



BACKFLOW PREVENTERS BEST PRACTICES

Backflow preventers keep domestic water systems safe from cross-contamination. In the event of a severe drop in water pressure in the potable water supply, such as from a water main break, a backflow preventer keeps water from irrigation, fire protection, and boiler systems from draining into the community's drinking water. They are important to a reliable, safe, and secure potable water supply.

There are two main types of backflow preventers, with various models of each.

1. Non-Testable Backflow Preventers

- a. Air gap
- b. Single swing check valve
- c. Atmospheric Vacuum Breaker Assembly

2. Testable Backflow Preventers

- a. Reduced Pressure Zone Assembly (RPZA)
- b. Double Check Valve Assembly (DCVA)
- c. Pressure Vacuum Breaker Assembly (PVBA)

Agencies or departments with backflow preventers should inventory their devices by location, system, and type.

Work with the local plumbing subcode official to ensure that backflow preventers which are designed to be field tested are tested before final inspection and annually, as required by [N.J.A.C 5:23-2,23\(l\)](#) and [N.J.A.C. 5:23-3.15, Plumbing Subcode Section 10.5.6](#). Testable backflow preventers for one- and two-family dwellings are not required to be tested annually.

On dedicated fire water service lines, the fire official may accept a current Certificate of Compliance issued by the plumbing subcode official. This will meet the requirement of National Fire Protection Association Standard 25 for the backflow annual test. Devices replaced on water supplies serving fire-protection systems must be approved for fire-protection service and cannot reduce the effectiveness of the fire-protection system.

Local officials are not permitted to perform the test. Their role is to ensure that the facility's owner has the backflow preventers tested by a qualified individual. The tester must have a certification from an agency recognized by the New Jersey Department of Environmental Protection, Bureau of Safe Drinking Water. The local official may witness the test or have the owner submit a certification that the device was tested.

Devices that do not pass the test must be repaired or replaced. A permit will be required for all backflow preventer replacements.