total number of fixture units required by or exceeding the total number of fixture units required by the installation. the installation. (6) Having located the proper fixture unit value for the (6) Having located the proper fixture unit value for the 6.5.2024 required length, sizes of meter and building supply pipe as required length, sizes of meter and building supply pipe as 238 TRUE found in the two left-hand columns shall be applied. found in the two left-hand columns shall be applied. No building supply pipe shall be less than 3/4 of an inch (20 No building supply pipe shall be less than 3/4 of an inch (20 mm) in diameter. mm) in diameter. 610.9 Size of Branches. Where Table 610.4 is used, the **610.9 Size of Branches.** Where Table 610.4 is used, the 6.5.2024 minimum size of each branch shall be determined by the minimum size of each branch shall be determined by the Keep as shown in 2024 total fixture units served by that branch and then following total fixture units served by that branch and then following TRUE 239 610.9 Size of Branches. UPC the steps in Section 610.8. No branch piping shall exceed the the steps in Section 610.8. No branch piping shall exceed the total demand in fixture units for the system computed total demand in fixture units for the system computed from from Table 610.3 Table 610.3 610.10 Sizing for Flushometer Valves. Where using Table 610.10 Sizing for Flushometer Valves. Where using Table 6.5.2024 610.4 to size water supply systems serving flushometer 610.4 to size water supply systems serving flushometer valves, the number of flushometer fixture units assigned to valves, the number of flushometer fixture units assigned to every section of pipe, whether branch or main, shall be every section of pipe, whether branch or main, shall be determined by the number and category of flushometer deter-mined by the number and category of flushometer Sizing for Flushometer Keep as shown in 202 valves served by that section of pipe, in accordance with 610.10 valves served by that section of pipe, in accordance with FALSE 240 UPC Valves. Table 610.10. Piping supplying a flushometer valve shall be Table 610.10. Piping supplying a flushometer valve shall be not less in size than the valve inlet. not less in size than the valve inlet. Where using Table 610.10 to size water piping, care shall be Where using Table 610.10 to size water piping, care shall be exercised to assign flushometer fixture units based on the exercised to assign flushometer fixture units based on the number and category of fixtures served. number and category of fixtures served. FLUSHOMETER FIXTURE TABLE 610.10 FLUSHOMETER FIXTURE UNITS FOR WATER **TABLE 610.10 FLUSHOMETER FIXTURE UNITS FOR WATER** 6.5.2024 **UNITS FOR WATER** Keep as shown in 2024 SIZING USING TABLE 610.3 SIZING USING TABLE 610.3 TRUE 241 TABLE 610.10 SIZING USING TABLE UPC 610.3 EXAMPLE 610.10 SIZING METHOD FOR PUBLIC USE SIZING METHOD FOR **EXAMPLE 610.10 SIZING METHOD FOR PUBLIC USE** 6.5.2024 **EXAMPLE** Keep as shown in 202 242 **PUBLIC USE FIXTURES** FIXTURES USING TABLE 610.10 TRUE **FIXTURES USING TABLE 610.10** 610.10 UPC USING TABLE 610.10 6.5.2024 610.11 Sizing Systems for Flushometer Tanks. The size of 610.11 Sizing Systems for Flushometer Tanks. The size of Sizing Systems for Keep as shown in 2024 branches and mains serving flushometer tanks shall be branches and mains serving flushometer tanks shall be 243 610.11 TRUE Flushometer Tanks. UPC consistent with the sizing procedures for flush tank water consistent with the sizing procedures for flush tank water closets. 6.5.2024 610.12 Sizing for Velocity. Water piping systems shall not 610.12 Sizing for Velocity. Water piping systems shall not Keep as shown in 202 TRUE 244 610.12 Sizing for Velocity. exceed the maximum velocities listed in this section or exceed the maximum velocities listed in this section or UPC Appendix A. Appendix A. 610.12.1 Copper Tube Systems. Maximum velocities in 610.12.1 Copper Tube Systems. Maximum velocities in 6.5.2024 Keep as shown in 2024 copper and copper alloy tube and fitting systems shall not copper and copper alloy tube and fitting systems shall not TRUE 245 610.12.1 Copper Tube Systems. UPC exceed 8 feet per second (ft/s) (2.4 m/s) in cold water and 5 exceed 8 feet per second (ft/s) (2.4 m/s) in cold water and 5 ft/s (1.5 m/s) in hot water. ft/s (1.5 m/s) in hot water.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board Chapter 6 (Keep 2024 UPC) 4.3.2024 Plumbing Board (A)ccept **Proposal and** Rules affected **Brief Title** Committee 2024 UPC 2020 MPC 4714 action/comments (R)eject Line # recommendation (M)odify 610.12.2 Tubing Systems Using Copper Fittings. Maximum 610.12.2 Tubing Systems Using Copper Fittings. Maximum 6.5.2024 **Tubing Systems Using** Keep as shown in 2024 velocities through copper fittings in tubing other than velocities through copper fittings in tubing other than 246 610.12.2 TRUE Copper Fittings. UPC copper shall not exceed 8 ft/s (2.4 m/s) in cold water and 5 copper shall not exceed 8 ft/s (2.4 m/s) in cold water and 5 ft/s (1.5 m/s) in hot water. ft/s (1.5 m/s) in hot water. 6.5.2024 Keep as shown in 202 **610.13 Exceptions.** The provisions of this section relative to 610.13 Exceptions. The provisions of this section relative to TRUE 247 610.13 Exceptions. the size of water piping shall not apply to the following: the size of water piping shall not apply to the following: UPC (1) Water supply piping systems designed in accordance (1) Water supply piping systems designed in accordance 6.5.2024 Keep as shown in 2024 248 TRUE with recognized engineering procedures acceptable to the with recognized engineering procedures acceptable to the UPC Authority Having Jurisdiction. Authority Having Jurisdiction. 6.5.2024 (2) Alteration of or minor additions to existing installations (2) Alteration of or minor additions to existing installations Keep as shown in 2024 provided the Authority Having Jurisdiction finds that there provided the Authority Having Jurisdiction finds that there TRUE 249 UPC will be an adequate supply of water to operate fixtures. will be an adequate supply of water to operate fixtures. Keep as shown in 2024 (3) Replacement of existing fixtures or appliances. 6.5.2024 (3) Replacement of existing fixtures or appliances. TRUE 250 UPC Keep as shown in 2024 (4) Piping that is part of fixture equipment. (4) Piping that is part of fixture equipment. 6.5.2024 TRUE 251 UPC (5) Unusual conditions where, in the judgment of the (5) Unusual conditions where, in the judgment of the 6.5.2024 Keep as shown in 2024 Authority Having Jurisdiction, an adequate supply of water Authority Having Jurisdiction, an adequate supply of water is TRUE 252 UPC s provided to operate fixtures and equipment. provided to operate fixtures and equipment. (6) The size and material of irrigation water piping installed (6) The size and material of irrigation water piping installed 6.5.2024 outside of a building or structure and separated from the outside of a building or structure and separated from the potable water supply by means of an approved air gap or potable water supply by means of an approved air gap or backflow prevention device are not regulated by this code. backflow prevention device are not regulated by this code. Keep as shown in 2024 253 FALSE The potable water piping system supplying each such The potable water piping system supplying each such UPC irrigation system shall be adequately sized as required irrigation system shall be adequately sized as required elsewhere in this chapter to deliver the full connected elsewhere in this chapter to deliver the full connected demand of both the domestic use and the irrigation demand of both the domestic use and the irrigation systems. Keep as shown in 2024 611.0 Drinking Water Treatment Units. 611.0 Water Conditioning Equipment. 6.5.2024 FALSE 254 611.0

UPC

	Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board												
				Chapter 7									
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of Committee review	Plumbing Board action/comments	(A)ccept (R)eject (M)odify						
96	701.2		Drainage Piping.	Recommendation - RFA PB0194 Discussed 3/5/2025 accepted as revised. 701.2 Drainage Piping. (2) ABS and PVC DWV piping installations shall be installed in accordance with the applicable standards referenced in Table 701.2. Plastic piping and tubing installed in plenums shall be tested in accordance with all requirements of ASTM E84 or UL 723. Mounting methods, supports and sample sizes of materials for testing that are not specified in ASTH4 E84 or UL723 shall be prohibited. shall comply with Chapter 6 of the Minnesota Mechanical and Fuel Gas Code.	6.5.2024								
97	Table 701.2	<u>PB0178,</u> <u>PB0179, PB0185</u>	MATERIALS FOR DRAIN, WASTE, VENT PIPE AND FITTINGS.	Recommendation - Do not accept RFA numbers PB0178, PB0179, and PB0185.	2.5.2025								
98	TABLE 702.1	<u>PB0164</u>	DRAINAGE FIXTURE UNIT VALUES (DFU)	Recommendation - Keep as shown in 2024 UPC. *Foot note 8 in 2024 UPC to read as Note #7 in 2020 MPC. *Keep Pot or scullery from 2020 MPC. *Add Commecial hand wash sink with 1DFU, 1 1/2" trap and drain. *Amend Note 6 to read "deleted." Do not need to define lavatories in sets.	<u>6.5.2024</u>								
99	704.3	PB0164	Commercial Sinks.	Recommendation - Accept RFA PB0164 as amended. 704.3 Commercial Dishwashing Machines and Sinks. Pot sinks, scullery sinks, commercial kitchen sinks, beverage service sinks, dishwashing sinks, silverware sinks, commercial dishwashing machines, silverware-washing machines, and other similar fixtures shall be connected directly to the drainage system. A floor-drain constructed without backwater valves shall be provided adjacent to the fixture. The fixture shall be connected on the sewer side of the floor drain trap and no other drainage line-shall be connected between the floor drain waste connection and the fixture drain. The fixture-and floor drain shall be trapped and vented in accordance with this code. With the exception of mop sinks and hand sinks, the installation shall include: 1. A floor drain constructed without backwater valves provided adjacent to the fixture. 2. The fixture shall be connected on the sewer side of the floor drain trap and no other drainage line shall be connected between the floor drain waste connection and the fixture drain. 3. The fixture and floor drain shall be trapped and vented in accordance with this code.	3.6.2024								
100	703.3		Sizing per Appendix C.	Recommendation - Do not adopt Appendix C	6.5.2024								

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 7 Rules affected** RFA No. **Brief Title** Line# **Proposal and Committee recommendation** Date of Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify Sump and Receiving Tank Recommendation - Leave as amended in the 2020 MPC. 710.10 Sump and Receiving Tank 710.10 6.25.2024 101 Covers and Vents. Covers and Vents. Sumps and receiving tanks shall be provided with substantial covers having a bolt-and-gasket-type manhole or equivalent opening to permit access for inspection, repairs, and cleaning. The top shall be provided with a vent pipe that shall extend separately through the roof or, where permitted, be combined with other vent pipes. The vent pipe shall be large enough to maintain atmospheric pressure within the sump under normal operating conditions and in no case shall be less in size than that required by Table 703.2 for the number and type of fixtures discharging into the sump, nor less than 11/2 inches (40 mm) in diameter. Where the preceding requirements are met and the vent, after leaving the sump, is combined with vents from fixtures discharging into the sump, the size of the combined vent need not exceed that required for the total number of fixtures discharging into the sump. No vent from an airoperating sewage ejector shall combine with other vents. Exception: Vents serving sumps connected to elevator pit drains or swimming pool deck drains need not extend through the roof and must not connect to any other vent pipe. 710.12 6.25.2024 102 Grinder Pump Ejector. Recommendation - Leave as amended in the 2020 MPC. 710.12 Grinder Pump Ejector. Grinder pumps shall be permitted to be used. The sump basin storage volume and the pump capacity shall be sized adequately to prevent overloading and shall at a minimum accommodate water demand peak flow from all fixtures. 103 710.13 **Macerating Toilet** Recommendation - Leave as amended in the 2020 MPC. 710.13 Macerating Toilet Systems. 6.25.2024 Systems and Pumped Listed macerating toilet systems shall be permitted as an alternate to a sewage pump system Waste Systems. only in one- or two-family dwellings when gravity flow is not possible. Not more than one bathroom group is permitted to discharge into a macerating toilet system. One bathroom group consists of: a toilet; a lavatory; and a shower or bathtub. Components of macerating toilet systems shall be accessible. 104 712.1 Media. Recommendation - Leave as amended in the 2020 MPC. 712.1 Media. The piping of the 6.25.2024 plumbing, drainage, and venting systems shall be tested with water or air. The Authority Having Jurisdiction shall be permitted to require the necessary points of access to ascertain whether the pressure has reached all parts of the system. 712.4 Recommendation - Leave as amended in the 2020 MPC, strike out 17 add 20. 712.4 Negative 6.25.2024 105 Negative Test. Test. Concrete manholes and sewer lines shall be tested by negative pressure in accordance with ASTM Standards C1214-19 and C1244-17 20 or the Hydrostatic Test Method in section 1107.2.3(B). 6.25.2024 106 712.5 Finished Plumbing. Recommendation - Leave as amended in the 2020 MPC with new restriction on 15 minutes. 712.5 Finished Plumbing. After the plumbing fixtures have been set and their traps filled with water, their connections shall be tested and proven gastight and watertight by plugging the stack openings on the roof and the building drain where it leaves the building, and air introduced into the system equal to the pressure of a 1-inch water column. Such pressure shall remain constant for 15 minutes or the duration of the inspection, but not to exceed 15 minutes without the introduction of additional air.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 7 Rules affected** RFA No. **Brief Title Proposal and Committee recommendation** Date of Line# Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify 712.6 Recommendation - Leave as amended in the 2020 MPC. 712.6 Test Plugs or Caps. Test plugs 6.25.2024 107 Test Plugs or Caps. or caps for roof terminals shall extend above or outside the end of the vent pipe to provide a visible indication for removal after the test has been completed. 108 713.1 Where Required. Recommendation - Leave as amended in the 2020 MPC. 713.1 Where Required. A building in 6.25.2024 which plumbing fixtures are installed and premises having drainage piping thereon shall have a connection to a public or private sewer, except as provided in sections 713.2 and 713.4 and Minnesota Rules, part 4714.0101, subpart 6. 713.2 Private Sewage Disposal Recommendation - Leave as amended in the 2020 MPC. 713.2 Private Sewage Disposal 6.25.2024 109 System. System. Where no public sewer intended to serve a lot or premises is available in a thoroughfare or right of way abutting such lot or premises, drainage piping from a building or works shall be connected to an approved private sewage disposal system. 713.5 6.25.2024 110 Permit. Recommendation - Leave as amended in the 2020 MPC. 713.5 Permit. Deleted in its entirety. 111 713.7 Installation. Recommendation - Leave as amended in the 2020 MPC. 713.7 Installation. In cities, counties, 6.25.2024 or both where the installation of building sewers is under the jurisdiction of a municipal utility easement, the provisions of this code relating to building sewers do not apply. Exception: Singlefamily and two-family dwellings and buildings or structures accessory thereto, when connected to an approved private sewage disposal system prior to the time of connecting the premises to the public sewer need not connect to the public sewer when there is insufficient grade or slope to permit drainage to the public sewer by gravity and the following conditions are met: (1) no hazard, nuisance, or unsanitary condition is evidenced from the private sewage disposal system; (2) the private sewage system is maintained properly; and (3) written permission has been obtained from the Authority Having Jurisdiction. 112 714.5 Tanks. Leave as amended in the 2020 MPC fix typo. 714.5 Tanks. An approved-typed, watertight 6.25.2024 sewage or wastewater holding tank, the contents of which, due to their character, shall be periodically removed and disposed of at some approved off-site location, shall be installed where required by the Authority Having Jurisdiction to prevent anticipated surface or subsurface contamination or pollution, damage to the public sewer, or other hazardous or nuisance conditions. 113 715.3.1 Sewer Pipe Lining. Keep as shown in 2024 UPC. Add in language from 2020 MPC715.3.1 Sewer Pipe Lining. For 6.25.2024 trenchless installation of resin-impregnated flexible tubing to line existing building sewers and building storm sewers installation shall be in accordance with ASTM F1216, ASTM F2561, ASTM F2599, or ASTM F3240. Replacement using cured in-place pipe liners shall not be used on collapsed piping or when the existing piping is compromised to a point where the installation of the liners will not eliminate hazardous or insanitary conditions.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 7 Rules affected** RFA No. **Brief Title Proposal and Committee recommendation** Date of Line# Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify 717.1 Keep as shown in 2024 UPC. Remove appendix C. 717.1 General. The minimum size of a 6.25.2024 114 General. building sewer shall be determined on the basis of the total number of fixture units drained by such sewer, in accordance with Table 717.1. No building sewer shall be smaller than the building drain. For alternate methods of sizing building sewers, see Appendix C. **TABLE 717.1** MAXIMUM/MINIMUM 6.25.2024 115 Recommendation - Leave as amended in the 2020 MPC. FIXTURE UNIT LOADING ON BUILDING SEWER **PIPING** 116 719.6 PB0202 Manholes. Recommendation - Do not accept RFA PB0202. Leave 719.6 as amended in the 2020 MPC. 7.2.2025 719.6 Manholes. Approved manholes shall be permitted to be installed in lieu of cleanouts, where first approved by the Authority Having Jurisdiction. The maximum distance between manholes shall not exceed 300 feet (91 400 mm). Connections to manhole and similar structures must be provided as follows: (1) The inlet and outlet connections shall be made by the use of a flexible compression joint not less than 12 inches (305 mm) and not exceeding 3 feet (914 mm) from the manhole. No flexible compression joints shall be embedded in the manhole base. (2) Approved resilient rubber joints must be used to make watertight connections to manholes, catch basins, and other structures. 117 **TABLE 721.1** MINIMUM HORIZONTAL Recommendation - Leave as amended in the 2020 MPC 6.25.2024 DISTANCE REQUIRED FROM BUILDING SEWER (feet) 722.0 118 Abandoned Sewers and Recommendation - Leave as amended in the 2020 MPC. Deleted in its entirety. 6.25.2024 Sewage Disposal Facilities. 119 722.1 Building (House) Sewer. Recommendation - Leave as amended in the 2020 MPC. Deleted in its entirety. 6.25.2024 120 722.2 Recommendation - Leave as amended in the 2020 MPC. Deleted in its entirety. 6.25.2024 Cesspools, Septic Tanks, and Seepage Pits. 722.3 121 Filling Recommendation - Leave as amended in the 2020 MPC. Deleted in its entirety. 6.25.2024 122 722.4 6.25.2024 Ownership. Recommendation - Leave as amended in the 2020 MPC. Deleted in its entirety. 722.5 123 **Disposal Facilities** 6.25.2024 Recommendation - Leave as amended in the 2020 MPC. Deleted in its entirety. 124 723.1 General. Recommendation - Leave as amended in the 2020 MPC. 723.1 General. Building sewers shall 6.25.2024 be tested by plugging the end of the building sewer at its points of connection with the public sewer or private sewage disposal system and completely filling the building sewer with water from the lowest to the highest point thereof, or by approved equivalent low-pressure air test. Testing of building sewers shall be in accordance with Section 712, as amended. The building sewer shall be gastight or watertight. 724.0 125 Recreational Vehicle Recommendation - Leave as amended in the 2020 MPC. 724.0 Recreational Vehicle Sanitary 6.25.2024 Sanitary Disposal Station. Disposal Station.

