4715.0100 DEFINITIONS.

Subpart 1. **Scope.** For the purpose of this code, the following terms shall have the meanings indicated in this part. No attempt is made to define ordinary words which are used in accordance with their established dictionary meanings except where it is necessary to define their meanings as used in this code to avoid misunderstanding.

Subp. 2. **Administrative authority.** "Administrative authority" means the commissioner of labor and industry. (When a governmental subdivision adopts and maintains a comprehensive plumbing enforcement program that is conducted by personnel who are knowledgeable about plumbing installation requirements, and includes enforcement of all code provisions including materials, methods, inspection, and testing, the administrative authority shall be the governing body of the adopting unit of government, its agents, and employees; however, the commissioner of labor and industry retains the ultimate authority to enforce Minnesota Statutes, sections 326B.43 to 326B.49, and provisions of this chapter that are necessary to ensure compliance.)

Subp. 3. **Air break.** "Air break" means a piping arrangement in which a fixture, appliance, or device is protected from backflow by discharging at or below the flood level rim of another fixture or receptacle whose flood level rim is lower than the bottom of the protected fixture, appliance, or device.

Subp. 4. **Air gap.** "Air gap" when used in reference to the drainage system means the unobstructed vertical distance through the free atmosphere between the outlet of a waste pipe and the flood level rim of the fixture or receptacle into which it is discharging.

Subp. 5. **Air gap.** "Air gap" when used in reference to the water distribution system means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device, and the flood level rim of the receptacle.

Subp. 6. **Anchors.** See "supports."

Subp. 7. **Approved.** "Approved," as applied to a material, device, or mode of construction, means approved by the administrative authority in accordance with the provisions of this code, or by other authority designated by law to give approval in the matter in question.

Subp. 8. **Area drain.** "Area drain" means a receptacle designed to collect surface or storm water from an open area.

Subp. 9. **Backflow.** "Backflow" means the flow of water or other liquids, mixtures, or substances into the distributing pipes of the potable supply of water, from any source or sources other than its intended source. Back-siphonage is one type of backflow.

Subp. 10. **Backflow connection.** "Backflow connection" means any condition whereby backflow can occur.

Subp. 11. **Backflow preventer.** "Backflow preventer" means a device or means to prevent backflow into the potable water system.

Subp. 12. **Backflow preventer (reduced pressure zone type).** "Backflow preventer (reduced pressure zone type)" means an assembly of differential valves and check valves including an automatically opened spillage port to the atmosphere.

Subp. 13. **Back-siphonage.** "Back-siphonage" means the flowing back of used, contaminated, or polluted water from a plumbing fixture or vessel or other sources, into a potable water supply pipe due to negative pressure in such pipe.

Subp. 14. **Barometric loop.** "Barometric loop" means a loop of water piping rising approximately 35 feet at its topmost point above the highest fixture it supplies.

Subp. 15. **Battery of fixtures.** "Battery of fixtures" means any group of two or more similar adjacent fixtures which discharge into a common horizontal waste or soil branch.

Subp. 16. **Boiler blowoff.** "Boiler blowoff" means an outlet on a boiler to permit emptying or discharge of sediment.

Subp. 17. **Boiler blowoff tank.** "Boiler blowoff tank" means a vessel designed to receive the discharge from a boiler blowoff outlet and to cool the discharge to a temperature which permits its safe discharge to the drainage system.

Subp. 18. **Branch.** "Branch" means any part of the piping system other than a riser, main, or stack.

Subp. 19. **Branch, fixture.** See "fixture branch."

Subp. 20. **Branch, horizontal.** See "horizontal branch."

Subp. 21. **Branch interval.** "Branch interval" means a vertical length of stack corresponding in general to a story height, but in no case less than eight feet, within which the horizontal branches from one story or floor of the building are connected to the stack.

Subp. 22. **Branch vent.** "Branch vent" means a vent connecting one or more individual vents with a vent stack or a stack vent.

