

Part VII — Plumbing

CHAPTER 25 PLUMBING

SECTION P2501 GENERAL

P2501.1 Scope. The provisions of this chapter shall establish the general requirements applicable to plumbing systems and test requirements of this code.

P2501.2 Application. The provisions of this chapter shall also apply to the plumbing requirements of Chapters 25 through 32.

[EB] SECTION P2502 EXISTING PLUMBING SYSTEMS

P2502.1 Existing installations. Plumbing systems lawfully in existence at the time of the adoption of this code shall be permitted to have their use and maintenance continued if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property is created by such plumbing system.

P2502.2 Maintenance. All plumbing systems, materials and appurtenances, both existing and new, and all parts thereof shall be maintained in proper operating condition in accordance with the original design in a safe and sanitary condition.

SECTION P2503 INSPECTION AND TESTS

P2503.1 Required inspection and testing. The holder of the permit shall be responsible for the scheduling of the following inspections.

1. Underground inspection and testing shall be made after trenches or ditches are excavated and bedded, piping installed, and before any backfill is put in place.
2. Rough-in inspection and testing shall be made of completed portions of all sanitary, storm and water distribution piping, after the framing, fireblocking, firestopping, draftstopping and bracing for that portion is in place, and prior to the installation of wall or ceiling membranes.
3. Final inspections and testing shall be made after the building is complete, all plumbing fixtures are in place and properly connected, and the structure is ready for occupancy.

P2503.2 Concealment. A plumbing or drainage system, or part thereof, shall not be covered, concealed or put into use until it has been tested.

P2503.3 Building sewer testing. The building sewer shall be tested by insertion of a test plug at the point of connection with the public sewer and filling the building sewer with water, test-

ing with not less than a 10-foot (3048 mm) head of water and be able to maintain such pressure for 15 minutes.

P2503.4 DWV systems testing. Rough and finished plumbing installations shall be tested in accordance with Sections P2503.4.1 and P2503.4.2.

P2503.4.1 Rough plumbing. DWV systems shall be tested on completion of the rough piping installation by water or air with no evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough piping has been installed, as follows:

1. Water test. Each section shall be filled with water to a point not less than 10 feet (3048 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.
2. Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34 kPa) or 10 inches of mercury column (2488 Pa). This pressure shall be held without introduction of additional air for a period of 15 minutes.

P2503.4.2 Finished plumbing. After the plumbing fixtures have been set and their traps filled with water, their connections shall be tested and proved gas tight and/or water tight as follows:

1. Water tightness. Each fixture shall be filled and then drained. Traps and fixture connections shall be proven water tight by visual inspection.
2. Gas tightness. When required by the local administrative authority, a final test for gas tightness of the DWV system shall be made by the smoke or peppermint test as follows:
 - 2.1. Smoke test. Introduce a pungent, thick smoke into the system. When the smoke appears at vent terminals, such terminals shall be sealed and a pressure equivalent to a 1-inch water column (249 Pa) shall be applied and maintained for a test period of not less than 15 minutes.
 - 2.2. Peppermint test. Introduce 2 ounces (59 mL) of oil of peppermint into the system. Add 10 quarts (9464 mL) of hot water and seal all vent terminals. The odor of peppermint shall not be detected at any trap or other point in the system.

P2503.5 Water-supply system testing. Upon completion of the water-supply system or a section thereof, the system, or

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portion completed, shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, by an air test of not less than 50 psi (344 kPa). The water used for tests shall be obtained from a potable water source.

P2503.6 Inspection and testing of backflow prevention devices. Inspection and testing of backflow prevention devices shall comply with Section P2503.6.1 and Section P2503.6.2.

P2503.6.1 Inspections. Inspections shall be made of all backflow prevention assemblies to determine whether they are operable.

P2503.6.2 Testing. Reduced pressure principle backflow preventers, double check valve assemblies, double-detector check valve assemblies and pressure vacuum breaker assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually.

P2503.7 Test gauges. Gauges used for testing shall be as follows:

1. Tests requiring a pressure of 10 psi or less shall utilize a testing gauge having increments of 0.10 psi or less.
2. Tests requiring a pressure of greater than 10 psi but less than or equal to 100 psi shall utilize a testing gauge having increments of 1 psi or less.
3. Tests requiring a pressure of greater than 100 psi shall utilize a testing gauge having increments of 2 psi or less.