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 7 Rules affected** RFA No. **Brief Title Proposal and Committee recommendation** Date of Line# Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify 724.1 Recommendation - Leave as amended in the 2020 MPC. 724.1 Construction. Each recreational 6.25.2024 126 Construction. vehicle sanitary disposal (dump) station shall have a concrete slab with the drainage system located as to be on the road (left) side of the recreational vehicle. The slab shall be not less than 3 feet by 3 feet (914 mm by 914 mm), not less than 31/2 inches (89 mm) thick, and properly reinforced. The slab surface shall be troweled to a smooth finish and sloped from each side inward to a drainage system inlet. The drainage system inlet shall consist of a 4-inch (102 mm), self-closing, foot-operated hatch of materials meeting these rules with the cover milled to fit tight. The hatch body shall be set in the concrete of the slab with the lip of the opening flush with its surface to facilitate the cleansing of the slab with water. The hatch shall be properly connected to a drainage system inlet, which shall discharge to a public or private sewer meeting the same requirements as provided in this code for building sewers. 127 724.2 PB0191 Recommendation - Accept RFA PB0191 as revised: 724.2 Flushing Device. The recreational 4.29.2025 Flushing Device. vehicle sanitary disposal station flushing device shall consist of a supported riser terminating not less than 2 feet (610 mm) above the ground surface, with a 3/4 inch (20 mm) valved outlet adaptable for a flexible hose. The flexible hose shall be designed such that it cannot lie on the ground and shall have an unthreaded outlet. The water supply to the flushing device shall be protected from backflow by means of a high hazard device listed in Table 603.2 vacuum breaker or backflow prevention device located downstream from the last shutoff valve. 128 PB0191 Recommendation - Accept RFA PB0191 as revised: A pressure-type vacuum breaker backflow 4.29.2025 prevention assembly (PVB), a spill-resistant pressure vacuum breaker assembly (SVB) device, or reduced-pressure principle backflow prevention assembly (RP) must be provided if a shut-off valve is installed downstream of the backflow device. 129 PB0191 Recommendation - Accept RFA PB0191 as revised: Direct connections between: 4.29.2025 (1) The water piping and sewer-connected waste piping; and (2) The water piping and the recreational vehicle holding tank; are not allowed to exist under any condition with or without backflow protection. Adjacent to the recreational vehicle sanitary disposal station shall be posted a sign of durable material not less than 2 feet by 2 feet (610 mm by 610 mm) in size. Inscribed on the sign in clearly legible letters shall be the following: "DANGER - NOT TO BE USED FOR DRINKING OR DOMESTIC PURPOSES. NO DIRECT OR ADDITIONAL CONNECTIONS ALLOWED DURING FLUSHING." 724.3 130 Drainage Pipe Sizes. Recommendation - Leave as amended in the 2020 MPC. 724.3 Drainage Pipe Sizes. The minimum pipe diameters of drainage pipes serving recreational vehicle sites shall be in accordance with Table 724.3. 131 **TABLE 724.3** DRAINAGE PIPE SIZES Recommendation - Leave as amended in the 2020 MPC.

	Chapter 7 (Neep 2024 of c)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify		
1				Part I – Drainage Systems.	Part I – Drainage Systems.	TRUE	6.5.2024				
2			Keep as shown in 2024 UPC	701.0 General.	701.0 Materials	FALSE	<u>6.5.2024</u>				
3	701.0		Keep as shown in 2024 UPC		701.1 Applicability. This chapter shall govern the materials, design, and installation of sanitary drainage systems and building sewers.	TRUE	6.5.2024				
4	701.3	Drainage Fittings.	Keep as shown in 2024 UPC		701.3 Drainage Fittings. Materials for drainage fittings shall comply with the applicable standards referenced in Table 701.2 of the same diameter as the piping served, and such fittings shall be compatible with the type of pipe used.	TRUE	6.5.2024				
5	701.3.1	Screwed Pipe.	Keep as shown in 2024 UPC	701.3.1 Screwed Pipe. Fittings on screwed pipe shall be of the recessed drainage type. Burred ends shall be reamed to the full bore of the pipe.	701.3.1 Screwed Pipe. Fittings on screwed pipe shall be of the recessed drainage type. Burred ends shall be reamed to the full bore of the pipe.	TRUE	6.5.2024				
6	701.3.2	Threads.	Keep as shown in 2024 UPC		701.3.2 Threads. The threads of drainage fittings shall be tapped to allow 1/4 inch per foot (20.8 mm/m) grade.	TRUE	6.5.2024				
7	701.3.3	Type.	Keep as shown in 2024 UPC	701.3.3 Type. Fittings used for drainage shall be of the drainage type, have a smooth interior water-way, and be constructed to allow 1/4 inch per foot (20.8 mm/m) grade.	701.3.3 Type. Fittings used for drainage shall be of the drainage type, have a smooth interior water-way, and be constructed to allow 1/4 inch per foot (20.8 mm/m) grade.	TRUE	6.5.2024				
8	701.4	Continuous Wastes.	Keep as shown in 2024 UPC	piping, provided, however, that such connections where exposed or accessible shall be permitted to be of seamless drawn brass not less than No. 20 B & S	701.4 Continuous Wastes. Continuous wastes and fixture tailpieces shall be constructed from the materials specified in Section 701.2 for drainage piping, provided, however, that such connections where exposed or accessible shall be permitted to be of seamless drawn brass not less than No. 20 B & S Gauge (0.032 inches) (0.8 mm).	TRUE	6.5.2024				
9	701.5	Lead.	Keep as shown in 2024 UPC	701.5 Lead. (See Chapter 17) Sheet lead shall comply with the following:	701.5 Lead. (See Table 1701.1) Sheet lead shall comply with the following:	FALSE	6.5.2024				
10				(1) For safe pans – not less than 4 pounds per square foot (lb/ft2) (19 kg/m2) or 1/16 of an inch (1.6 mm) thick.	thick.	TRUE	6.5.2024				
11				(2) For flashings or vent terminals – not less than 3 lb/ft2 (15 kg/m2) or 0.0472 of an inch (1.2 mm) thick.	(2) For flashings or vent terminals – not less than 3 lb/ft2 (15 kg/m2) or 0.0472 of an inch (1.2 mm) thick.	TRUE	6.5.2024				
12				(3) Lead bends and lead traps shall be not less than 1/8 of an inch (3.2 mm) in wall thickness.	(3) Lead bends and lead traps shall be not less than 1/8 of an inch (3.2 mm) in wall thickness.	TRUE	6.5.2024				

					100 P 202 + 01 C/				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
13	701.6	Caulking Ferrules.	Keep as shown in 2024 UPC	701.6 Caulking Ferrules. Caulking ferrules shall be manufactured from copper or copper alloy and shall be in accordance with Table 701.6.	701.6 Caulking Ferrules. Caulking ferrules shall be manufactured from copper or copper alloy and shall be in accordance with Table 701.6.	TRUE	6.5.2024		
14	701.7	Soldering Bushings.	Keep as shown in 2024 UPC	701.7 Soldering Bushings. Soldering bushings shall be of copper or copper alloy and shall be in accordance with Table 701.7.	701.7 Soldering Bushings. Soldering bushings shall be of copper or copper alloy and shall be in accordance with Table 701.7.	TRUE	6.5.2024		
15	TABLE 701.6	CAULKING FERRULES		TABLE 701.6 CAULKING FERRULES	TABLE 701.6 CAULKING FERRULES	TRUE	6.5.2024		
16	TABLE 701.7	SOLDERING BUSHINGS	Keep as shown in 2024 UPC	TABLE 701.7 SOLDERING BUSHINGS	TABLE 701.7 SOLDERING BUSHINGS	TRUE	<u>6.5.2024</u>		
17	702.0	Fixture Unit Equivalents.	Keep as shown in 2024 UPC	702.0 Fixture Unit Equivalents.	702.0 Fixture Unit Equivalents.	TRUE	6.5.2024		
18	702.1	Trap Size.	Keep as shown in 2024 UPC	702.1 Trap Size. The unit equivalent of plumbing fixtures shown in Table 702.1 shall be based on the size of the trap required, and the unit equivalent of fixtures and devices not shown in Table 702.1 shall be based on the size of trap or trap arm. Maximum drainage fixture units for a fixture trap and trap arm loadings for sizes up to 4 inches (100 mm) shall be in accordance with Table 702.1(1).	702.1 Trap Size. The unit equivalent of plumbing fixtures shown in Table 702.1 shall be based on the size of the trap required, and the unit equivalent of fixtures and devices not shown in Table 702.1 shall be based on the size of trap or trap arm.	FALSE	6.5.2024		
19	TABLE 702.1(1)	MAXIMUM DRAINAGE FIXTURE UNITS FOR A TRAP AND TRAP ARM*	Keep as shown in 2024 UPC	TABLE 702.1(1) MAXIMUM DRAINAGE FIXTURE UNITS FOR A TRAP AND TRAP ARM*	TABLE 702.1(1) MAXIMUM DRAINAGE FIXTURE UNITS FOR A TRAP AND TRAP ARM*	TRUE	6.5.2024		
20	702.2	Intermittent Flow.	Keep as shown in 2024 UPC	702.2 Intermittent Flow. Drainage fixture units for intermittent flow into the drainage system shall be computed on the rated discharge capacity in gallons per minute (gpm) (L/s) in accordance with Table 702.2.	702.2 Intermittent Flow. Drainage fixture units for intermittent flow into the drainage system shall be computed on the rated discharge capacity in gallons per minute (gpm) (L/s) in accordance with Table 702.2(2).	FALSE	6.5.2024		
21	TABLE 702.2	DISCHARGE CAPACITY IN GALLONS PER MINUTE FOR INTERMITTENT FLOW ONLY*	Keep as shown in 2024 UPC	TABLE 702.2 DISCHARGE CAPACITY IN GALLONS PER MINUTE FOR INTERMITTENT FLOW ONLY*	TABLE 702.2(2) DISCHARGE CAPACITY IN GALLONS PER MINUTE FOR INTERMITTENT FLOW ONLY*	FALSE	6.5.2024		
22	702.3	Continuous Flow.	Keep as shown in 2024 UPC	702.3 Continuous Flow. For a continuous flow into a drainage system, such as from a pump, sump ejector, air conditioning equipment, or similar device, 2 fixture units shall be equal to each gallon per minute (gpm) (L/s) of flow.	702.3 Continuous Flow. For a continuous flow into a drainage system, such as from a pump, sump ejector, air conditioning equipment, or similar device, 2 fixture units shall be equal to each gallon per minute (gpm) (L/s) of flow.	TRUE	6.5.2024		
23	703.0	Size of Drainage Piping.	Keep as shown in 2024 UPC	703.0 Size of Drainage Piping.	703.0 Size of Drainage Piping.	TRUE	6.5.2024		

					100 E E E E E E E E E E E E E E E E E E				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
24	703.1	Minimum Size.	Keep as shown in 2024 UPC	703.1 Minimum Size. The minimum sizes of vertical, horizontal, or both drainage piping shall be determined from the total of fixture units connected thereto, and additionally, in the case of vertical drainage pipes, in accordance with their length.	703.1 Minimum Size. The minimum sizes of vertical, horizontal, or both drainage piping shall be determined from the total of fixture units connected thereto, and additionally, in the case of vertical drainage pipes, in accordance with their length.	TRUE	6.5.2024		
25		Maximum Number of Fixture Units	Keep as shown in 2024 UPC	703.2 Maximum Number of Fixture Units. Table 703.2 shows the maximum number of fixture units allowed on a vertical or horizontal drainage pipe, building drain, or building sewer of a given size; the maximum number of fixture units allowed on a branch interval of a given size; and the maximum length (in feet and meters) of a vertical drainage pipe of a given size.	703.2 Maximum Number of Fixture Units. Table 703.2 shows the maximum number of fixture units allowed on a vertical or horizontal drainage pipe, building drain, or building sewer of a given size; the maximum number of fixture units allowed on a branch interval of a given size; and the maximum length (in feet and meters) of a vertical drainage pipe of a given size.	TRUE	6.5.2024		
26	704.0	Fixture Connections (Drainage).	Keep as shown in 2024 UPC	704.0 Fixture Connections (Drainage).	704.0 Fixture Connections (Drainage).	TRUE	6.5.2024		
27	704.1	Inlet Fittings.	Keep as shown in 2024 UPC	704.1 Inlet Fittings. Drainage piping shall be provided with approved inlet fittings for fixture connections, correctly located according to the size and type of fixture proposed to be connected.	704.1 Inlet Fittings. Drainage piping shall be provided with approved inlet fittings for fixture connections, correctly located according to the size and type of fixture proposed to be connected.	TRUE	6.5.2024		
28	704.2	Single Vertical Drainage Pipe	Keep as shown in 2024 UPC	704.2 Single Vertical Drainage Pipe. Two fixtures set back-to-back, or side-by-side, within the distance allowed between a trap and its vent, shall be permitted to be served by a single vertical drainage pipe provided that each fixture wastes separately into an approved double-fixture fitting having inlet openings at the same level.	704.2 Single Vertical Drainage Pipe. Two fixtures set back-to-back, or side-by-side, within the distance allowed between a trap and its vent, shall be permitted to be served by a single vertical drainage pipe provided that each fixture wastes separately into an approved double-fixture fitting having inlet openings at the same level.	TRUE	6.5.2024		
29	705.0	Joints and Connections.		705.0 Joints and Connections.	705.0 Joints and Connections.	TRUE	6.5.2024		
30	705.1	ABS and ABS Co-Extruded Plastic Pipe and Joints	Keep as shown in 2024 UPC	705.1 ABS and ABS Co-Extruded Plastic Pipe and Joints. Joining methods for ABS plastic pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.1.1 through Section 705.1.3.	705.1 ABS and ABS Co-Extruded Plastic Pipe and Joints. Joining methods for ABS plastic pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.1.1 through Section 705.1.3.	TRUE	6.5.2024		
31	705.1.1	Mechanical Joints.	Keep as shown in 2024 UPC	705.1.1 Mechanical Joints. Mechanical joints shall be designed to provide a permanent seal and shall be of the mechanical or push-on joint. The push-on joint shall include an elastomeric gasket that complies with ASTM D3212 and shall provide a compressive force against the spigot and socket after assembly to provide a permanent seal.	705.1.1 Mechanical Joints. Mechanical joints shall be designed to provide a permanent seal and shall be of the mechanical or push-on joint. The push-on joint shall include an elastomeric gasket that complies with ASTM D3212 and shall provide a compressive force against the spigot and socket after assembly to provide a permanent seal.	TRUE	6.5.2024		