Subp. 23. **Building classification.** "Building classification" means the arrangement adopted by the administrative authority for the designation of buildings in classes according to occupancy.

Subp. 24. **Building drain.** "Building drain" means that part of the lowest piping of the drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer beginning at least one foot outside the building footings.

Subp. 25. **Building drain, sanitary.** "Building drain, sanitary" means a building drain which conveys sewage only.

Subp. 26. **Building drain, storm.** "Building drain, storm" means a building drain which conveys storm water but no sewage.

Subp. 27. **Building sewer.** "Building sewer" means that part of the drainage system which extends from the end of the building drain and conveys its discharge to the public sewer, private sewer, individual sewage-disposal system, or other point of disposal.

Subp. 28. **Building sewer, sanitary.** "Building sewer, sanitary" means a building sewer which conveys sewage only.

Subp. 29. **Building sewer, storm.** "Building sewer, storm" means a building sewer which conveys storm water but no sewage.

Subp. 30. **Building subdrain.** "Building subdrain" means that portion of a drainage system which cannot drain by gravity into the building sewer.

Subp. 31. **Circuit vent.** "Circuit vent" means a branch vent that serves two or more traps and extends from the downstream side of the highest fixture connection of a horizontal branch to the vent stack.

Subp. 32. **Combination fixture.** "Combination fixture" means a fixture combining one sink and laundry tray or a two or three compartment sink and laundry tray in one unit.

Subp. 33. **Common vent.** "Common vent" means a vent connecting at the junction of two fixture drains and serving as a vent for both fixture drains.

Subp. 34. **Conductor.** "Conductor" means a pipe inside the building which conveys storm water from the roof to a storm drain.

Subp. 35. **Continuous vent.** A "continuous vent" is a vertical vent that is a continuation of the drain to which it connects.

Subp. 36. **Continuous waste.** "Continuous waste" means a drain from two or three compartments of a fixture connected to a single trap.

Subp. 37. **Cross connection.** "Cross connection" means any connection or arrangement, physical or otherwise, between a potable water supply system and any plumbing fixture, or tank, receptacle, equipment, or device through which it may be possible for nonpotable, used, unclean, polluted, or contaminated water or other substance to enter any part of such potable water system under any condition.

Subp. 38. **Dead end.** "Dead end" means a branch leading from a soil, waste, or vent pipe, building drain, building sewer, or water distribution branch, and terminating at a developed length of two feet or more by means of a plug, cap, or other fitting.

Subp. 39. **Developed length.** "Developed length" means the length of pipe measured along the center line of the pipe and fittings.

Subp. 40. **Downspout.** See "leader."

Subp. 41. **Drain.** "Drain" means any pipe which carries waste water or waterborne wastes in a building drainage system.

Subp. 42. **Drainage system.** "Drainage system" includes all the piping which conveys sewage, rain water, or other liquid wastes to a legal point of disposal. It does not include the mains of a public sewer system, or a public sewage treatment or disposal plant.

Subp. 43. **Dwelling unit.** "Dwelling unit" means one or more rooms with provision for living, sanitary, and sleeping facilities arranged for the use of one family or individual.

Subp. 44. **Effective opening.** "Effective opening" means the minimum cross-sectional area at the point of water supply discharge measured or expressed in terms of diameter of a circle, or if the opening is not circular, the diameter of a circle of the equivalent cross sectional area.

Subp. 45. **Existing work.** "Existing work" is a plumbing system or any part thereof which has been installed prior to the effective date of this code.

Subp. 45a. **Factory-trained installer.** "Factory-trained installer" means a person who has received training from the manufacturer on installation of that manufacturer's specific plumbing product, and holds a valid certificate of competency issued by the manufacturer for the completion of that training.

Subp. 46. **Fixture.** See "plumbing fixture."

Subp. 47. **Fixture branch.** A "fixture branch" is a water supply pipe between the fixture supply pipe and a water distributing pipe.

