

4715.2820 METHOD OF TESTING.

Subpart 1. **Testing.** The tests shall be applied to the plumbing drainage system in its entirety or in sections. Sections which are found satisfactory need not be retested after completion of the entire system unless considered necessary by the proper administrative authority.

Subp. 2. **Rough plumbing.** The piping of plumbing drainage and venting systems shall be tested upon completion of the rough piping. The method of testing shall be specified by the designer and shall either be an air test or hydrostatic test as described in this subpart or an alternative test as approved by the administrative authority. The air test shall be made by attaching the air compressor or testing apparatus to any suitable opening and closing all other inlets and outlets to the system by means of proper testing plugs. Plaster of paris shall not be used in roof terminals. Air shall be forced into the system until there is a uniform pressure of five pounds per square inch on the portion of the system being tested. The pressure shall remain constant for 15 minutes without the addition of air. The pressure gauge scale shall not read more than 30 pounds per square inch and the gauge face shall not be less than 2-1/2 inches in diameter.

The hydrostatic test for thermoplastic piping materials shall be conducted by tightly closing all openings in the entire system to be tested except the highest opening. The system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest opening of the section under test. Each section shall be filled with water, but a section shall not be tested with less than ten foot head of water. In testing successive sections, at least the upper ten feet of the next preceding section shall be tested, so that no joint or pipe in the building, except the uppermost ten feet of the system, is subjected to a test of less than ten foot head of water. The water shall be kept in the system or in the portion under test for at least 15 minutes before inspection begins. The system shall be tight at all points.

In lieu of five pound air test, concrete manholes and sewer lines may be tested by negative pressure in accordance with ASTM Standards C1214-92 and C1244-93.

Subp. 2a. **Exceptions.**

A. Testing is not required for:

- (1) outside leaders;
- (2) perforated or open drain tile; or
- (3) portions of storm sewers located more than ten feet from buildings, more than ten feet from buried water lines, and more than 50 feet from water wells, and not passing through soil or water identified as being contaminated.

B. Building storm sewers may be tested in accordance with the Hydrostatic Test Method from the City Engineers Association of Minnesota, except that an air test may be required for any section of the building storm sewer that passes through contaminated soils or contaminated water. The Hydrostatic Test Method, provisions F2 and F3, as specified in Standard Utilities Specifications for Watermain and Service Line Installation and Sanitary Sewer and Storm Sewer Installation, written and published by the City Engineers Association of Minnesota, 1999 edition, is incorporated by reference, is not subject to frequent change, and is available in the office of the commissioner.

Subp. 3. **Finished plumbing.** After the plumbing fixtures have been set and their traps filled with water, their connections shall be tested and proven gas and water tight 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 one inch water column. Such pressure shall remain constant for 15 minutes or the duration of the inspection without the introduction of additional air.

Subp. 4. **Conductor pipes.** Conductor pipes and their roof connections inside the building shall be tested with air. (See subpart 2)

Subp. 5. **Test of water distribution system.** Upon the completion of a section or of the entire water distribution system, it shall be tested and proved tight with the use of air or water not less than the maximum working pressure under which it is to be used. If tested with water, the water used for the test shall be obtained from a potable source.

Subp. 6. **Material and labor for tests.** The equipment, material, power, and labor necessary for the inspection and test shall be furnished by the plumbing contractor.

Subp. 7. **Test plugs or caps.** Test plugs or caps for roof terminals must extend above or outside the end of the vent pipe to provide a visible indication for removal after the test has been completed.

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

History: *19 SR 590; 23 SR 686; 28 SR 146; 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; 36 SR 1479*

Published Electronically: *November 13, 2012*