	Chapter 7 (Reep 2024 OPC)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify		
32	705.1.2	Solvent Cement Joints.	Keep as shown in 2024 UPC	705.1.2 Solvent Cement Joints. Solvent cement joints for ABS pipe and fittings shall be clean from dirt and moisture. Pipe shall be cut square and shall be deburred. Where surfaces to be joined are cleaned, and free of dirt, moisture, oil, and other foreign material, the solvent cement that complies with ASTM D2235 shall be applied to all joint surfaces. Joints shall be made while both the inside socket surface and outside surface of pipe are wet with solvent cement. Hold joint in place and undisturbed for 1 minute after assembly.	705.1.2 Solvent Cement Joints. Solvent cement joints for ABS pipe and fittings shall be clean from dirt and moisture. Pipe shall be cut square and shall be deburred. Where surfaces to be joined are cleaned, and free of dirt, moisture, oil, and other foreign material, the solvent cement that complies with ASTM D2235 shall be applied to all joint surfaces. Joints shall be made while both the inside socket surface and outside surface of pipe are wet with solvent cement. Hold joint in place and undisturbed for 1 minute after assembly.	TRUE	6.5.2024				
33	705.1.3	Threaded Joints.	Keep as shown in 2024 UPC	705.1.3 Threaded Joints. Threads shall comply with ASME B1.20.1. A minimum of Schedule 80 shall be permitted to be threaded. Molded threads on adapter fittings for the transition to threaded joints shall be permitted. Thread sealant compound shall be applied to male threads, insoluble in water, and nontoxic. The joint between the pipe and transition fitting shall be of the solvent cement type. Caution shall be used during assembly to prevent over tightening of the ABS components once the thread sealant compound has been applied.	threaded. Molded threads on adapter fittings for the transition to threaded joints shall be permitted. Thread sealant compound shall be applied to male threads, insoluble	TRUE	6.5.2024				
34	705.2	Cast-Iron Pipe and Joints.	Keep as shown in 2024 UPC	iron pipe and fittings shall be installed in accordance with	705.2 Cast-Iron Pipe and Joints. Joining methods for castiron pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.2.1 or Section 705.2.2.	TRUE	6.5.2024				
35	705.2.1	Caulked Joints.	Keep as shown in 2024 UPC	lead to a depth of not less than 1 inch (25.4 mm) in one continuous pour. The lead shall be caulked thoroughly at the inside and outside edges of the joint. After caulking, the finished joint shall not exceed 1/8 of an inch (3.2 mm) below the rim of the hub. No paint, varnish, or other coatings shall be permitted on the joining material until	705.2.1 Caulked Joints. Caulked joints shall be firmly packed with oakum or hemp and filled with molten lead to a depth of not less than 1 inch (25.4 mm) in one continuous pour. The lead shall be caulked thoroughly at the inside and outside edges of the joint. After caulking, the finished joint shall not exceed 1/8 of an inch (3.2 mm) below the rim of the hub. No paint, varnish, or other coatings shall be permitted on the joining material until after the joint has been tested and approved.	TRUE	6.5.2024				
36	TABLE 703.2	MAXIMUM UNIT LOADING AND MAXIMUM LENGTH OF DRAINAGE AND VENT PIPING	Keep as shown in 2024 UPC	TABLE 703.2 MAXIMUM UNIT LOADING AND MAXIMUM LENGTH OF DRAINAGE AND VENT PIPING	TABLE 703.2 MAXIMUM UNIT LOADING AND MAXIMUM LENGTH OF DRAINAGE AND VENT PIPING	TRUE	6.5.2024				

Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
37	705.2.2	Mechanical Joints and Compression Joints	Keep as shown in 2024 UPC	Joints. Mechanical joints for cast-iron pipe and fittings shall be of the elastomeric compression type or mechanical joint couplings. Compression type joints with an elastomeric gasket for cast-iron hub and spigot pipe shall comply with ASTM C564 and be tested in accordance with ASTM C1563. Hub and spigot shall be clean and free of dirt, mud, sand, and foreign materials. Cut pipe shall be free from sharp edges. Fold and insert gasket into the hub. Lubricate the joint following manufacturer's instructions. Insert spigot into hub until the spigot end of the pipe bottom out in the hub. Use the same procedure for the installation of fittings. A mechanical joint shielded coupling type for hubless cast-iron pipe and fittings shall have a metallic shield that complies with ASTM A1056, ASTM C1277, ASTM C1540, or CISPI 310. The elastomeric gasket shall comply with ASTM C564. Hubless cast-iron pipe and fittings shall be clean and free of dirt, mud, sand, and foreign materials. Cut pipe shall be free from sharp edges. Gasket shall be placed on the end of the pipe or fitting and the stainless steel shield and clamp assembly on the end of the other pipe or fitting. Pipe or fittings shall be seated against the center stop inside the elastomeric sleeve. Slide the stainless steel shield and clamp assembly into a position centered over the gasket and tighten. Bands shall be tightened using an approved calibrated torque wrench specifically set by the manufacturer of the couplings.	A mechanical joint shielded coupling type for hubless castiron pipe and fittings shall have a metallic shield that	TRUE	6.5.2024		
38	705.3	Copper or Copper Alloy Pipe (DWV) and Joints	Keep as shown in 2024 UPC	705.3 Copper or Copper Alloy Pipe (DWV) and Joints. Joining methods for copper or copper alloy pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.3.1 through Section 705.3.4.	and fittings shall be installed in accordance with the	TRUE	6.5.2024		

	Chapter 7 (Keep 2024 OPC)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify		
39	705.3.1	Brazed Joints.	Keep as shown in 2024 UPC	cleaned bright by either manual or mechanical means. Piping shall be cut square and reamed to full inside diameter. Brazing flux shall be applied to the joint surfaces where required by manufacturer's recommendation. Brazing filler metal shall conform to AWS A5.8 and shall be applied at the point where the	shall be applied to the joint surfaces where required by manufacturer's recommendation. Brazing filler metal	TRUE	6.5.2024				
40	705.3.2	Mechanical Joints.	Keep as shown in 2024 UPC	1	705.3.2 Mechanical Joints. Mechanical joints in copper or copper alloy piping shall be made with a mechanical coupling with grooved end piping or approved joint designed for the specific application.	TRUE	6.5.2024				
41	705.3.3	Soldered Joints.	2024 UPC	705.3.3 Soldered Joints. Soldered joints between copper or copper alloy pipe and fittings shall be made in accordance with ASTM B828 with the following sequence of joint preparation and operation as follows: measuring and cutting, reaming, cleaning, fluxing, assembly and support, heating, applying the solder, cooling, and cleaning. Pipe shall be cut square and reamed to the full inside diameter including the removal of burrs on the outside of the pipe. Surfaces to be joined shall be cleaned bright by manual or mechanical means. Flux shall be applied to pipe and fittings and shall conform to ASTM B813, and shall become noncorrosive and nontoxic after soldering. Insert pipe into the base of the fitting and remove excess flux. Pipe and fitting shall be supported to ensure a uniform capillary space around the joint. Heat shall be applied using air or fuel torch with the flame perpendicular to the pipe using acetylene or an LP gas. Preheating shall depend on the size of the joint.	705.3.3 Soldered Joints. Soldered joints between copper or copper alloy pipe and fittings shall be made in accordance with ASTM B828 with the following sequence of joint preparation and operation as follows: measuring and cutting, reaming, cleaning, fluxing, assembly and support, heating, applying the solder, cooling, and cleaning. Pipe shall be cut square and reamed to the full inside diameter including the removal of burrs on the outside of the pipe. Surfaces to be joined shall be cleaned bright by manual or mechanical means. Flux shall be applied to pipe and fittings and shall conform to ASTM B813, and shall become noncorrosive and nontoxic after soldering. Insert pipe into the base of the fitting and remove excess flux. Pipe and fitting shall be supported to ensure a uniform capillary space around the joint. Heat shall be applied using air or fuel torch with the flame perpendicular to the pipe using acetylene or an LP gas. Preheating shall depend on the size of the joint. The flame shall be moved to the fitting cup and alternate between the pipe and fitting. Solder conforming to ASTM B32 shall be applied to the joint surfaces until capillary action draws the molten solder into the cup. Joint surfaces shall not be disturbed until cool, and any remaining flux residue shall be cleaned.		6.5.2024				

Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
42	705.3.4	Threaded Joints.	Keep as shown in 2024 UPC	1	705.3.4 Threaded Joints. Threaded joints for copper or copper alloy pipe shall be made with pipe threads that comply with ASME B1.20.1. Thread sealant tape or compound shall be applied only to male threads, and such material shall be approved types, insoluble in water, and nontoxic.	TRUE	6.5.2024		
43	705.4	Galvanized Steel Pipe and Joints.	2024 UPC	705.4 Galvanized Steel Pipe and Joints. Joining methods for galvanized steel pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.4.1 or Section 705.4.2.	instructions and shall comply with Section 705.4.1 or Section 705.4.2.	TRUE	6.5.2024		
44	705.4.1	Mechanical Joints.	Keep as shown in 2024 UPC	705.4.1 Mechanical Joints. Mechanical joints shall be made with an elastomeric gasket.	705.4.1 Mechanical Joints. Mechanical joints shall be made with an elastomeric gasket.	TRUE	6.5.2024		
45	705.4.2	Threaded Joints.		705.4.2 Threaded Joints. Threaded joints shall be made with pipe threads that comply with ASME B1.20.1. Thread sealant tape or compound shall be applied only to male threads, and such material shall be of approved types, insoluble in water, and nontoxic.	705.4.2 Threaded Joints. Threaded joints shall be made with pipe threads that comply with ASME B1.20.1. Thread sealant tape or compound shall be applied only to male threads, and such material shall be of approved	TRUE	6.5.2024		
46	705.5	Polyethylene (PE) Sewer Pipe.	Keep as shown in 2024 UPC	705.5 Polyethylene (PE) Sewer Pipe. Polyethylene (PE) sewer pipe or tubing and fitting joining methods shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.5.1 through Section 705.5.1.3.	705.5 Polyethylene (PE) Sewer Pipe. Polyethylene (PE) sewer pipe or tubing and fitting joining methods shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.5.1 through Section 705.5.1.3.	TRUE	6.5.2024		
47	705.5.1	Heat-Fusion Joints.	Keep as shown in 2024 UPC	705.5.1 Heat-Fusion Joints. Heat-fusion joints between PE sewer pipe or tubing and fittings shall be assembled in accordance with Section 705.5.1.1 through Section 705.5.1.3 using butt-fusion, electrofusion, or socket-fusion heat methods. Do not disturb the joint until cooled to ambient temperature.	705.5.1 Heat-Fusion Joints. Heat-fusion joints between PE sewer pipe or tubing and fittings shall be assembled in accordance with Section 705.5.1.1 through Section 705.5.1.3 using butt-fusion, electro-fusion, or socket-fusion heat methods. Do not disturb the joint until cooled to ambient temperature.	TRUE	6.5.2024		
48	705.5.1.1	Butt-Fusion Joints.	Keep as shown in 2024 UPC	and shall be made by heating the prepared ends of two pipes, pipe and fitting, or two fittings by holding ends against a heated element. The heated element shall be removed when the required melt or times are obtained and heated ends shall be placed together	705.5.1.1 Butt-Fusion Joints. Butt-fusion joints for PE pipe shall be installed in accordance with ASTM F2620 and shall be made by heating the prepared ends of two pipes, pipe and fitting, or two fittings by holding ends against a heated element. The heated element shall be removed when the required melt or times are obtained and heated ends shall be placed together with applied force. Do not disturb the joint until cooled to ambient temperature.	TRUE	6.5.2024		

Line # Ru	ules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify		
				705.5.1.2 Electro-Fusion Joints. Electro-fusion joints	705.5.1.2 Electro-Fusion Joints. Electro-fusion joints		6.5.2024				
				shall be heated internally by a conductor at the	shall be heated internally by a conductor at the interface						
				interface of the joint. Fittings shall comply with ASTM	of the joint. Fittings shall comply with ASTM F1055 for						
				F1055 for the performance requirements of	the performance requirements of polyethylene electro-						
				polyethylene electro-fusion fittings. The specified	fusion fittings. The specified electro-fusion cycle used to						
			Voor os shown in	electro-fusion cycle used to form the joint requires	form the joint requires consideration of the properties						
49	705.5.1.2	Electro-Fusion Joints.	Keep as shown in 2024 UPC	consideration of the properties of the materials being	of the materials being joined, the design of the fitting	TRUE					
			2024 UPC	joined, the design of the fitting being used, and the	being used, and the environmental conditions. Align and						
				environmental conditions. Align and restrain fitting to	restrain fitting to pipe to prevent movement and apply						
				pipe to prevent movement and apply electric current	electric current to the fitting. Turn off the current when						
						to the fitting. Turn off the current when the required	the required time has elapsed to heat the joint. Do not				
				time has elapsed to heat the joint. Do not disturb the	disturb the joint until cooled to ambient temperature.						
				joint until cooled to ambient temperature.							
				705.5.1.3 Socket-Fusion Joints. Socket fusion joints	705.5.1.3 Socket-Fusion Joints. Socket fusion		6.5.2024				
				shall be installed in accordance with ASTM F2620 and	joints shall be installed in accordance with ASTM						
				shall be made by simultaneously heating the outside	F2620 and shall be made by simultaneously heating the						
			Keep as shown in	surface of a pipe end and the inside of a fitting socket.	outside surface of a nine end and the inside of a fitting						
50	705.5.1.3	Socket-Fusion Joints.	2024 UPC	Where the required melt is obtained, the pipe and	socket. Where the required melt is obtained, the pipe	FALSE					
				fitting shall be joined by inserting one into the other	and fitting shall be joined by inserting one into the other						
				with applied force. Do not disturb the joint until	with applied force. Do not disturb the joint until cooled						
				cooled to ambient temperature.	to ambient temperature.						
				705.6 PVC and PVC Co-Extruded Plastic Pipe and	705.6 PVC and PVC Co-Extruded Plastic Pipe and Joining		6.5.2024				
		PVC and PVC Co-		Joining Methods. Joining methods for PVC plastic pipe	Methods. Joining methods for PVC plastic pipe and						
51	705.6	Extruded Plastic Pipe and	Keep as shown in	and fittings shall be installed in accordance with the	fittings shall be installed in accordance with the	TRUE					
		Joining Methods.	2024 UPC	manufacturer's installation instructions and shall	manufacturer's installation instructions and shall comply						
		-		comply with Section 705.6.1 through Section 705.6.3.	with Section 705.6.1 through Section 705.6.3.						
				705.6.1 Mechanical Joints. Mechanical joints shall	705.6.1 Mechanical Joints. Mechanical joints shall		6.5.2024				
				be designed to provide a permanent seal and shall be	be designed to provide a permanent seal and shall be of						
				of the mechanical or push-on joint type. The push-on	the mechanical or push-on joint type. The push-on joint						
52	705.6.1	Mechanical Joints.	Keep as shown in	joint shall include an elastomeric gasket that complies	shall include an elastomeric gasket that complies with	TRUE					
			2024 UPC	with ASTM D3212 and shall provide a compressive	ASTM D3212 and shall provide a compressive force						
			wit	force against the spigot and socket after assembly to	against the spigot and socket after assembly to provide a						
				provide a permanent seal.	permanent seal.						

Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
53	705.6.2	Solvent Cement Joints.		of the pipe and fitting is softened. Solvent cement that comply with ASTM D2564 shall be applied to all joint surfaces. Joints shall be made while both the inside	705.6.2 Solvent Cement Joints. Solvent cement joints for PVC pipe and fittings shall be clean from dirt and moisture. Pipe shall be cut square, and pipe shall be deburred. Where surfaces to be joined are cleaned and free of dirt, moisture, oil, and other foreign material, apply primer purple in color that complies with ASTM F656. Primer shall be applied to the surface of the pipe and fitting is softened. Solvent cement that comply with ASTM D2564 shall be applied to all joint surfaces. Joints shall be made while both the inside socket surface and outside surface of pipe are wet with solvent cement. Hold joint in place and undisturbed for 1 minute after assembly.	TRUE	6.5.2024		
54	705.6.3	Threaded Joints.	Keep as shown in 2024 UPC	ASME B1.20.1. A minimum of Schedule 80 shall be permitted to be threaded. Molded threads on adapter fittings for the transition to threaded joints shall be permitted. Thread sealant compound that is compatible with the pipe and fitting, insoluble in water and nontoxic shall be applied to male threads. The joint between the pipe and transition fitting shall be of the solvent cement type. Caution shall be used during assembly to prevent over tightening of the PVC	fittings for the transition to threaded joints shall be permitted. Thread sealant compound that is compatible with the pipe and fitting, insoluble in water and nontoxic shall be applied to male threads. The joint between the pipe and transition fitting shall be of the solvent cement type. Caution shall be used during assembly to prevent over tightening of the PVC components once the thread sealant has been applied. Female PVC threaded fittings		6.5.2024		
55	705.7	Stainless Steel Pipe and Joints.	Keep as shown in 2024 UPC	for stainless steel pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.7.1 or	705.7 Stainless Steel Pipe and Joints. Joining methods for stainless steel pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.7.1 or Section 705.7.2.	FALSE	6.5.2024		
56	705.7.1	Mechanical Joints.	Keep as shown in 2024 UPC		705.7.1 Mechanical Joints. Mechanical joints between stainless steel pipe and fittings shall be of the compression, grooved coupling, hydraulic press-connect fittings, or flanged.	FALSE	6.5.2024		

Line #	Rules affected		Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
57	705.7.2	Welded Joints.	Keep as shown in 2024 UPC		particles. Pipe shall be cut with a combination cutting and beveling tool that provides a square cut, and free of	TRUE	6.5.2024		
58	705.8	Vitrified Clay Pipe and Joints.	Keep as shown in 2024 UPC	705.8 Vitrified Clay Pipe and Joints. Joining methods for vitrified clay pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.8.1.	705.8 Vitrified Clay Pipe and Joints. Joining methods for vitrified clay pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 705.8.1.	TRUE	6.5.2024		
59	705.8.1	Mechanical Joints.	Keep as shown in 2024 UPC	705.8.1 Mechanical Joints. Mechanical joints shall be designed to provide a permanent seal and shall be of the mechanical or push-on joint type. The push-on joint shall include an elastomeric gasket that complies with ASTM C425 and shall provide a compressive force against the spigot and socket after assembly to provide a permanent seal.		TRUE	6.5.2024		
60	705.9	Special Joints.	Keep as shown in 2024 UPC	705.9 Special Joints. Special joints shall comply with	705 9 Special Joints Special joints shall comply with	TRUE	6.5.2024		
61	705.9.1	Slip Joints.	Keep as shown in 2024 UPC	705.9.1 Slip Joints. In fixture drains and traps, slip joints of approved materials shall be permitted to be used in accordance with their approvals.	705.9.1 Slip Joints. In fixture drains and traps, slip joints of approved materials shall be permitted to be used in accordance with their approvals.	TRUE	6.5.2024		
62	705.9.2	Expansion Joints.	Keep as shown in 2024 UPC		705.9.2 Expansion Joints. Expansion joints shall be accessible, except where in vent piping or drainage stacks, and shall be permitted to be used where necessary to provide for expansion and contraction of the pipes.	TRUE	6.5.2024		
63	705.9.3	Ground Joint, Flared, or Ferrule Connections.	Keep as shown in 2024 UPC	705.9.3 Ground Joint, Flared, or Ferrule Connections. Copper or copper alloy ground joint flared, or ferrule-type connections that allow adjustment of tubing, but	705.9.3 Ground Joint, Flared, or Ferrule Connections. Copper or copper alloy ground joint flared, or ferrule-	TRUE	6.5.2024		
64	705.9.4	Transition Joint.	Keep as shown in 2024 UPC	sewer shall be made using listed transition solvent	705.9.4 Transition Joint. A solvent cement transition joint between ABS and PVC building drain and building sewer shall be made using listed transition solvent cement in accordance with ASTM D3138.	TRUE	6.5.2024		

	Chapter 7 (Reep 2024 OFC)									
Line #	Rules affected		Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify	
65	705.10 705.10.1	Joints Between Various Materials. Copper or Copper Alloy Pipe to Cast- Iron Pipe.	Keep as shown in 2024 UPC Keep as shown in 2024 UPC	between various materials shall be installed in accordance with the manufacturer's installation instructions and with Section 705.10.1 through Section 705.10.4. Mechanical couplings used to join different materials shall comply with ASTM C1173 for	ferrule, and the ferrule shall be joined to the cast iron	FALSE	6.5.2024 6.5.2024			
67	705.10.2	Copper or Copper Alloy Pipe to Threaded Pipe Joints.	Keep as shown in 2024 UPC	the use of a listed copper alloy adapter or dielectric fitting. The joint between the copper or copper alloy pipe and the fitting shall be a soldered or brazed, and	fitting shall be a soldered or brazed, and the connection between the threaded and the fittings shall be made		6.5.2024			
68	705.10.3	Plastic Pipe to Other Materials.	Keep as shown in 2024 UPC	connecting plastic pipe to other types of plastic or other types of piping material; approved listed adapter		FALSE	6.5.2024			
69	705.10.4	Stainless Steel Pipe to Other Materials.	Keep as shown in 2024 UPC	Where connecting stainless steel pipe to other types of piping, listed mechanical joints of the compression type and listed for the specific transition intended shall be used.	listed for the specific transition intended shall be used.	TRUE	6.5.2024			
70	706.0	Changes in Direction of Drainage Flow.		706.0 Changes in Direction of Drainage Flow.	706.0 Changes in Direction of Drainage Flow.	TRUE	6.5.2024			

Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
71	706.1	Approved Fittings.	Keep as shown in 2024 UPC	706.1 Approved Fittings. Changes in the direction of drainage piping shall be made by the appropriate use of approved fittings and shall be of the angles presented by a one-sixteenth bend, one-eighth bend, or one-sixth bend, or other approved fittings of equivalent sweep.	706.1 Approved Fittings. Changes in the direction of drainage piping shall be made by the appropriate use of approved fittings and shall be of the angles presented by a one-sixteenth bend, one-eighth bend, or one-sixth bend, or other approved fittings of equivalent sweep.	TRUE	6.5.2024		
72	706.2	Horizontal to Vertical.	Keep as shown in 2024 UPC	connecting with a vertical stack, shall enter through 45 degree (0.79 rad) wye branches, 60 degree (1.05 rad) wye branches, combination wye and one-eighth bend branches, sanitary tee or sanitary tapped tee branches, or other approved fittings of equivalent sweep. No fitting having more than one inlet at the same level shall be used unless such fitting is constructed so that the discharge from one inlet cannot readily enter any other inlet. Double sanitary tees shall be permitted to be used where the barrel of the fitting is not less than two pipe sizes larger than	706.2 Horizontal to Vertical. Horizontal drainage lines, connecting with a vertical stack, shall enter through 45 degree (0.79 rad) wye branches, 60 degree (1.05 rad) wye branches, combination wye and one-eighth bend branches, sanitary tee or sanitary tapped tee branches, or other approved fittings of equivalent sweep. No fitting having more than one inlet at the same level shall be used unless such fitting is constructed so that the discharge from one inlet cannot readily enter any other inlet. Double sanitary tees shall be permitted to be used where the barrel of the fitting is not less than two pipe sizes larger than the largest inlet, (pipe sizes recognized for this purpose are 2 inches, 21/2 inches, 3 inches, 31/2 inches, 4 inches, 41/2 inches, 5 inches, 6 inches, etc.) (50 mm, 65 mm, 80 mm, 90 mm, 100 mm, 115 mm, 125 mm, 150 mm, etc.).		6.5.2024		
73	706.3	Horizontal to Horizontal.	Keep as shown in 2024 UPC	706.3 Horizontal to Horizontal. Horizontal drainage lines connecting with other horizontal drainage lines shall enter through 45 degree (0.79 rad) wye branches, combination wye and one-eighth bend branches, or other approved fittings of equivalent sweep.	706.3 Horizontal to Horizontal. Horizontal drainage lines connecting with other horizontal drainage lines shall enter through 45 degree (0.79 rad) wye branches, combination wye and one-eighth bend branches, or other approved fittings of equivalent sweep.	TRUE	6.5.2024		
74	706.4	Vertical to Horizontal	Keep as shown in 2024 UPC	706.4 Vertical to Horizontal. Vertical drainage lines connecting with horizontal drainage lines shall enter through 45 degree (0.79 rad) wye branches, combination wye and oneeighth bend branches, or other approved fittings of equivalent sweep. Branches or offsets of 60 degrees (1.05 rad) shall be permitted to be used where installed in a true vertical position.	706.4 Vertical to Horizontal. Vertical drainage lines connecting with horizontal drainage lines shall enter through 45 degree (0.79 rad) wye branches, combination wye and oneeighth bend branches, or other approved fittings of equivalent sweep. Branches or offsets of 60 degrees (1.05 rad) shall be permitted to be used where installed in a true vertical position.	TRUE	6.5.2024		
75	707.0	Cleanouts.	Keep as shown in 2024 UPC	707.0 Cleanouts.	707.0 Cleanouts.	TRUE	6.5.2024		

				- Chapter / (Reep 2024 OFC				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
76	707.1	Plug.	Keep as shown in 2024 UPC	707.1 Plug. Each cleanout fitting for cast-iron pipe shall consist of a cast-iron or copper alloy body and an approved plug. Each cleanout for galvanized wrought iron, galvanized steel, copper, or copper alloy pipe shall consist of a plug as specified in Table 707.1, or a standard weight copper alloy cap, or an approved ABS or PVC plastic plug, or an approved stainless steel cleanout or plug. Plugs shall have raised square heads or approved countersunk rectangular slots.	707.1 Plug. Each cleanout fitting for cast-iron pipe shall consist of a cast-iron or copper alloy body and an approved plug. Each cleanout for galvanized wrought iron, galvanized steel, copper, or copper alloy pipe shall consist of a plug as specified in Table 707.1, or a standard weight copper alloy cap, or an approved ABS or PVC plastic plug, or an approved stainless steel cleanout or plug. Plugs shall have raised square heads or approved countersunk rectangular slots.	TRUE	6.5.2024		
77	TABLE 707.1	CLEANOUTS	Keep as shown in 2024 UPC	TABLE 707.1 CLEANOUTS	TABLE 707.1 CLEANOUTS	TRUE	6.5.2024		
78	707.2	Approved.		707.2 Approved. Each cleanout fitting and each cleanout plug or cap shall be of an approved type. A list of approved standards for cleanouts are referenced in Table 707.2.	707.2 Approved. Each cleanout fitting and each cleanout plug or cap shall be of an approved type.	FALSE	6.5.2024		
79	TABLE 707.2	CLEANOUT MATERIALS FOR DRAIN, WASTE, AND VENT	Keep as shown in 2024 UPC	TABLE 707.2 CLEANOUT MATERIALS FOR DRAIN, WASTE, AND VENT	N/A	FALSE	6.5.2024		
80	707.3	Watertight and Gastight	Keep as shown in 2024 UPC	707.3 Watertight and Gastight . Cleanouts shall be designed to be watertight and gastight.	707.3 Watertight and Gastight. Cleanouts shall be designed to be watertight and gastight.	TRUE	6.5.2024		
81	707.4	Location.	Keep as shown in 2024 UPC	707.4 Location. Each horizontal drainage pipe shall be provided with a cleanout at its upper terminal, and each run of piping, that is more than 100 feet (30 480 mm) in total developed length, shall be provided with a cleanout for each 100 feet (30 480 mm), or fraction thereof, in length of such piping. An additional cleanout shall be provided in a drainage line for each aggregate horizontal change in direction exceeding 135 degrees (2.36 rad). A cleanout shall be installed above the fixture connection fitting, serving each urinal, regardless of the location of the urinal in the building. Exceptions: (1) Cleanouts shall be permitted to be omitted on a	707.4 Location. Each horizontal drainage pipe shall be provided with a cleanout at its upper terminal and each run of piping that is more than 100 feet (30 480 mm) in total developed length shall be provided with a cleanout for each 100 feet (30 480 mm), or fraction therof, in length of such piping. An additional cleanout shall be	FALSE	6.5.2024 6.5.2024		
82			2024 HPC	horizontal drain line less than 5 feet (1524 mm) in length unless such line is serving sinks or urinals.		TRUE	5.5.252		
83			Keep as shown in 2024 UPC	(2) Cleanouts shall be permitted to be omitted on a horizontal drainage pipe installed on a slope of 72 degrees (1.26 rad) or less from the vertical angle (one-fifth bend).	(2) Cleanouts shall be permitted to be omitted on a horizontal drainage pipe installed on a slope of 72 degrees (1.26 rad) or less from the vertical angle (one-fifth bend).	TRUE	6.5.2024		

Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
84			Keep as shown in 2024 UPC	(3) Excepting the building drain, its horizontal branches, kitchen sinks, and urinals, a cleanout shall not be required on a pipe or piping that is above the floor level of the lowest floor of the building.	(3) Excepting the building drain, its horizontal branches, kitchen sinks, and urinals, a cleanout shall not be required on a pipe or piping that is above the floor level of the lowest floor of the building.	TRUE	6.5.2024		
85			Keep as shown in 2024 UPC	_	(4) An approved type of two-way cleanout fitting, installed inside the building wall near the connection between the building drain and the building sewer or installed outside of a building at the lower end of a building drain and extended to grade, shall be permitted to be substituted for an upper terminal cleanout.	TRUE	6.5.2024		
86	707.4.1	Load Rated Cover.	Keep as shown in 2024 UPC	707.4.1 Load Rated Cover. Cleanout floor covers and top rims meant to take loads shall be rated for the loading in accordance with ASME A112.36.2M.	N/A	FALSE	6.5.2024		
87	707.5	Cleaning.	Keep as shown in 2024 UPC	it opens to allow cleaning in the direction of flow of	707.5 Cleaning. Each cleanout shall be installed so that it opens to allow cleaning in the direction of flow of the soil or waste or at right angles thereto and, except in the case of wye branch and end-of-line cleanouts, shall be installed vertically above the flow line of the pipe.		6.5.2024		
88	707.6	Extension.	Keep as shown in 2024 UPC	considered as drainage piping and each 90 degree	,	TRUE	6.5.2024		
89	707.7	Interceptor.	Keep as shown in 2024 UPC	707.7 Interceptor. Each cleanout for an interceptor shall be outside of such interceptor.	707.7 Interceptor. Each cleanout for an interceptor shall be outside of such interceptor.	TRUE	<u>6.5.2024</u>		
90	707.8	Access.	Keep as shown in 2024 UPC	707.8 Access. Each cleanout, unless installed under an approved cover plate, shall be above grade, readily accessible, and so located as to serve the purpose for which it is intended. Cleanouts located under cover	707.8 Access. Each cleanout, unless installed under an approved cover plate, shall be above grade, readily accessible, and so located as to serve the purpose for which it is intended. Cleanouts located under cover plates shall be so installed as to provide the clearances and accessibility required by this section.	TRUE	6.5.2024		

Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
91	707.9	Clearance.	Keep as shown in 2024 UPC	piping exceeding 2 inches (50 mm) shall have a clearance of not less than 24 inches (610 mm) by 24 inches (610 mm) in front of the cleanout. Cleanouts in under-floor piping shall be extended to or above the finished floor or shall be extended outside the building where there is less than 18 inches (457 mm) vertical overall, allowing for obstructions such as ducts, beams, and piping, and 30 inches of (762 mm)	707.9 Clearance. Each cleanout in piping 2 inches (50 mm) or less in size shall be so installed that there is a clearance of not less than 18 inches (457 mm) by 18 inches (457 mm) in front of the cleanout. Cleanouts in piping exceeding 2 inches (50 mm) shall have a clearance of not less than 24 inches (610 mm) by 24 inches (610 mm) in front of the cleanout. Cleanouts in under-floor piping shall be extended to or above the finished floor or shall be extended outside the building where there is less than 18 inches (457 mm) vertical overall, allowing for obstructions such as ducts, beams, and piping, and 30 inches of (762 mm) horizontal clearance from the means of access to such cleanout. No under-floor cleanout shall be located exceeding 5 feet (1524 mm) from an access door, trap door, or crawl hole.	TRUE	6.5.2024		
92	707.10	Fittings.	Keep as shown in 2024 UPC	707.10 Fittings. Cleanout fittings shall be not less in size than those given in Table 707.1.	707.10 Fittings. Cleanout fittings shall be not less in size than those given in Table 707.1.	TRUE	6.25.2024		
93	707.11	Pressure Drainage Systems.	Keep as shown in 2024 UPC	707.11 Pressure Drainage Systems . Cleanouts shall be provided for pressure drainage systems as classified under Section 710.7.	707.11 Pressure Drainage Systems. Cleanouts shall be provided for pressure drainage systems as classified under Section 710.7.	TRUE	6.25.2024		
94	707.12	Countersunk Cleanout Plugs.	Keep as shown in 2024 UPC	707.12 Countersunk Cleanout Plugs. Countersunk cleanout plugs shall be installed where raised heads cause a hazard.	707.12 Countersunk Cleanout Plugs. Countersunk cleanout plugs shall be installed where raised heads cause a hazard.	TRUE	6.25.2024		
95	707.13	Hubless Blind Plugs.	Keep as shown in 2024 UPC	707.13 Hubless Blind Plugs. Where a hubless blind plug is used for a required cleanout, the complete coupling and plug shall be accessible for removal or replacement.	707.13 Hubless Blind Plugs. Where a hubless blind plug is used for a required cleanout, the complete coupling and plug shall be accessible for removal or replacement.	TRUE	6.25.2024		
96	707.14	Trap Arms.	Keep as shown in 2024 UPC	707.14 Trap Arms. Cleanouts for trap arms shall be installed in accordance with Section 1002.3.	707.14 Trap Arms. Cleanouts for trap arms shall be installed in accordance with Section 1002.3.	TRUE	6.25.2024		
97	708.0	Grade of Horizontal Drainage Piping.	Keep as shown in 2024 UPC	708.0 Grade of Horizontal Drainage Piping.	708.0 Grade of Horizontal Drainage Piping.	TRUE	6.25.2024		

