

Joint Committee on Administrative Rules

ADMINISTRATIVE CODE

TITLE 77: PUBLIC HEALTH
CHAPTER I: DEPARTMENT OF PUBLIC HEALTH
SUBCHAPTER r: WATER AND SEWAGE
PART 890 ILLINOIS PLUMBING CODE
SECTION 890.1130 PROTECTION OF POTABLE WATER

Section 890.1130 Protection of Potable Water

- a) Cross Connection (Submergence). Potable water supply piping and water discharge outlets shall not be submerged in any sewage or toxic substance. Where potable water supply piping or water discharge outlets are submerged in other substances, they shall be provided with backflow protection as listed in Section 890.1140(f). (See Appendix I: Illustrations A, B and C.)
- b) Approval of Devices and Maintenance. All devices and assemblies for the prevention of backflow shall comply with the standards listed in Appendix A: Table A of this Part. All reduced pressure principle (RP), reduced pressure detector (RPDA), double check (DCA) and double check detector (DCDA) backflow prevention assemblies shall be tested and approved by a Cross-Connection Control Device Inspector (CCCDI) before initial operation, and at least annually thereafter. Records to verify testing and maintenance shall be available at the site of the installation.
- c) Backflow. The water distribution system shall be protected against backflow. Each water outlet shall be protected from backflow by having the outlet end from which the water flows spaced a distance above the flood-level rim of the receptacle into which the water flows sufficient to provide a minimum fixed air gap. Where it is not possible to provide a minimum fixed air gap, the water outlet shall be equipped with an accessible backflow prevention device or assembly in accordance with subsection (f) or Section 890.1140.
- d) Fire Safety Systems. The installation of any fire safety system involving the potable water supply system shall be protected against backflow as follows:
- 1) Backflow protection is not required for fire safety systems constructed as follows:

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- a) An atmospheric vacuum breaker shall be installed between the control valve and the fixture and in such a manner that it will not be subject to water pressure, except the pressure incidental to water flowing to the fixture. An atmospheric vacuum breaker shall be installed on the outlet side of the control valve.
- b) Flushometer Valve. Flush valves shall be equipped with vacuum breakers installed on the discharge side of the flushing valve with the critical level at least 4 inches above the overflow rim of the bowl or 4 inches above the top of the urinal. (See Appendix I: Illustration D.)
- c) Flushing Tanks. Flushing tanks shall be equipped with anti-siphon ball cocks. The ball cock shall be installed with the critical level of the vacuum breaker at least one inch above the full opening of the overflow pipe. In cases where the ball cock has no hush tube, the bottom of the water supply inlet shall be installed one inch above the top of the overflow pipe. (See Section 890.650(d).)
- d) Lawn Sprinklers. Any lawn sprinkler system connected to a potable water supply shall be equipped with a reduced pressure principle backflow preventer assembly (RPZ). The RPZ may be located outside provided it is protected from freezing or is removed at the end of the season, and it conforms with Section 890.1130(g)(1).
- e) Valve Outlets for Hose Attachments.
 - 1) All threaded valve outlets shall have backflow protection in accordance with Section 890.1130. All outside threaded valve outlets shall not be subject to freezing.