Subp. 48. **Fixture drain.** "Fixture drain" means the drain from the trap of a fixture to the junction of that drain with any other drain pipe.

Subp. 49. **Fixture supply.** A "fixture supply" is a water supply pipe connecting the fixture with the fixture branch.

Subp. 50. **Fixture unit (drainage - d.f.u.).** A "drainage fixture unit" is a common measure of the probable discharge into the drainage system by various types of plumbing fixtures on the basis of one d.f.u. being equal to 7.5 gallons per minute discharge. The drainage fixture unit value for a particular fixture depends on its volume rate of drainage discharge, on the time duration of a single drainage operation, and on the average time between successive operations.

Subp. 51. **Fixture unit (supply - s.f.u.).** A "supply fixture unit" is a common measure of the probable hydraulic demand on the water supply by various types of plumbing fixtures.

The supply fixture unit value for a particular fixture depends on its volume rate of supply operation, and on the average time between successive operations.

Subp. 52. **Flood level rim.** "Flood level rim" means the top edge of the receptacle from which water overflows.

Subp. 53. **Flow pressure.** "Flow pressure" the pressure in the water supply pipe near the faucet or water outlet while the faucet or water outlet is wide open and flowing.

Subp. 54. **Flushometer valve.** "Flushometer valve" means a device which discharges a predetermined quantity of water to fixtures for flushing purposes and is actuated by direct water pressure.

Subp. 55. **Flush valve.** "Flush valve" means a device located at the bottom of a flush tank for flushing water closets and similar fixtures.

Subp. 55a. **Fouling waste.** "Fouling waste" means waste that is harmful to the drainage system consisting of grease, dairy, heavy solids, animal matters, feathers, or similar waste that may settle out or deposit on pipes, reducing effective pipe diameter, or otherwise impeding flow.

Subp. 56. **Grade.** "Grade" means the fall (slope) of a line of pipe in reference to a horizontal plane. In drainage it is usually expressed as the fall in a fraction of an inch per foot length of pipe.

Subp. 56a. **Gravity grease interceptor.** "Gravity grease interceptor" means a grease interceptor identified by volume, retention time, and gravity separation.

Subp. 57. **Grease interceptor.** See "interceptor."

Subp. 57a. **Grinder pump.** A "grinder pump" is a specialized submersible pump designed for reducing sewage particulates and pumping the resulting slurry.

Subp. 58. **Hangers.** See "supports."

Subp. 59. **Horizontal branch drain.** "Horizontal branch drain" means a drain pipe extending horizontally from a soil or waste stack or building drain with or without vertical sections or branches, which receives the discharge from one or more fixture drains on the same floor as the horizontal branch and conducts it to the soil or waste stack or to the building drain.

Subp. 60. **Horizontal pipe.** "Horizontal pipe" means any pipe or fitting which makes an angle of less than 45 degrees with the horizontal.

Subp. 60a. **Hydromechanical grease interceptor.** "Hydromechanical grease interceptor" means a grease interceptor that incorporates air entrainment, hydromechanical separation, interior baffling, and/or barriers in combination or separately.

Subp. 61. **Individual sewage disposal system.** "Individual sewage disposal system" means a system for disposal of sewage designed for use apart from a public sewer as regulated under rules administered by the Pollution Control Agency.

Subp. 62. **Indirect waste pipe.** "Indirect waste pipe" means a waste pipe that does not connect directly with the drainage system but conveys liquid wastes by discharging into a plumbing fixture, interceptor, or receptacle which is directly connected to the drainage system.

Subp. 63. **Individual vent.** "Individual vent" means a pipe installed to vent a fixture trap and which connects with the vent system above the fixture served or terminates in the open air.

Subp. 64. **Industrial wastes.** "Industrial wastes" means liquid or waterborne waste from industrial or commercial processes except domestic sewage.