	Chapter 7 (Reep 2024 OPC)										
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify		
98	708.1	General.	Keep as shown in 2024 UPC	a uniform slope of not less than 1/4 inch per foot (20.8 mm/m) or 2 percent toward the point of disposal. Where it is impractical due to the depth of the street sewer, structural features, or to the arrangement of a building or structure to obtain a slope of 1/4 inch per foot (20.8 mm/m) or 2 percent, building drain piping 4 inches (100 mm) or larger in diameter shall be	708.1 General. Horizontal drainage piping shall be run in practical alignment and a uniform slope of not less than 1/4 inch per foot (20.8 mm/m) or 2 percent toward the point of disposal provided that, where it is impractical due to the depth of the street sewer, to the structural features, or to the arrangement of a building or structure to obtain a slope of 1/4 inch per foot (20.8 mm/m) or 2 percent, such pipe or piping 4 inches (100 mm) or larger in diameter shall be permitted to have a slope of not less than 1/8 inch per foot (10.4 mm/m) or 1 percent, where first approved by the Authority Having Jurisdiction.	FALSE	6.25.2024				
99	709.0	Gravity Drainage Required.	Keep as shown in 2024 UPC	709.0 Gravity Drainage Required.	709.0 Gravity Drainage Required.	TRUE	6.25.2024				
100			Keep as shown in 2024 UPC	709.1 General. Where practicable, plumbing fixtures shall be drained to the public sewer or private sewage disposal system by gravity.	709.1 General. Where practicable, plumbing fixtures shall be drained to the public sewer or private sewage disposal system by gravity.	TRUE	6.25.2024				
101	710	Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level.	Keep as shown in 2024 UPC	710.0 Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level.	710.0 Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level.	TRUE	6.25.2024				
102	710.1	Backflow Protection	Keep as shown in 2024 UPC	710.1 Backflow Protection. Fixtures installed on a floor level that is lower than the next upstream manhole cover of the public, or private sewer shall be protected from backflow of sewage by installing an approved type of backwater valve. Fixtures on such floor level that are not below the next upstream manhole cover shall not be required to be protected by a backwater valve. Fixtures on floor levels above such elevation shall not discharge through the backwater valve. Cleanouts for drains that pass through a backwater valve shall be clearly identified with a permanent label stating "backwater valve downstream."	710.1 Backflow Protection. Fixtures installed on a floor level that is lower than the next upstream manhole cover of the public, or private sewer shall be protected from backflow of sewage by installing an approved type of backwater valve. Fixtures on such floor level that are not below the next upstream manhole cover shall not be required to be protected by a backwater valve. Fixtures on floor levels above such elevation shall not discharge through the backwater valve. Cleanouts for drains that pass through a backwater valve shall be clearly identified with a permanent label stating "backwater valve downstream."		6.25.2024				

					1 C C C C C C C C C C C C C C C C C C C				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
103	710.2	Sewage Discharge.	Keep as shown in 2024 UPC	710.2 Sewage Discharge. Drainage piping serving fixtures that are located below the crown level of the main sewer shall discharge into an approved watertight sump or receiving tank, so located as to receive the sewage or wastes by gravity. From such sump or receiving tank, the sewage or other liquid wastes shall be lifted and discharged into the building drain or building sewer by approved ejectors, pumps, or other equally efficient approved mechanical devices.	710.2 Sewage Discharge. Drainage piping serving fixtures that are located below the crown level of the main sewer shall discharge into an approved watertight sump or receiving tank, so located as to receive the sewage or wastes by gravity. From such sump or receiving tank, the sewage or other liquid wastes shall be lifted and discharged into the building drain or building sewer by approved ejectors, pumps, or other equally efficient approved mechanical devices.	TRUE	6.25.2024		
104	710.3	Sewage Ejector and Pumps.	Keep as shown in 2024 UPC		710.3 Sewage Ejector and Pumps . A sewage ejector or sewage pump receiving the discharge of water closets or urinals:	TRUE	6.25.2024		
105			Keep as shown in 2024 UPC	(1) Shall have a discharge capacity of not less than 20 gpm (1.26 L/s).	(1) Shall have a discharge capacity of not less than 20 gpm (1.26 L/s).	TRUE	6.25.2024		
106			Keep as shown in 2024 UPC	(2) In single dwelling units, the ejector or pump shall be capable of passing an 11/2 inch (38 mm) diameter solid ball, and the discharge piping of each ejector or pump shall have a backwater valve and gate valve, and be not less than 2 inches (50 mm) in diameter.	(2) In single dwelling units, the ejector or pump shall be capable of passing an 11/2 inch (38 mm) diameter solid ball, and the discharge piping of each ejector or pump shall have a backwater valve and gate valve, and be not less than 2 inches (50 mm) in diameter.	TRUE	6.25.2024		
107			Keep as shown in 2024 UPC		(3) In other than single-dwelling units, the ejector or pump shall be capable of passing a 2 inch (51 mm) diameter solid ball, and the discharge piping of each ejector or pump shall have a backwater valve and gate valve, and be not less than 3 inches (80 mm) in diameter.	TRUE	6.25.2024		
108	710.4	Discharge Line.	Keep as shown in 2024 UPC	ejector, pump, or another mechanical device shall be of approved pressure rated material and be provided with an accessible backwater or swing check valve and gate or ball valve. Where the gravity drainage line to which such discharge line connects is horizontal, the method of connection shall be from the top through a wye branch fitting. The gate or ball valve shall be located on the discharge side of the backwater or	710.4 Discharge Line. The discharge line from such ejector, pump, or another mechanical device shall be of approved pressure rated material and be provided with an accessible backwater or swing check valve and gate or ball valve. Where the gravity drainage line to which such discharge line connects is horizontal, the method of connection shall be from the top through a wye branch fitting. The gate or ball valve shall be located on the discharge side of the backwater or check valve. Gate or ball valves, where installed in drainage piping, shall be fullway type with working parts of corrosion-resistant metal. Sizes 4 inches (100 mm) or more in diameter shall have cast-iron bodies and sizes less than 4 inches (100 mm), cast-iron or copper alloy bodies.	FALSE	6.25.2024		

Line #	Rules affected	Brief Title	Proposal and Committee recommendation		2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
109	710.5	Size of Building Drains and Sewers.	Keep as shown in 2024 UPC		710.5 Size of Building Drains and Sewers. Building drains or building sewers receiving a discharge from a pump or ejector shall be adequately sized to prevent overloading. Two fixture units shall be allowed for each gallon per minute (L/s) of flow.	TRUE	6.25.2024		
110	710.6	Backwater Valves	Keep as shown in 2024 UPC	710.6 Backwater Valves. Backwater valves, gate valves, fullway ball valves, unions, motors, compressors, air tanks, and other mechanical devices required by this section shall be located where they will be accessible for inspection and repair and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover. Backwater valves shall comply with ASME A112.14.1 or IAPMO IGC 305, and have bodies of cast-iron, plastic, copper alloy, or other approved materials; shall have noncorrosive bearings, seats, and self-aligning discs; and shall be constructed to ensure a positive mechanical seal. Such backwater valves shall remain open during periods of low flows to avoid screening of solids and shall not restrict capacities or cause excessive turbulence during peak loads. Unless otherwise listed, valve access covers shall be bolted type with gasket, and each valve shall bear the manufacturer's name cast into the body and the cover.	710.6 Backwater Valves. Backwater valves, gate valves, fullway ball valves, unions, motors, compressors, air tanks, and other mechanical devices required by this section shall be located where they will be accessible for inspection and repair and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover. Backwater valves shall comply with ASME A112.14.1, and have bodies of cast-iron, plastic, copper alloy, or other approved materials; shall have noncorrosive bearings, seats, and self-aligning discs; and shall be constructed to ensure a positive mechanical seal. Such backwater valves shall remain open during periods of low flows to avoid screening of solids and shall not restrict capacities or cause excessive turbulence during peak loads. Unless otherwise listed, valve access covers shall be bolted type with gasket, and each valve shall bear the manufacturer's name cast into the body and the cover.	FALSE	6.25.2024		
111	710.7	Drainage and Venting Systems.	Keep as shown in 2024 UPC	710.7 Drainage and Venting Systems. The drainage and venting systems, in connection with fixtures, sumps, receiving tanks, and mechanical waste-lifting devices shall be installed under the same requirements as provided for in this code for gravity systems.	710.7 Drainage and Venting Systems. The drainage and venting systems, in connection with fixtures, sumps, receiving tanks, and mechanical waste-lifting devices shall be installed under the same requirements as provided for in this code for gravity systems.	TRUE	6.25.2024		
112	710.8	Sump and Receiving Tank Construction.	Keep as shown in 2024 UPC	710.8 Sump and Receiving Tank Construction. Sumps and receiving tanks shall be watertight and shall be constructed of concrete, metal, or other approved materials. Where constructed of poured concrete, the walls and bottom shall be adequately reinforced and designed to recognized acceptable standards. Metal sumps or tanks shall be of such thickness as to serve their intended purpose and shall be treated internally and externally to resist corrosion.	710.8 Sump and Receiving Tank Construction. Sumps and receiving tanks shall be watertight and shall be constructed of concrete, metal, or other approved materials. Where constructed of poured concrete, the walls and bottom shall be adequately reinforced and designed to recognized acceptable standards. Metal sumps or tanks shall be of such thickness as to serve their intended purpose and shall be treated internally and externally to resist corrosion.	TRUE	6.25.2024		

				Chapter / (Reep 2024 OPC				<u>. </u>
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
113	710.9	Alarm.	Keep as shown in 2024 UPC	and independently. Such pumps shall be capable of running continuously in case of overload or mechanical failure of one of the pumps or ejectors. The pumps shall have an audio and visual alarm, readily accessible, that signals pump failure or an overload condition. The lowest inlet shall have a clearance of not less than 2 inches (51 mm) from the highwater or "starting" level of the sump.	710.9 Alarm. Such sumps and receiving tanks shall be automatically discharged and, wherein a "public use" occupancy, shall be provided with dual pumps or ejectors arranged to function alternately in normal use and independently in case of overload or mechanical failure. The pumps shall have an audio and visual alarm, readily accessible, that signals pump failure or an overload condition. The lowest inlet shall have a clearance of not less than 2 inches (51 mm) from the highwater or "starting" level of the sump.	FALSE	6.25.2024		
114	710.11	Air Tanks.	Keep as shown in 2024 UPC	710.11 Air Tanks. Air tanks shall be so proportioned as to be of equal cubical capacity to the ejectors connected in addition to that in which there shall be maintained an air pressure of not less than 2 pounds per foot (lb/ft) (3 kg/m) of height the sewage is to be raised. No water-operated ejectors shall be permitted.	710.11 Air Tanks. Air tanks shall be so proportioned as to be of equal cubical capacity to the ejectors connected in addition to that in which there shall be maintained an air pressure of not less than 2 pounds per foot (lb/ft) (3 kg/m) of height the sewage is to be raised. No water-operated ejectors shall be permitted.		6.25.2024		
115	710.12.1	Discharge Piping.	Keep as shown in	710.12.1 Discharge Piping. The discharge piping shall be sized in accordance with the manufacturer's installation instructions and shall be not less than 11/4 inches (32 mm) in diameter. A check valve and fullway type shutoff valve shall be located on the discharge line.	710.12.1 Discharge Piping. The discharge piping shall be sized in accordance with the manufacturer's installation instructions and shall be not less than 11/4 inches (32 mm) in diameter. A check valve and fullway-type shutoff valve shall be located within the discharge line.	FALSE	6.25.2024		
116	710.13.1	Sumps.	Keep as shown in 2024 UPC	710.13.1 Sumps. The sump shall be watertight and gastight.	710.13.1 Sumps. The sump shall be watertight and gastight.	TRUE	6.25.2024		
117	710.13.2	Discharge Piping.	Keep as shown in 2024 UPC	710.13.2 Discharge Piping. The discharge piping shall be sized in accordance with manufacturer's instructions and shall be not less than 3/4 of an inch (20 mm) in diameter. The developed length of the discharge piping shall not exceed the manufacturer's instructions. A check valve and fullway-type shutoff valve shall be located within the discharge line or	710.13.2 Discharge Piping. The discharge piping shall be sized in accordance with manufacturer's instructions and shall be not less than 3/4 of an inch (20 mm) in	FALSE	6.25.2024		
118	710.13.3	Venting.	Keep as shown in 2024 UPC	710.13.3 Venting. The plumbing fixtures that discharge into the macerating device shall be vented in accordance with this code. The sump shall be vented in accordance with the manufacturer's instructions, and such vent shall be permitted to connect to the fixture venting.	710.13.3 Venting. The plumbing fixtures that discharge into the macerating device shall be vented in accordance with this code. The sump shall be vented in accordance with the manufacturer's instructions, and such vent shall be permitted to connect to the fixture venting.	TRUE	6.25.2024		

				Sinapter 7 (Reep 2024 Of C				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
119	711.0	Suds Relief.	Keep as shown in 2024 UPC	711.0 Suds Relief.	711.0 Suds Relief.	TRUE	6.25.2024		
120	711.1	General	Keep as shown in 2024 UPC	mm) of a vertical to horizontal change of direction of a stack containing suds-producing fixtures. Bathtubs,	711.1 General. Drainage connections shall not be made into a drainage piping system within 8 feet (2438 mm) of a vertical to horizontal change of direction of a stack containing suds-producing fixtures. Bathtubs, laundries, washing machine standpipes, kitchen sinks, and dishwashers shall be considered suds-producing fixtures. Where parallel vent stacks are required, they shall connect to the drainage stack at a point 8 feet (2438 mm) above the lowest point of the drainage stack. Exceptions:		6.25.2024		
121			Keep as shown in 2024 UPC	(1) Single-family residences.	(1) Single-family residences.	TRUE	6.25.2024		
122			Keep as shown in 2024 UPC	(2) Stacks receiving the discharge from less than three stories of plumbing fixtures.	(2) Stacks receiving the discharge from less than three stories of plumbing fixtures.	TRUE	6.25.2024		
123	712.0	Testing.	Keep as shown in 2024 UPC	712.0 Testing.	712.0 Testing.	TRUE	6.25.2024		
124	712.2	Water Test.	Keep as shown in 2024 UPC	openings in the piping shall be tightly closed, except the highest opening, and the system filled with water to the point of overflow. Where the system is tested in sections, each opening shall be tightly plugged, except the highest	712.2 Water Test. The water test shall be applied to the drainage and vent systems either in its entirety or in sections. Where the test is applied to the entire system, openings in the piping shall be tightly closed, except the highest opening, and the system filled with water to the point of overflow. Where the system is tested in sections, each opening shall be tightly plugged, except the highest opening of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 10 foot head of water (30 kPa). In testing successive sections, not less than the upper 10 feet (3048 mm) of the next preceding section shall be tested, so that no joint or pipe in the building (except the uppermost 10 feet (3048 mm) of the system) shall have been submitted to a test of less than a 10 foot head of water (30 kPa). The water shall be kept in the system, or in the portion under test, for not less than 15 minutes before inspection starts. The system shall then be tight at all points.	TRUE	6.25.2024		

