

§20-04 Backflow Prevention Devices, Water Hammer Arresters, Pumps and Separation Valves.

(a) Backflow prevention devices.

Reduced Pressure Zone devices (RPZ's) and Double Check Valve Assemblies are backflow prevention devices. Backflow prevention devices shall be installed to prevent possible backflow/backsiphonage from a commercial property or dwelling unit into a City water main, private water main, or internal water main. A property owner shall install an approved backflow prevention device in every water service pipe that has a potential cross connection hazard, as determined by the Commissioner.

(b) Backflow prevention device requirements. Backflow prevention devices shall be installed to address potential hazards, as follows:

DEP Containment Requirement

DEGREE OF HAZARD	PROTECTION REQUIRED
Hazardous Facilities	Air Gap or Reduced Pressure Zone Device
Aesthetically Objectionable	Double Check Valve Assembly
Non-Hazardous Facilities with Hazardous Fixtures (such as treated boilers, cooling towers, etc.)	Double Check Valve Assembly (Provided that internal protective devices are installed for the hazardous fixtures in accordance with Department of Building requirements).
Non-Hazardous Facilities	None

Subject to review by the Department, the degree of hazard shall be determined by the property owner's Licensed Professional Engineer, Registered Architect or Licensed Master Plumber in accordance with guidelines established by the New York State Department of Health.

(c) Cross connection control reviews.

A Cross Connection Control Review shall be required prior to approval of a permit application for installation of a corporation stop (tap) or wet connection that will be used to supply water to a property that poses a backflow hazard. A Cross Connection Control Review shall also be required prior to installation of a wet connection. Approval of Cross Connection submissions shall not constitute approval of the meter setting or other aspects of the water service design.

(d) Installation of backflow prevention devices.

- (1) Where the Commissioner determines that a facility poses a potential hazard to the City Water Supply, he or she shall direct the building owner or customer to install an approved backflow prevention device in the service pipe.
- (2) A Licensed Master Plumber shall submit an application to the Department of Buildings for a permit or an approval to install a RPZ or a Double Check Valve Assembly. RPZ's and Double Check Valve Assemblies shall be installed in accordance with plans approved by the Department. A Licensed Professional Engineer or Registered Architect shall inspect and certify that the complete installation conforms to plans approved by the Department.
- (3) A building owner or customer who fails to install a backflow prevention device as directed by the Commissioner shall be subject to the issuance of notices of violation, cease and desist orders, other civil and criminal actions and proceedings, and such fines, penalties and other enforcement measures as may be imposed pursuant to section 24-346 of the Administrative Code, including but not limited to the termination of the water supply to the building or to any portion thereof or a facility therein which the Environmental Control Board or the Commissioner may deem necessary to prevent or alleviate any hazard to the City Water Supply.
- (4) The customer shall pay any fees which the New York City Water Board may establish in connection with the termination or restoration of Water service to the customer.

(e) *Backflow prevention device testing requirements.*

- (1) Each RPZ or Double Check Valve must be tested upon installation, device repair, and at least once annually, thereafter, and as otherwise required by the Building or Health Codes. Testing shall be performed by a backflow preventer tester who is certified by the New York State Department of Health and employed by a Licensed Master Plumber. A test report certifying that the backflow prevention device is operating properly must be submitted to the Department.
- (2) Defects in any device tested shall be repaired within thirty (30) days, and the repair shall be followed by a retest. Retest results shall be submitted to the Department within thirty (30) days of completion of the repair.
- (3) Failure of a building owner or customer to provide an annual test report certifying that an existing backflow prevention device installed pursuant to this section or otherwise is properly operating shall be a violation of these rules.

(f) *Suspension of service due to backflow.*

- (1) Where a backflow is detected from premises into a City water main or a private water main, the water supply to the premises may be terminated by the Department.

(2) Prior to restoration of water service, a Licensed Master Plumber must certify to the Department that the backflow has been eliminated, and an approved backflow prevention device has been installed.

(3) The customer shall pay any fees that the New York City Water Board may establish in connection with the termination or restoration of water service to the customer.

(g) *Water hammer arresters.*

Where flushometers, suction tanks, other fixtures or piping are equipped with quick closing valves and are supplied by direct street pressure, an approved water hammer arrester shall be installed in the service pipe two (2) feet downstream of the meter as required by Reference Standard P107-5 F of the NYC Building Code.

(h) *Suction tanks.*

(1) Domestic water connections to premises with a pumped supply which exceeds 400 gpm (total) must be equipped with either a suction or a surge tank, as required by the Department of Buildings.

(2) Suction tanks shall be sized as required by the Department of Buildings.

(3) For premises with a pumped supply greater than 400 gpm and more than one water service pipe, the pumped capacity shall not be divided among the multiple service pipes for the purpose of determining the need for a suction tank.

(i) *Separation (section) valves.*

The installation of a separation (section) valve in an existing City water main or private water main for the purpose of installing two separate sources of water for a property is prohibited, except upon a finding by the Department that the separation (section) valve is required for protection of life or property.

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