Subp. 65. **Insanitary.** "Insanitary" means a condition which is contrary to sanitary principles or injurious to health.

Subp. 66. **Interceptor.** "Interceptor" means a device designed and installed so as to separate and retain deleterious, hazardous, or undesirable matter from normal wastes while permitting normal sewage or liquid wastes to discharge into the drainage system by gravity.

Subp. 67. **Leader.** "Leader" means the water conductor from the roof to the building storm drain or other means of disposal.

Subp. 67a. **Food establishment.** "Food establishment" as used in this chapter means a "food and beverage service establishment" as that term is defined in Minnesota Statutes, section 157.15, subdivision 5, or a "place of business" as that term is defined in Minnesota Statutes, section 28A.03, subdivision 4.

Subp. 68. **Liquid waste.** "Liquid waste" means the discharge from any fixture, appliance, or appurtenance which does not receive fecal matter.

Subp. 69. **Load factor.** "Load factor" means the percentage of the total connected fixture unit flow which is likely to occur at any point in the plumbing system.

Subp. 70. **Loop vent.** "Loop vent" means a circuit vent which loops back to connect with a stack vent instead of a vent stack.

Subp. 70a. **Macerating toilet system.** "Macerating toilet system" means a system consisting of a toilet and a sump with a macerating pump. The system is intended to receive and break waste from a toilet, bathtub, shower, or lavatory into pieces of fine slurry and pump to the building drainage.

Subp. 71. **Main.** "Main" means the principal pipe artery to which branches may be connected.

Subp. 72. **Main vent.** "Main vent" means the principle artery of the venting system to which vent branches may be connected.

Subp. 73. **May.** The word "may" is a permissive or allowable term for alternative procedures.

Subp. 73a. **Must.** The word "must" is a mandatory term.

Subp. 74. **Nonpotable water.** "Nonpotable water" means water not safe for drinking because it may contain impurities in amounts sufficient to cause disease or harmful physiological effects, or water that does not conform to the public water supply quality requirements of parts 4720.0100 to 4720.2500 or the regulations of the local public health authority having jurisdiction.

Subp. 74a. **Nonwater urinal.** "Nonwater urinal" means a plumbing fixture that is designed to receive and convey only liquid waste through a trap seal into the gravity drainage system without the use of water for such function.

Subp. 75. **Offset.** "Offset" means a combination of elbows or bends which brings one section of the pipe out of line but into a line parallel with the other section.

Subp. 76. **Plumbing.** "Plumbing" means the business, trade, or work having to do with the installation, removal, alteration, or repair of plumbing and drainage systems or parts thereof.

Subp. 77. **Plumbing appliance.** "Plumbing appliance" means any one of a special class of plumbing fixture which is intended to perform a special function. Its operation and/or control may be dependent upon one or more energized components, such as motors, controls, heating elements, or pressure or temperature-sensing elements. Such fixtures may operate automatically through one or more of the following actions: a time cycle, a temperature range, a pressure range, a measured volume or weight, or the fixture may be manually adjusted or controlled by the user or operator.

Subp. 78. **Plumbing appurtenance.** "Plumbing appurtenance" means a manufactured device, or a prefabricated assembly, or an on-the-job assembly of component parts, and which is an adjunct to the basic piping system and plumbing fixtures. An appurtenance demands no additional water supply, nor does it add any discharge load to a fixture or the drainage system. It is presumed that it performs some useful function in the operation, maintenance, servicing, economy, or safety of the plumbing system.

Subp. 79. **Plumbing inspector official.** See "administrative authority."

Subp. 80. **Plumbing fixture.** "Plumbing fixture" means a receptacle or device which is either permanently or temporarily connected to the water distribution system, and demands a supply of water therefrom, or it discharges used water, liquid-borne waste materials, or sewage either directly or indirectly to the drainage system, or which

requires both a water supply connection and a discharge to the drainage system. Plumbing appliances as a special class of fixture are further defined.