					Recp 202 i Oi Oj				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
125	712.3	Air Test.	Keep as shown in 2024 UPC	opening and, after closing all other inlets and outlets to the system, forcing air into the system until there is a uniform gauge pressure of 5 pounds-force per square inch (psi) (34 kPa) or sufficient to balance a column of mercury 10 inches (34 kPa) in height.	712.3 Air Test. The air test shall be made by attaching an air compressor testing apparatus to a suitable opening and, after closing all other inlets and outlets to the system, forcing air into the system until there is a uniform gauge pressure of 5 pounds-force per square inch (psi) (34 kPa) or sufficient to balance a column of mercury 10 inches (34 kPa) in height. The pressure shall be held without the introduction of additional air for a period of not less than 15 minutes.	FALSE	6.25.2024		
126				Part II – Building Sewers.	Part II – Building Sewers.	TRUE	6.25.2024		
127	713.0	Sewer Required.		713.0 Sewer Required.	9	TRUE	6.25.2024		
128	713.3	Public Sewer.	Keep as shown in 2024 UPC	subdivision into smaller parcels of a lot that abuts and	construction of a private sewage disposal system, and	TRUE	6.25.2024		
129	713.4	Public Sewer Availability.	Keep as shown in 2024 UPC	713.4 Public Sewer Availability. The public sewer shall be permitted to be considered as not being available where such public sewer or a building or an exterior drainage facility connected thereto is located more than 200 feet (60 960 mm) from a proposed building or exterior drainage facility on a lot or premises that abut and is served by such public sewer.	713.4 Public Sewer Availability. The public sewer shall be permitted to be considered as not being available where such public sewer or a building or an exterior drainage facility connected thereto is located more than 200 feet (60 960 mm) from a proposed building or exterior drainage facility on a lot or premises that abut and is served by such public sewer.	TRUE	6.25.2024		
130	713.6	Lot.	Keep as shown in 2024 UPC	713.6 Lot. On every lot or premises hereafter connected to a public sewer, plumbing, and drainage systems or parts thereof on such lot or premises shall be connected with such public sewer	713.6 Lot. On every lot or premises hereafter connected to a public sewer, plumbing, and drainage systems or parts thereof on such lot or premises shall be connected with such public sewer.	FALSE	6.25.2024		
131	714.0	Damage to Public Sewer or Private Sewage Disposal System.	Keep as shown in 2024 UPC	714.0 Damage to Public Sewer or Private Sewage Disposal System.	714.0 Damage to Public Sewer or Private Sewage Disposal System.	TRUE	6.25.2024		

					Recp 202+ 01 e/				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
				714.1 Unlawful Practices. It shall be unlawful for a	714.1 Unlawful Practices. It shall be unlawful for a		6.25.2024		
				person to deposit, by means whatsoever, into a	person to deposit, by means whatsoever, into a				
					plumbing fixture, floor drain, interceptor, sump,				
				receptor, or device which is connected to a drainage	receptor, or device which is connected to a drainage				
132	71.4.1	Unlawful Practices.	Keep as shown in	system, public sewer, private sewer, septic tank, or	system, public sewer, private sewer, septic tank, or	FALSE			
132	714.1	Offiawful Practices.	2024 UPC	cesspool, ashes; cinders; solids; rags; flammable,	cesspool, ashes; cinders; solids; rags; flammable,	FALSE			
				poisonous, or explosive liquids or gases; oils; grease;	poisonous, or explosive liquids or gases; oils; grease; and				
				and whatsoever that is capable of causing damage to	whatsoever that is capable of causing damage to the				
				the public sewer, private sewer, or private sewage	public sewer, private sewer, or private sewage disposal				
				disposal system.	system.				
				714.2 Prohibited Water Discharge. No rain, surface, or	714.2 Prohibited Water Discharge. No rain, surface, or		6.25.2024		
133	714.2	Prohibited Water		subsurface water shall be connected to or discharged	subsurface water shall be connected to or discharged	TRUE			
	, 17.6	Discharge.	2024 UPC	into a drainage system unless first approved by the	into a drainage system unless first approved by the				
				·	Authority Having Jurisdiction.				
				-	714.3 Prohibited Sewer Connection. No cesspool, septic		6.25.2024		
134	714.3	Prohibited Sewer	Keep as shown in		tank, seepage pit, or drain field shall be connected to a	TRUE			1
		Connection	2024 UPC	connected to a public sewer or to a building sewer	public sewer or to a building sewer leading to such				
				leading to such public sewer.	public sewer.				
				714.4 Commercial Food Waste Disposer. The	714.4 Commercial Food Waste Disposer. The Authority		6.25.2024		
40-		Commercial Food Waste	Keep as shown in	Authority Having Jurisdiction shall review before	Having Jurisdiction shall review before approval, the				
135	714.4	Disposer.	2024 UPC	approval, the installation of a commercial food waste	installation of a commercial food waste disposer	TRUE			
				disposer connecting to a private sewage disposal	connecting to a private sewage disposal system.				
			Koon oo ah assaris	system.	715 O Building Course Makerials		C 2E 2024		+
136	715.0	Building Sewer Materials.	Keep as shown in 2024 UPC	715.0 Building Sewer Materials.	715.0 Building Sewer Materials.	TRUE	6.25.2024		
			Keep as shown in		715.1 Materials. The building sewer, beginning 2 feet		6.25.2024		
137	715.1	Materials.	2024 UPC	-	, ,	TRUE			1
			202 7 01 0		materials as prescribed in this code.				
		Joining Methods and	Keep as shown in	715.2 Joining Methods and Materials. Joining	715.2 Joining Methods and Materials. Joining methods		6.25.2024		
138	715.2	Materials.	2024 UPC	methods and materials shall be as prescribed in this	and materials shall be as prescribed in this code.	TRUE			
				code.					1
				715.3 Existing Sewers. Where permitted by the	715.3 Existing Sewers. Replacement of existing building		6.25.2024		
				Authority Having Jurisdiction, trenchless methods of	sewer and building storm sewers using cured-in-place				
				rehabilitation of existing building sewer and building	pipe lining trenchless methodology and materials shall				
4.5.5	139 715.3	.	Keep as shown in		be installed in accordance with ASTM F 1216.				
139		Existing Sewers.	2024 UPC	Section 715.3.1 or Section 715.3.2.	Replacement using curedin-place pipe liners shall not be	FALSE			
					used on collapsed piping or when the existing piping is				
					compromised to a point where the installation of the				
					liners will not eliminate hazardous or insanitary				
					conditions.		I		

	Chapter / (Neep 2024 OFC)								
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
140	715.3.2	Sewer Pipe Replacement.	Keep as shown in	715.3.2 Sewer Pipe Replacement. For trenchless installation of polyethylene (PE) pipe using the pipe bursting method to replace existing building sewers and building storm sewers materials shall be in accordance with ASTM F714.		FALSE	6.25.2024		
141	716.0	Markings.	Keep as shown in 2024 UPC	716.0 Markings.	716.0 Markings.	TRUE	6.25.2024		
142	716.1	General.	Keep as shown in 2024 UPC	716.1 General. Pipe, brick, block, prefabricated septic tanks, prefabricated septic tank or seepage pit covers, or other parts or appurtenances incidental to the installation of building sewers or private sewage disposal systems shall be in accordance with the approval requirements of Chapter 3 of this code.	716.1 General. Pipe, brick, block, prefabricated septic tanks, prefabricated septic tank or seepage pit covers, or other parts or appurtenances incidental to the installation of building sewers or private sewage disposal systems shall be in accordance with the approval requirements of Chapter 3 of this code.		6.25.2024		
143	717.0	Size of Building Sewers.	Keep as shown in 2024 UPC	717.0 Size of Building Sewers.	717.0 Size of Building Sewers.	TRUE	6.25.2024		
144	718.0	Grade, Support, and Protection of Building Sewers.	Keep as shown in 2024 UPC	718.0 Grade, Support, and Protection of Building Sewers.	718.0 Grade, Support, and Protection of Building Sewers.	TRUE	6.25.2024		
145	718.1	Slope.	Keep as shown in 2024 UPC	alignment and at a uniform slope of not less than 1/4 inch per foot (20.8 mm/m) toward the point of disposal. Exception: Where approved by the Authority Having Jurisdiction and where it is impractical, due to the depth of the street sewer, the structural features or the arrangement of a building or structure, to obtain a slope of 1/4 inch per foot (20.8 mm/m), piping 4 inches (100 mm) through 6 inches (150 mm) shall be permitted to have a slope of not less than 1/8 inch per foot (10.4 mm/m) and piping 8 inches (200 mm) and larger shall be permitted to have a slope of not less than 1/16 inch per foot (5.2 mm/m). The maximum and minimum fixture unit loading shall be in accordance with Table 717.1.	alignment and at a uniform slope of not less than 1/4 inch per foot (20.8 mm/m) toward the point of disposal. Exception: Where approved by the Authority Having Jurisdiction and where it is impractical, due to the depth of the street sewer or to the structural features or the arrangement of a building or structure, to obtain a slope of 1/4 inch per foot (20.8 mm/m), such pipe or piping 4 inches (100 mm) through 6 inches (150 mm) shall be permitted to have a slope of not less than 1/8 inch per foot (10.4 mm/m) and such piping 8 inches (200 mm) and larger shall be permitted to have a slope of not less than 1/16 inch per foot (5.2 mm/m).		6.25.2024		
146	718.2	Support.	Keep as shown in 2024 UPC	718.2 Support. Building sewer piping shall be laid on a firm bed throughout its entire length, and such piping laid in made or filled-in ground shall be laid on a bed of approved materials and shall be properly supported as required by the Authority Having Jurisdiction.	718.2 Support. Building sewer piping shall be laid on a firm bed throughout its entire length, and such piping laid in made or filled-in ground shall be laid on a bed of approved materials and shall be properly supported as required by the Authority Having Jurisdiction.	TRUE	6.25.2024		

Line #	Rules affected	Brief Title	Proposal and Committee recommendation		2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
147	718.3	Protection from Damage.	Keep as shown in 2024 UPC	718.3 Protection from Damage. No building sewer or other drainage piping or part thereof, which is constructed of materials other than those approved for use under or within a building, shall be installed under or within 2 feet (610 mm) of a building or structure, or part thereof, nor less than 1 foot (305 mm) below the surface of the ground. The provisions of this subsection include structures such as porches and steps, whether covered or uncovered; breezeways; roofed porte cochere; roofed patios; carports; covered walks; covered driveways; and similar structures or appurtenances.	718.3 Protection from Damage. No building sewer or other drainage piping or part thereof, which is constructed of materials other than those approved for use under or within a building, shall be installed under or within 2 feet (610 mm) of a building or structure, or part thereof, nor less than 1 foot (305 mm) below the surface of the ground. The provisions of this subsection include structures such as porches and steps, whether covered or uncovered; breezeways; roofed porte cochere; roofed patios; carports; covered walks; covered driveways; and similar structures or appurtenances.	TRUE	6.25.2024		
148	719.0	Cleanouts.	Keep as shown in 2024 UPC	719.0 Cleanouts.	719.0 Cleanouts.	TRUE	6.25.2024		
149	719.1	Locations.	Keep as shown in 2024 UPC	719.1 Locations. Cleanouts shall be placed inside the building near the connection between the building drain and the building sewer or installed outside the building at the lower end of the building drain and extended to grade. Additional building sewer cleanouts shall be installed at intervals not to exceed 100 feet (30 480 mm) in straight runs and for each aggregate horizontal change in direction exceeding 135 degrees (2.36 rad).	719.1 Locations. Cleanouts shall be placed inside the building near the connection between the building drain and the building sewer or installed outside the building at the lower end of the building drain and extended to grade. Additional building sewer cleanouts shall be installed at intervals not to exceed 100 feet (30 480 mm) in straight runs and for each aggregate horizontal change in direction exceeding 135 degrees (2.36 rad).	TRUE	6.25.2024		
150	719.2	No Additional Cleanouts.	Keep as shown in 2024 UPC	719.2 No Additional Cleanouts. Where a building sewer or a branch thereof does not exceed 10 feet (3048 mm) in length and is a straight-line projection from a building drain that is provided with a cleanout, no cleanout will be required at its point of connection to the building drain.	719.2 No Additional Cleanouts. Where a building sewer or a branch thereof does not exceed 10 feet (3048 mm) in length and is a straight-line projection from a building drain that is provided with a cleanout, no cleanout will be required at its point of connection to the building drain.	TRUE	6.25.2024		
151	719.3	Building Sewer Cleanouts.	Keep as shown in 2024 UPC	719.3 Building Sewer Cleanouts. Required building sewer cleanouts shall be extended to grade and shall be in accordance with the appropriate sections of cleanouts, Section 707.0, for sizing, construction, and materials. Where building sewers are located under buildings, the cleanout requirements of Section 707.0 shall apply.	719.3 Building Sewer Cleanouts. Required building sewer cleanouts shall be extended to grade and shall be in accordance with the appropriate sections of cleanouts, Section 707.0, for sizing, construction, and materials. Where building sewers are located under buildings, the cleanout requirements of Section 707.0 shall apply.	TRUE	6.25.2024		

				- Chapter / (Reep 2024 OF C				
Line #	Rules affected		Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
152	719.4	Cleaning.	Keep as shown in 2024 UPC	lit opens to allow cleaning in the direction of flow of	719.4 Cleaning. Each cleanout shall be installed so that it opens to allow cleaning in the direction of flow of the soil or waste or at right angles thereto and, except in the case of wye branch and end-of-line cleanouts, shall be installed vertically above the flow line of the pipe.		6.25.2024		
153	719.5	Access.	Keep as shown in 2024 UPC	719.5 Access. Cleanouts installed under concrete or asphalt paving shall be made accessible by yard boxes or by extending flush with paving with approved materials and shall be adequately protected.	719.5 Access. Cleanouts installed under concrete or asphalt paving shall be made accessible by yard boxes or by extending flush with paving with approved materials and shall be adequately protected.	TRUE	6.25.2024		
154	720.0	Sewer and Water Pipes.	Keep as shown in 2024 UPC	720.0 Sewer and Water Pipes.	720.0 Sewer and Water Pipes.	TRUE	6.25.2024		
155	720.1	General.	Keep as shown in 2024 UPC	720.1 General. Building sewers or drainage piping of clay or materials that are not approved for use within a building shall not be run or laid in the same trench as the water pipes unless the following requirements are met:	720.1 General. Building sewers or drainage piping of clay or materials that are not approved for use within a building shall not be run or laid in the same trench as the water pipes unless the following requirements are met:	TRUE	6.25.2024		
156			Keep as shown in 2024 UPC	(1) The bottom of the water pipe, at points, shall be not less than 12 inches (305 mm) above the top of the sewer or drain line.	(1) The bottom of the water pipe, at points, shall be not less than 12 inches (305 mm) above the top of the sewer or drain line.	TRUE	6.25.2024		
157			Keep as shown in 2024 UPC	(2) The water pipe shall be placed on a solid shelf excavated at one side of the common trench with a clear horizontal distance of not less than 12 inches (305 mm) from the sewer or drain line.	(2) The water pipe shall be placed on a solid shelf excavated at one side of the common trench with a clear horizontal distance of not less than 12 inches (305 mm) from the sewer or drain line.	TRUE	6.25.2024		
158			Keep as shown in 2024 UPC	for use within a building shall be laid not less than 12 inches (305 mm) above the sewer or drainpipe. For the purpose of this section, "within a building" shall mean	(3) Water pipes crossing sewer or drainage piping constructed of clay or materials that are not approved for use within a building shall be laid not less than 12 inches (305 mm) above the sewer or drain pipe. For the purpose of this section, "within a building" shall mean within the fixed limits of the building foundation.	FALSE	6.25.2024		
159	721.0	Location.	Keep as shown in 2024 UPC	721.0 Location.	721.0 Location.	TRUE	6.25.2024		
160	721.1	Building Sewer.	Keep as shown in 2024 UPC	721.2, no building sewer shall be located in a lot other	721.1 Building Sewer. Except as provided in Section 721.2, no building sewer shall be located in a lot other than the lot that is the site of the building or structure served by such sewer nor shall a building sewer be located at a point having less than the minimum distances referenced in Table 721.1.	TRUE	6.25.2024		