Subp. 81. **Plumbing system.** The "plumbing system" means and includes all potable water supplies and distribution pipes, all plumbing fixtures and traps, all drainage and vent pipes and all building drains, including their respective joints and connections, devices and appurtenances within the property lines of the premises and shall include potable water treatment or using equipment.

Subp. 82. **Potable water.** "Potable water" means water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming in its bacteriological and chemical quality to parts 4720.0100 to 4720.2500 or the regulations of the local public health authority having jurisdiction.

Subp. 83. **Private or private use.** In the classification of plumbing fixtures, "private" applies to fixtures in residences and apartments, and to fixtures in private bathrooms of hotels, as well as similar installations in other buildings where fixtures are intended for use of one family or an individual.

Subp. 84. **Public or public use.** In the classification of plumbing fixtures, "public" applies to fixtures in general toilet rooms of schools, gymnasiums, hotels, railroad stations, bars, public comfort stations, and other installations (whether pay or free) where fixtures are installed so that their use is similarly unrestricted.

Subp. 84a. **Readily accessible.** "Readily accessible" means capable of being reached safely and quickly for operation, repair, or inspection without requiring those to whom ready access is requisite to remove obstacles, panels, or similar obstructions.

Subp. 85. **Receptor.** "Receptor" means an approved plumbing fixture or device of such material, shape, and capacity as to adequately receive the discharge from indirect waste pipes, so constructed and located as to be readily cleaned.

Subp. 86. **Relief vent.** "Relief vent" means a vent, the primary function of which is to provide additional circulation of air between drainage and vent systems or to act as an auxiliary vent on a specially designed system.

Subp. 87. **Return offset.** "Return offset" means a double offset installed so as to return the pipe to its original alignment.

Subp. 88. **Revent pipe.** See "individual vent."

Subp. 89. **Rim.** "Rim" means an unobstructed open edge of a fixture.

Subp. 90. **Riser.** "Riser" means a water supply pipe which extends vertically one full story or more to convey water to branches or to a group of fixtures.

Subp. 91. **Roof drain.** "Roof drain" means a drain installed to receive water collecting on the surface of a roof and to discharge it into a leader or conductor.

Subp. 92. **Roughing in.** "Roughing in" means the installation of all parts of the plumbing system which can be completed prior to the installation of fixtures. This includes drainage, water supply, and vent piping, and necessary fixture supports.

Subp. 93. **Sand interceptor or trap.** See "interceptor."

Subp. 94. **Sanitary sewer.** "Sanitary sewer" means a sewer which carries sewage and excludes storm, surface, and ground water.

Subp. 95. **Sewage.** "Sewage" means any liquid waste containing animal or vegetable matter in suspension or solution and may include liquids containing chemicals in solution.

Subp. 96. **Sewage ejector.** "Sewage ejector" means a device for moving sewage by entraining it in a high velocity jet of steam, air, or water.

Subp. 97. **Sewer.** "Sewer" means an artificial conduit, usually underground, for carrying off waste water and refuse.

Subp. 98. **Slope.** See "grade."

Subp. 99. **Shall.** The word "shall" is a mandatory term.

Subp. 100. **Should.** The word "should" is a nonmandatory term, but describes recommended procedures.

Subp. 101. **Soil pipe.** "Soil pipe" means a pipe which conveys the discharge of water closets or similar fixtures containing fecal matter with or without the discharge of other fixtures to the building drain or building sewer.

Subp. 102. **Special wastes.** "Special wastes" means wastes which require special treatment before entry into the normal plumbing system.

Subp. 103. **Special waste pipe.** "Special waste pipe" means pipe which conveys special wastes.

Subp. 104. **Stack.** "Stack" is a general term for any vertical line of soil, waste, or vent piping extending through one or more stories. Excepting vertical vent branches which do not extend through the roof and which pass through less than two stories, before being reconnected to a vent stack or stack vent.

Subp. 105. **Stack group.** "Stack group" means a group of fixtures located adjacent to the stack so that by means of proper fittings, vents may be reduced to a minimum.

Subp. 106. **Stack vent.** "Stack vent" means the extension of a soil or waste stack above the highest horizontal drain connected to the stack.

Subp. 107. **Storm drain.** See "building drain, storm."

Subp. 108. **Storm sewer.** "Storm sewer" means a sewer used for conveying ground water, rain water, surface water, or similar nonpollutional wastes.

Subp. 109. **Sump.** "Sump" means a watertight tank which receives sewage or liquid waste and which is located below the normal grade of the gravity system and must be emptied by mechanical means.

Subp. 110. **Sump pump.** "Sump pump" means a mechanical device other than an ejector for removing sewage or liquid waste from a sump.

Subp. 111. **Supports.** "Supports" means devices for supporting and securing pipe, fixtures, and equipment.

Subp. 112. **Trap.** "Trap" means a fitting or device which provides, when properly vented, a liquid seal to prevent the emission of sewer gases without materially affecting the flow of sewage or waste water through it.

Subp. 113. **Trap seal.** "Trap seal" means the vertical distance between the crown weir and the top dip of the trap.

Subp. 114. **Vacuum.** "Vacuum" means any pressure less than that exerted by the atmosphere.

Subp. 115. **Vacuum breaker, nonpressure type (atmospheric).** "Nonpressure type vacuum breaker" means a vacuum breaker which is not designed to be subjected to static line pressure.

Subp. 116. **Vacuum breaker, pressure type.** "Vacuum breaker, pressure type" means a vacuum breaker designed to operate under conditions of static line pressure.

Subp. 117. **Vent pipe.** "Vent pipe" means any pipe provided to ventilate a building drainage system and to prevent trap siphonage and back pressure.

Subp. 118. **Vent stack.** "Vent stack" means a vertical vent pipe installed to provide circulation of air to and from the drainage system.

Subp. 119. **Vent system.** "Vent system" means a pipe or pipes installed to provide a flow of air to or from a drainage system or to provide a circulation of air within such system to protect trap seals from siphonage and back pressure.

Subp. 120. **Vertical pipe.** "Vertical pipe" means any pipe or fitting which makes an angle of 45 degrees or less with the vertical.

Subp. 121. **Waste.** See "liquid waste" and "industrial waste."

Subp. 122. **Waste pipe.** "Waste pipe" means a pipe which conveys only liquid waste free from fecal material.

Subp. 123. **Water distributing pipe.** "Water distributing pipe" means a pipe conveys water from the water service pipe to the point of usage.

Subp. 124. **Water outlet.** "Water outlet" means a discharge opening through which water is supplied to a fixture, into the atmosphere (except into an open tank which is part of the water supply system), to a boiler or heating system, or to any devices or equipment requiring water to operate.

Subp. 125. **Water service pipe.** "Water service pipe" means the pipe from the water main or other source of water supply to the water distributing system of the building served.

Subp. 126. **Water supply system.** "Water supply system" means the water service pipe, the water distributing pipes, and the necessary connecting pipes, fittings, control valves, and all appurtenances within the building or outside the building within the property lines.

Subp. 127. **Wet vent.** "Wet vent" means a vent which also serves as a drain.

Subp. 128. **Yoke vent.** A "yoke vent" is a pipe connecting upward from a soil or waste stack to a vent stack for the purpose of preventing pressure changes in the stacks.

Statutory Authority: *MS s 14.389; 16B.59 to 16B.75; 326.37 to 326.45; 326B.101 to 326B.194; 326B.43 to 326B.49; 326B.52*

History: *9 SR 1557; L 1977 c 305 s 39; 11 SR 1405; 15 SR 76; 23 SR 686; L 2007 c 140 art 4 s 61; art 6 s 15; art 13 s 4; L 2008 c 337 s 64; 33 SR 2042; 35 SR 1171; 36 SR 1479*

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