				Chapter 7 (Reep 2024 OPC				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714			Plumbing Board action/comments	(A)ccept (R)eject (M)odify
			Voor oo shoum in	721.2 Abutting Lot . Nothing contained in this code	721.2 Abutting Lot. Nothing contained in this code shall		6.25.2024		
161	721.2	Abutting Lot.	1 70174 11190	shall be construed to prohibit the use of all or part of an abutting lot to:	be construed to prohibit the use of all or part of an abutting lot to:	TRUE			
				(1) Provide access to connect a building sewer to an	(1) Provide access to connect a building sewer to an		6.25.2024		
				available public sewer where proper cause and legal	available public sewer where proper cause and legal				
162			Keep as shown in 2024 UPC	easement, not in violation of other requirements, has	easement, not in violation of other requirements, has	TRUE			
			2024 0FC	been first established to the satisfaction of the	been first established to the satisfaction of the Authority				
				Authority Having Jurisdiction.	Having Jurisdiction.				
163			Keep as shown in 2024 UPC	(2) Provide additional space for a building sewer where the proper cause, transfer of ownership, or change of boundary, not in violation of other requirements, has been first established to the satisfaction of the Authority Having Jurisdiction. The instrument recording such action shall constitute an agreement with the Authority Having Jurisdiction and shall clearly state and show that the areas so joined or used shall be maintained as a unit during the time they are so used. Such an agreement shall be recorded in the office of the County Recorder as part of the conditions of ownership of said properties, and shall be binding on heirs, successors, and assigns to such properties. A copy of the instrument recording such proceedings shall be filed with the Authority Having Jurisdiction.	(2) Provide additional space for a building sewer where the proper cause, transfer of ownership, or change of boundary, not in violation of other requirements, has been first established to the satisfaction of the Authority Having Jurisdiction. The instrument recording such action shall constitute an agreement with the Authority Having Jurisdiction and shall clearly state and show that the areas so joined or used shall be maintained as a unit during the time they are so used. Such an agreement shall be recorded in the office of the County Recorder as part of the conditions of ownership of said properties, and shall be binding on heirs, successors, and assigns to such properties. A copy of the instrument recording such proceedings shall be filed with the Authority Having Jurisdiction.	TRUE	6.25.2024		
164	723.0	Building Sewer Test.	Keep as shown in 2024 UPC	723.0 Building Sewer Test.	723.0 Building Sewer Test.	TRUE	6.25.2024		
165	723.1	General.	Keep as amended in the 2020 MPC	723.1 General. Building sewers shall be tested by plugging the end of the building sewer at its points of connection to the public sewer or private sewage disposal system and completely filling the building sewer with water from the lowest to the highest point thereof, or by approved equivalent lowpressure air test. Plastic DWV piping systems shall not be tested by the air test method. The building sewer shall be watertight.	723.1 General. Building sewers shall be tested by plugging the end of the building sewer at its points of connection with the public sewer or private sewage disposal system and completely filling the building sewer with water from the lowest to the highest point thereof, or by approved equivalent lowpressure air test. Testing of building sewers shall be in accordance with Section 712, as amended. The building sewer shall be gastight or watertight.	FALSE	6.25.2024		

			Ad Hoc Co	de Review and Rulemaking Committee 2024 UPC Rec	ommend	ations to the Board	
				Chapter 8			
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of Committee review	Plumbing Board action/comments	(A)ccept (R)eject (M)odify
132	801.3.2			Recommendation - Leave as amended in the 2020 MPC. 801.3.2 Walk-In Coolers. Floor drains shall not be located inside walk-in coolers unless they are specifically required by the licensing authority. Where required, floor drains shall be connected to a separate drainage line discharging into an outside receptor. The flood-level rim of the receptor shall not be less than 6 inches (152 mm) lower than the lowest floor drain. The floor drains shall be trapped and individually vented. Cleanouts shall be provided at 90 degree (1.57 rad) turns and shall be accessibly located. The waste shall discharge through an air gap or air break into a trapped and vented receptor, except that a full-size air gap is required where the indirect waste pipe is under vacuum.	6.25.2024		
133	801.3.3		Fixtures.	Recommendation - Leave as amended in the 2020 MPC. 801.3.3 Food-Handling Fixtures. Cooking ranges, steam kettles, potato peelers, ice cream dipper wells, and similar equipment shall be indirectly connected to the drainage system by means of an air gap. Bins, cooling counters, compartments, and other equipment having drainage connections and used for the storage of unpackaged ice used for human ingestion, or used in direct contact with ready-to-eat food, shall be indirectly connected to the drainage system by means of an air gap	6.25.2024		
134	801.4		801.4 Bar and Fountain Sink Traps.	Leave as amended in the 2020 MPC. Deleted in its entirety.	6.25.2024		
135	804.2		804.2 Domestic or Culinary Type Fixtures Prohibited as Receptors	Recommendation - Leave as amended in the 2020 MPC. 804.2 Domestic or Culinary Type Fixtures Prohibited as Receptors. No plumbing fixture that is used for domestic or culinary purposes shall be used to receive the discharge of an indirect waste. Exception: Domestic use dishwashers may discharge into a sink, or discharge to a sink tailpiece or food-waste grinder when installed in accordance with Section 807.3.	6.25.2024		
136	807.3			Recommendation - Leave as amended in the 2020 MPC. 807.3 Domestic Dishwashing Machine. No domestic dishwashing machine shall be directly connected to a drainage system or food waste disposer without the use of an approved dishwasher air gap fitting on the discharge side of the dishwashing machine or run the discharge line as high as possible under the countertop, securely fastened. Listed air gaps shall be installed with the flood level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher.	6.25.2024		

Ad Hoc Code Review and Rulemaking Committee 2024 UPC Recommendations to the Board **Chapter 8** Line # **Rules affected** RFA No. **Brief Title** Proposal and Committee recommendation Date of Plumbing Board action/comments (A)ccept Committee (R)eject review (M)odify 137 810.1 810.1 High-Temperature | Recommendation - Leave as amended in the 2020 MPC. 810.1 High-Temperature Discharge. No 6.25.2024 steam pipe shall be directly connected to plumbing or drainage system, nor shall water having a Discharge. temperature above 140°F (60°C) be discharged under pressure directly into a drainage system. Table 810.1 TABLE 810.1 PIPE 6.25.2024 138 Leave as amended in the 2020 MPC. Deleted in its entirety. **CONNECTIONS IN BLOWOFF CONDENSERS** AND SUMPS 139 811.9 Recommendation - Leave as amended in the 2020 MPC. 811.9 Waste and Vent. Thermal 6.25.2024 811.9 Waste and Vent. expansion and contraction compensation shall be provided for every 30 feet of developed horizontal or vertical length of run for thermoplastic piping as shown in Table 313.3.1. 140 813.1 General Recommendation: Leave as amended in the 2020 MPC, as follows: 813.1 General. Pipes carrying 6.25.2024 wastewater from swimming or wading pools, including pool drainage and backwash from filters, water from scum gutter drains and pool deck drains, shall be installed as an indirect waste. Pool deck drains need not be trapped and vented per section 803.1. Pool deck drain piping must be pitched at a minimum of 1/8 inch per foot for pipe sizes 3 inches and larger. Where a pump is used to discharge waste pool water to the drainage system, the pump discharge shall be installed as an indirect waste. 814 PB0181 6.25.2024 141 **Condesate Piping** Recommendation - Do not accept RFA PB0181. Leave as amended in the 2020 MPC 142 814.1 6.25.2024 814.1 Condensate Recommendation - Leave as amended in the 2020 MPC. 814.1 Condensate Disposal. Where Disposal. discharged into the drainage system, equipment shall drain by means of an indirect waste pipe. 143 814.1.1 Recommendation - Delete in its entirety. 814.1.1 Condensate Pumps. Where approved by the 6.25.2024 814.1.1 Condensate Pumps. Authority Having Jurisdiction, condensate pumps shall be installed in accordance with the manufacturer's installation instructions. Pump discharge shall rise vertically to a point where it is possible to connect to a gravity condensate drain and discharged to an approved disposal point. Each condensing unit shall be provided with a separate sump and interlocked with the equipment to prevent the equipment from operating during a failure. Separate pumps shall be permitted to connect to a single gravity indirect waste where equipped with check valves and approved by the Authority Having Jurisdiction. 144 814.3 814.3 Condensate Waste Leave as amended in the 2020 MPC. Deleted in its entirety 6.25.2024 Pipe Material and Sizing. **TABLE 814.3MINIMUM** 6.25.2024 145 Table 814.3 Leave as amended in the 2020 MPC. Deleted in its entirety CONDENSATE PIPE SIZE

			Ad Hoc Co	ode Review and Rulemaking Committee 2024 UPC Rec	commend	ations to the Board	
				Chapter 8			
Line #	Rules affected	RFA No.	Brief Title	Proposal and Committee recommendation	Date of Committee review	Plumbing Board action/comments	(A)ccept (R)eject (M)odify
146	814.3.1		814.3.1 Cleanouts.	Leave as amended in the 2020 MPC. Deleted in its entirety	6.25.2024		
147	814.4		814.4 Appliance Condensate Drains.	Recommendation - Leave as amended in the 2020 MPC. 814.4 Appliance Condensate Drains. Condensate drain lines from individual condensing appliances shall be sized as required by the manufacturer's instructions. Condensate drain lines serving more than one appliance shall be approved by the Authority Having Jurisdiction prior to installation.	6.25.2024		
148	814.5		814.5 Point of Discharge.	Recommendation - Leave as amended in the 2020 MPC. 814.5 Point of Discharge. Air-conditioning condensate waste pipes shall connect indirectly to the interior drainage system through an air gap or air break to: (1) properly trapped and vented receptors; (2) the tailpiece of an approved plumbing fixture; or (3) an exterior place of disposal approved by the Minnesota Pollution Control Agency. Condensate waste shall not drain over a public way or in areas causing a nuisance.	6.25.2024		

	Chapter o (Reep 2024 OPC)									
Line #	Rules affected Brid	ef Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify	
1		801.0 General.		801.0 General.	801.0 General.	TRUE	6.25.2024			
2	8	801.1 Applicability.	Keep as shown in 2024 UPC	801.1 Applicability. This chapter shall govern the materials, design, and installation of indirect waste piping, receptors, and connections; and provisions for discharge and disposal of condensate wastes, chemical wastes, industrial wastes, and clear water wastes.	801.1 Applicability. This chapter shall govern the materials, design, and installation of indirect waste piping, receptors, and connections; and provisions for discharge and disposal of condensate wastes, chemical wastes, industrial wastes, and clear water wastes.	TRUE	6.25.2024			
3	8	801.2 Air Gap or Air Break Required.	Keep as shown in 2024 UPC	as set forth in this code. Where a drainage air	801.2 Air Gap or Air Break Required. Indirect waste piping shall discharge into the building drainage system through an air gap or air break as set forth in this code. Where a drainage air gap is required by this code, the minimum vertical distance as measured from the lowest point of the indirect waste pipe or the fixture outlet to the flood-level rim of the receptor shall be not less than 1 inch (25.4 mm).	TRUE	6.25.2024			
4		801.3 Food and Beverage Handling Establishments.	Keep as shown in 2024 UPC	Establishments. Establishments engaged in the storage, preparation, selling, serving,	801.3 Food and Beverage Handling Establishments. Establishments engaged in the storage, preparation, selling, serving, processing, or other handling of food and beverage involving the following equipment that requires drainage shall provide indirect waste piping for refrigerators, refrigeration coils, freezers, walk-in coolers, iceboxes, icemaking machines, steam tables, egg boilers, coffee urns and brewers, hot-and-cold drink dispensers, and similar equipment.	TRUE	6.25.2024			
5	80	01.3.1 Size of Indirect Waste Pipes.	Keep as shown in 2024 UPC	refrigeration coils and ice-making machines, the size of the indirect waste pipe shall be not smaller than the drain on the unit, but shall be not smaller than 1 inch (25 mm), and the maximum developed length shall not exceed 15 feet (4572 mm). Indirect waste pipe for icemaking machines shall be not less than the	801.3.1 Size of Indirect Waste Pipes. Except for refrigeration coils and ice-making machines, the size of the indirect waste pipe shall be not smaller than the drain on the unit, but shall be not smaller than 1 inch (25 mm), and the maximum developed length shall not exceed 15 feet (4572 mm). Indirect waste pipe for ice-making machines shall be not less than the drain on the unit and in no case less than 3/4 of an inch (20 mm).	TRUE	6.25.2024			

				Chapter o (i	keep 2024 OPC)				
.ine#	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify
6		801.5 Connections from Water Distribution System.	Keep as shown in 2024 UPC	801.5 Connections from Water Distribution System. Indirect waste connections shall be provided for drains, overflows, or relief pipes from potable water pressure tanks, water heaters, boilers, and similar equipment that is connected to the potable water distribution system. Such indirect waste connections shall be made using a water-distribution air gap constructed in accordance with Table 603.3.1.	801.5 Connections from Water Distribution System. Indirect waste connections shall be provided for drains, overflows, or relief pipes from potable water pressure tanks, water heaters, boilers, and similar equipment that is connected to the potable water distribution system. Such indirect waste connections shall be made using a water-distribution air gap constructed in accordance with Table 603.3.1.	TRUE	6.25.2024		
7		801.6 Sterilizers.	Keep as shown in 2024 UPC	801.6 Sterilizers. Lines, devices, or apparatus such as stills, sterilizers, and similar equipment requiring waste connections and used for sterile materials shall be indirectly connected using an air gap. Each such indirect waste pipe shall be separately piped to the receptor and shall not exceed 15 feet (4572 mm). Such receptors shall be located in the same room.	801.6 Sterilizers. Lines, devices, or apparatus such as stills, sterilizers, and similar equipment requiring waste connections and used for sterile materials shall be indirectly connected using an air gap. Each such indirect waste pipe shall be separately piped to the receptor and shall not exceed 15 feet (4572 mm). Such receptors shall be located in the same room.	TRUE	6.25.2024		
8		801.7 Drip or Drainage Outlets.	Keep as shown in 2024 UPC	devices, or apparatus not regularly classified as plumbing fixtures, but which have a drip or drainage outlets, shall be permitted to be	801.7 Drip or Drainage Outlets. Appliances, devices, or apparatus not regularly classified as plumbing fixtures, but which have a drip or drainage outlets, shall be permitted to be drained by indirect waste pipes discharging into an open receptor through either an air gap or air break (see Section 801.3.1).	TRUE	6.25.2024		
9		802.0 Approvals.	Keep as shown in 2024 UPC	802.0 Approvals.	802.0 Approvals.	TRUE	6.25.2024		
10		802.1 General.	Keep as shown in 2024 UPC	indirect waste pipes or receiving discharge therefrom shall be installed until first approved	802.1 General. No plumbing fixtures served by indirect waste pipes or receiving discharge therefrom shall be installed until first approved by the Authority Having Jurisdiction.	TRUE	6.25.2024		
11		803.0 Indirect Waste Piping.	Keep as shown in 2024 UPC	803.0 Indirect Waste Piping.	803.0 Indirect Waste Piping.	TRUE	6.25.2024		
12		803.1 Materials.	Keep as shown in 2024 UPC	803.1 Materials. Pipe, tube, and fittings conveying indirect waste shall be of such materials and design as to perform their intended function to the satisfaction of the Authority Having Jurisdiction.	803.1 Materials. Pipe, tube, and fittings conveying indirect waste shall be of such materials and design as to perform their intended function to the satisfaction of the Authority Having Jurisdiction.	TRUE	6.25.2024		

				Chaptel o (i	Reep 2024 OPC)				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify
13		803.2 Copper and Copper Alloys	Keep as shown in 2024 UPC	803.2 Copper and Copper Alloys. Joints and connections in copper and copper alloy pipe and tube shall be installed in accordance with Section 705.3.	803.2 Copper and Copper Alloys. Joints and connections in copper and copper alloy pipe and tube shall be installed in accordance with Section 705.3.	TRUE	6.25.2024		
14		803.3 Pipe Size and Length.	Keep as shown in 2024 UPC.	803.3 Pipe Size and Length. Except as hereinafter provided, the size of indirect waste piping shall be in accordance with other sections of this code applicable to drainage and vent piping. No vent from indirect waste piping shall combine with a sewer-connected vent. Vents from indirect waste piping shall extend separately to the outside air. Indirect wastepipes exceeding 5 feet (1524 mm), but less than 15 feet (4572mm) in length shall be directly trapped, but such traps need not be vented. Indirect waste pipes less than 15 feet (4572 mm) in length shall be not less than the diameter of the drain outlet or tailpiece of the fixture, appliance, or equipment served, and in no case less than 1/2 of an inch (15 mm). Angles and changes of direction in such indirect waste pipes shall be provided with cleanouts to permit flushing and cleaning.	mm) in length shall be not less than the diameter of the drain outlet or tailpiece of the fixture, appliance, or equipment served, and in no case less than 1/2 of an inch (15 mm). Angles and changes of direction in	FALSE	6.25.2024		
15		804.0 Indirect Waste Receptors.	Keep as shown in 2024 UPC.	804.0 Indirect Waste Receptors.	804.0 Indirect Waste Receptors.	TRUE	6.25.2024		
16		804.1 Standpipe Receptors.	Keep as shown in 2024 UPC.	splashing or flooding and shall be located where they	804.1 Standpipe Receptors. Plumbing fixtures or other receptors receiving the discharge of indirect waste pipes shall be approved for the use proposed and shall be of such shape and capacity as to prevent splashing or flooding and shall be located where they are readily accessible for inspection and cleaning. No standpipe receptor for a clothes washer shall extend more than 30 inches (762 mm), or not less than 18 inches (457 mm) above its trap. No trap for a clothes washer standpipe receptor shall be installed below the floor, but shall be roughed in not less than 6 inches (152 mm) and not more than 18 inches (457 mm) above the floor. No indirect waste receptor shall be installed in a toilet room, closet, cupboard, or storeroom, or in a portion of a building not in general use by the occupants thereof; except standpipes for clothes washers shall be permitted to be installed in toilet and bathroom areas where the clothes washer is installed in the same room.		6.25.2024		

	Chapter o (Reep 2024 or C)									
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify	
17		805.0 Pressure Drainage Connections.	Keep as shown in 2024 UPC.	805.0 Pressure Drainage Connections.	805.0 Pressure Drainage Connections.	TRUE	6.25.2024			
18		805.1 General.	Keep as shown in 2024 UPC.	carrying wastes or producing wastes or other discharges under pressure shall be directly connected	805.1 General. Indirect waste connections shall be provided for drains, overflows, or relief vents from the water supply system, and no piping or equipment carrying wastes or producing wastes or other discharges under pressure shall be directly connected to a part of the drainage system. The preceding shall not apply to an approved sump pump or to an approved pressure-wasting plumbing fixture or device where the Authority Having Jurisdiction has been satisfied that the drainage system is adequately sized to accommodate the anticipated discharge thereof.	TRUE	6.25.2024			
19		806.0 Sterile Equipment.	Keep as shown in 2024 UPC.	806.0 Sterile Equipment.	806.0 Sterile Equipment.	TRUE	6.25.2024			
20		806.1 General.	Keep as shown in 2024 UPC.	apparatus such as stills, sterilizers, and similar equipment requiring water and waste and used	806.1 General. Appliances, devices, or apparatus such as stills, sterilizers, and similar equipment requiring water and waste and used for sterile materials shall be drained through an air gap.	TRUE	6.25.2024			
21		807.0 Appliances.	Keep as shown in 2024 UPC.		807.0 Appliances.	TRUE	6.25.2024			
22		807.1 Non-Classed Apparatus.	Keep as shown in 2024 UPC.	807.1 Non-Classed Apparatus. Commercial dishwashing machines, silverware washing machines, and other appliances, devices, equipment, or other apparatus not regularly classed as plumbing fixtures, which are equipped with pumps, drips, or drainage outlets, shall be permitted to be drained by indirect waste pipes discharging through an air break into an approved type of open receptor.	807.1 Non-Classed Apparatus. Commercial dishwashing machines, silverware washing machines, and other appliances, devices, equipment, or other apparatus not regularly classed as plumbing fixtures, which are equipped with pumps, drips, or drainage outlets, shall be permitted to be drained by indirect waste pipes discharging into an approved type of open receptor.	FALSE	6.25.2024			
23		807.2 Undiluted Condensate Waste.	Keep as shown in 2024 UPC.	undiluted condensate waste from a fuel- burning condensing appliance is discharged into	807.2 Undiluted Condensate Waste. Where undiluted condensate waste from a fuel-burning condensing appliances discharged into the drainage system, the material in the drainage system shall be cast-iron, galvanized iron, plastic, or other materials approved for this use.	FALSE	6.25.2024			

				Chapter o (i	Reep 2024 OPC)				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify
24			Keep as shown in 2024 UPC.	Exceptions: (1) Where the above condensate is discharged to an exposed fixture tailpiece and trap, such tailpiece and trap shall be permitted to be a copper alloy.	Exceptions: (1) Where the above condensate is discharged to an exposed fixture tailpiece and trap, such tailpiece and trap shall be permitted to be a copper alloy.	TRUE	6.25.2024		
25			2024 UPC.	(2) Materials approved in Section 701.0 shall be permitted to be used where data is provided that the condensate waste is adequately diluted.	permitted to be used where data is provided that the condensate waste is adequately diluted.	TRUE	6.25.2024		
26		808.0 Cooling Water.	Keep as shown in 2024 UPC.	808.0 Cooling Water.	808.0 Cooling Water.	TRUE	6.25.2024		
27		808.1 General.	2024 UPC.	the event that a suitable fixture is not available to receive such discharge. Such trap connection shall be by means of a pipe connected to the inlet side of an approved fixture trap, the upper end terminating in a funnel shaped receptacle set adjacent, and not less than 6 inches (152mm) above the overflow rim of the fixture.	to receive such discharge. Such trap connection shall be by means of a pipe connected to the inlet side of an approved fixture trap, the upper end terminating in a funnel shaped receptacle set adjacent, and not less than 6 inches (152mm) above the overflow rim of the fixture.	TRUE	6.25.2024		
28		809.0 Drinking Fountains.	Keep as shown in 2024 UPC.	809.0 Drinking Fountains.		TRUE	6.25.2024		
29		809.1 General.	Keep as shown in 2024 UPC.	809.1 General. Drinking fountains shall be permitted to be installed with indirect wastes through an air break.	809.1 General. Drinking fountains shall be permitted to be installed with indirect wastes.	FALSE	6.25.2024		
30		810.0 Steam and Hot Water Drainage Condensers and Sumps.	Keep as shown in 2024 UPC.	810.0 Steam and Hot Water Drainage Condensers and Sumps.	810.0 Steam and Hot Water Drainage Condensers and Sumps.	TRUE	6.25.2024		
31		810.2 Sumps, Condensers, and Intercepting Tanks.	Keep as shown in 2024 UPC.	810.2 Sumps, Condensers, and Intercepting Tanks. Sumps, condensers, or intercepting tanks that are constructed of concrete shall have walls and bottom, not less than 4 inches(102 mm) in thickness, and the inside shall be cement plastered not less than 1/2 of an inch (12.7 mm) in thickness. Condensers constructed of metal shall be not less than No. 12 U.S.standard gauge (0.109 inch) (2.77 mm), and such metal condensers shall be protected from external corrosion by an approved bituminous coating.	810.2 Sumps, Condensers, and Intercepting Tanks. Sumps , condensers, or intercepting tanks that are constructed of concrete shall have walls and bottom, not less than 4 inches(102 mm) in thickness, and the inside shall be cement plastered not less than 1/2 of an inch (12.7 mm) in thickness. Condensers constructed of metal shall be not less than No. 12 Substandard gauge (0.109 inch) (2.77 mm), and such metal condensers shall be protected from external corrosion by an approved bituminous coating.	FALSE	6.25.2024		

				Chapter o (r	keep 2024 OPC)				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify
32		810.3 Cleaning.	Keep as shown in 2024 UPC.	810.3 Cleaning. Sumps and condensers shall be provided with suitable means of access for cleaning and shall contain a volume of not less than twice the volume of water removed from the boiler or boilers connected to it where the normal water level of such boiler or boilers is reduced not less than 4 inches (102 mm).	810.3 Cleaning. Sumps and condensers shall be provided with suitable means of access for cleaning and shall contain a volume of not less than twice the volume of water removed from the boiler or boilers connected to it where the normal water level of such boiler or boilers is reduced not less than 4 inches (102 mm).	TRUE	6.25.2024		
33		810.4 Strainers.	Keep as shown in 2024 UPC.	810.4 Strainers. An indirect waste interceptor is receiving discharge-containing particles that would clog the receptor drain shall have a readily removable beehive strainer.	receiving discharge-containing particles that	TRUE	6.25.2024		
34		811.0 Chemical Wastes.	Keep as shown in 2024 UPC.	811.0 Chemical Wastes.	811.0 Chemical Wastes.	TRUE	6.25.2024		
35		811.1 Pretreatment	Keep as shown in 2024 UPC.	811.1 Pretreatment. Chemical or liquid industrial wastes that are likely to damage or increase maintenance costs on the sanitary sewer system, detrimentally affect sewage treatment or contaminate surface or subsurface waters shall be pretreated to render them innocuous before discharge into a drainage system. Detailed construction documents of the pretreatment facilities shall be required by the Authority Having Jurisdiction. Piping conveying industrial, chemical, or process wastes from their point of origin to sewer-connected pretreatment facilities shall be of such material and design as to adequately perform its intended function to the satisfaction of the Authority Having Jurisdiction. Drainage discharge piping from pretreatment facilities or interceptors shall be in accordance with standard drainage installation procedures. Copper or copper alloy tube shall not be used for chemical or industrial wastes as defined in this section.	811.1 Pretreatment. Chemical or liquid industrial wastes that are likely to damage or increase maintenance costs on the sanitary sewer system, detrimentally affect sewage treatment or contaminate surface or subsurface waters shall be pretreated to render them innocuous before discharge into a drainage system. Detailed construction documents of the pretreatment facilities shall be required by the Authority Having Jurisdiction. Piping conveying industrial, chemical, or process wastes from their point of origin to sewer-connected pretreatment facilities shall be of such material and design as to adequately perform its intended function to the satisfaction of the Authority Having Jurisdiction. Drainage discharge piping from pretreatment facilities or interceptors shall be in accordance with standard drainage installation procedures. Copper or copper alloy tube shall not be used for chemical or industrial wastes as defined in this section.	TRUE	6.25.2024		

Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify
36			Keep as shown in 2024 UPC.	receiving or intended to receive the discharge of a fixture into which acid or corrosive chemical is placed, and each vent pipe connected thereto, shall be constructed of chlorinated polyvinyl chloride(CPVC), polypropylene (PP), polyvinylidene fluoride(PVDF), chemical-resistant glass, high-silicon iron pipe, or lead pipe with a wall thickness of not less than 1/8 of an inch(3.2 mm); an approved type of ceramic glazed or unglazed vitrified clay; or other approved corrosion-resistant materials.CPVC pipe and fittings shall comply with ASTM F2618.PP pipe and fittings shall comply with ASTM F1412 or CSAB181.3. PVDF pipe and fittings shall comply with ASTMF1673 or CSA B181.3. Chemical-resistant glass pipe and fittings shall comply with ASTM C1053. High-	811.2 Waste and Vent Pipes. Each waste pipe receiving or intended to receive the discharge of a fixture into which acid or corrosive chemical is placed, and each vent pipe connected thereto, shall be constructed of chlorinated polyvinyl chloride(CPVC), polypropylene (PP), polyvinylidene fluoride(PVDF), chemical-resistant glass, high-silicon iron pipe, or lead pipe with a wall thickness of not less than 1/8 of an inch(3.2 mm); an approved type of ceramic glazed or unglazed vitrified clay; or other approved corrosion-resistant materials.CPVC pipe and fittings shall comply with ASTM F2618.PP pipe and fittings shall comply with ASTM F1412 or CSAB181.3. PVDF pipe and fittings shall comply with ASTMF1673 or CSA B181.3. Chemical-resistant glass pipe and fittings shall comply with ASTM C1053. Highsilicon iron pipe and fittings shall comply with ASTM ASTM ASTM	TRUE	6.25.2024		
37		811.3 Joining Materials	Keep as shown in 2024 UPC.	_	811.3 Joining Materials . Joining materials shall be of approved type and quality.	TRUE	6.25.2024		
38		811.4 Access.	Keep as shown in 2024 UPC.		811.4 Access. Where practicable, the piping shall be readily accessible and installed with the maximum of clearance from other services.	TRUE	6.25.2024		
39		811.5 Permanent Record.	Keep as shown in 2024 UPC.	make and keep a permanent record of the	811.5 Permanent Record. The owner shall make and keep a permanent record of the location of piping and venting carrying chemical waste.	TRUE	6.25.2024		
40		811.6 Chemical Vent.	Keep as shown in 2024 UPC.	811.6 Chemical Vent . No chemical vent shall intersect vents for other services.	811.6 Chemical Vent. No chemical vent shall intersect vents for other services.	TRUE	6.25.2024		
41		811.7 Discharge.	Keep as shown in 2024 UPC.	811.7 Discharge . Chemical wastes shall be discharged in a manner approved by the Authority Having Jurisdiction.	811.7 Discharge. Chemical wastes shall be discharged in a manner approved by the Authority Having Jurisdiction.	TRUE	6.25.2024		
42		811.8 Diluted Chemicals.	Keep as shown in 2024 UPC.	811.8 Diluted Chemicals. The provisions of this section about materials and methods of construction shall not apply to installations such as photographic or x-ray darkrooms or research or control laboratories where minor amounts of adequately diluted chemicals are discharged.	811.8 Diluted Chemicals. The provisions of this section about materials and methods of construction shall not apply to installations such as photographic or x-ray darkrooms or research or control laboratories where minor amounts of adequately diluted chemicals are discharged.	TRUE	6.25.2024		

				Chapter o (i	Reep 2024 OPC)				
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify
43		812.0 Clear Water Wastes.	Keep as shown in 2024 UPC.	812.0 Clear Water Wastes.	812.0 Clear Water Wastes.	TRUE	6.25.2024		
44		812.1 General.	Keep as shown in 2024 UPC.	cooling jackets, sprinkler systems, drip or	812.1 General. Water lifts, expansion tanks, cooling jackets, sprinkler systems, drip or overflow pans, or similar devices that discharge clear wastewater into the building drainage system shall discharge through an indirect waste.	TRUE	6.25.2024		
45			Keep as shown in 2024 UPC.	813.0 Swimming Pools.	813.0 Swimming Pools.	TRUE	6.25.2024		
46			Keep as shown in 2024 UPC.	814.0 Condensate Waste and Control.	814.0 Condensate Waste and Control.	TRUE	6.25.2024		
47		814.2 Condensate Control.	Keep as shown in 2024 UPC.	equipment or appliance is installed in a space where damage is capable of resulting from condensate overflow, a drain line shall be provided and shall be drained in accordance with Section 814.1.An additional protection method for condensate overflow shall be provided in accordance with one of the following:	814.2 Condensate Control. Where an equipment or appliances installed in a space where damage is capable of resulting from condensate overflow, other than damage to replaceable lay-in ceiling tiles, a drain line shall be provided and shall be drained in accordance with Section 814.1. An additional protection method for condensate overflow shall be provided in accordance with one of the following:	FALSE	6.25.2024		
48			Keep as shown in 2024 UPC.		(1) A water level detecting device that will shut off the equipment or appliance in the event the primary drain is blocked.	FALSE	6.25.2024		
49			Keep as shown in 2024 UPC.	(2) An additional watertight pan of corrosion- resistant material, with a separate drain line, installed beneath the cooling coil, unit, or the appliance to catch the overflow condensate due to a clogged primary condensate drain.	(2) An additional watertight pan of corrosion- resistant material, with a separate drain line, installed beneath the cooling coil, unit, or the appliance to catch the overflow condensate due to a clogged primary condensate drain.	TRUE	6.25.2024		
50			Keep as shown in 2024 UPC.		(3) An additional drain line at a level that is higher than the primary drain line connection of the drain pan.	FALSE	6.25.2024		
51			Keep as shown in 2024 UPC.	(4) An additional watertight pan of corrosion-resistant material with a water level detection device installed beneath the cooling coil, unit, or the appliance to catch the overflow condensate due to a clogged primary condensate drain and to shut off the equipment.	(4) An additional watertight pan of corrosion-resistant material with a water level detection device installed beneath the cooling coil, unit, or the appliance to catch the overflow condensate due to a clogged primary condensate drain and to shut off the equipment.	TRUE	6.25.2024		

	Chapter o (Reep 202+ of e)									
Line #	Rules affected	Brief Title	Proposal and Committee recommendation	2024 UPC	2020 MPC 4714		Date of review by committee	Plumbing Board action/comments	(A)accept (R)eject (M)odify	
52			Keep as shown in 2024 UPC.		The additional pan or the additional drain line connection shall be provided with a drain pipe of not less than 3/4 of an inch (20 mm) nominal pipe size, discharging at a point that is readily observed.	FALSE	6.25.2024			
53		814.2.1 Protection of Appurtenances	Keep as shown in 2024 UPC.	insulation or appurtenances are installed where damage is capable of resulting from a condensate drain pan overfill, such installations shall occur above the rim of the drain pan with supports. Where the supports are in contact with the condensate waste, the supports shall	814.2.1 Protection of Appurtenances. Where insulation or appurtenances are installed where damage is capable of resulting from a condensate drain pan overfill, such installations shall occur above the rim of the drain pan with supports. Where the supports are in contact with the condensate waste, the supports shall be of approved corrosion-resistant material.	TRUE	6.25.2024			
54		814.6 Condensate Waste from Air-Conditioning Coils.	Keep as shown in 2024 UPC.	direct connection to a lavatory tailpiece or to an approved accessible inlet on a bathtub overflow, the connection shall be located in the area controlled by the same person controlling	814.6 Condensate Waste From Air-Conditioning Coils. Where the condensate waste from air-conditioning coils discharges by direct connection to a lavatory tailpiece or to an approved accessible inlet on a bathtub overflow, the connection shall be located in the area controlled by the same person controlling the air-conditioned space.	FALSE	6.25.2024			
55		814.7 Plastic Fittings.	Keep as shown in 2024 UPC.	814.7 Plastic Fittings. Female plastic screwed fittings shall be used with male plastic fittings and plastic threads.	814.7 Plastic Fittings. Female plastic screwed fittings shall be used with male plastic fittings and plastic threads.	TRUE	6.25.2024			