Backflow Prevention Devices & Testing

10801 Town Square Drive NE, Blaine MN 55449
Building Inspections Department
phone: 763-785-6177 **BlaineMN**.*gov*

What is a backflow prevention device and cross-connection control?

A cross-connection is a connection between the drinking (potable) water supply system and any plumbing fixture or a tank, receptor, equipment, or device through which it may be possible for non-potable, used, unclean, polluted, and contaminated water or other substances to enter into a part of the drinking water system under any condition. Backflow devices are installed for cross-connection control. The type of device installed is determined by the level of hazard and other parameters.

Cross-connection Program - the City of Blaine has partnered with BSI Online to assist in administering the program and tracking the testing of backflow prevention devices.

The State of Minnesota requires a backflow prevention device assembly be installed on all hazardous cross-connections to help keep our water supply safe. Certain testable assemblies must be tested and certified every year to ensure that they are working properly. All RP devices (see below) need to be tested annually. All other backflow protection devices that have test ports (PVB, DC, SVB), installed/replaced on or after 01/23/16 need to be tested annually.

Property owners are responsible to have these devises tested. If you need a tester, you can search "backflow testers near me". Persons performing backflow protection device testing are required to have completed American Society of Safety Engineers (ASSE) certification and be licensed as a Backflow Prevention Tester by the State of Minnesota.

Residential

Not all residential plumbing systems have testable backflow prevention devices. Typical homes that have them have a lawn irrigation system or a boiler connected to the home's water supply. RP backflow devices serving lawn irrigation for some townhome associations may be in a "doghouse" on the property. Apartments will typically have a device for boilers, lawn irrigation, and fire suppression.

1. Lawn irrigation systems typically have a PVB (see below). **Only PVBs installed/replaced on or after 01/23/16 need to be tested annually.**
2. Boilers typically have a RP or DC device (see below). Only DCs installed/replaced since 01/23/16 need to be tested annually. All RP devices are required to be tested annually regardless of the install date.

Commercial & Industrial

Most commercial buildings have a testable backflow device serving lawn irrigation – most are RP devices inside near the building water meter. Other typical commercial/industrial applications include boilers, fire sprinkler systems, water reclamation, and chemical mixing.

1. **All RP devices (see below) need to be tested annually.**
2. All other backflow protection devices that have test ports **(PVB, DC, SVB), installed/replaced on or after 01/23/16 need to be tested annually.** These are devices meeting ASSE Standard 1015, 1020, 1048, and 1056.

Information for Testers & Plumbing Contractors

Commercial & Industrial:

-Test reports: Starting 08/01/2024 register and file test reports at www.BSIonline.com. Removal of devices must also be reported to BSI Online. Please contact BSI via e-mail (support@backflow.com) or phone (888-966-6050) if you have any questions.

-Permits: A *commercial* plumbing permit is required for new installations, replacements, and removals (not repairs).

Residential (homes, townhomes, apartments & buildings with permanent residents):

-Test reports: Test reports to be submitted to the City of Blaine. For directions on how to submit test results please visit the City of Blaine web site (search "backflow testing" or go to www.BlaineMN.gov/3334/Backflow-Testing). Removal of devices must also be submitted. In early 2025, residential reports will need to be submitted to BSI Online. Please contact the City of Blaine by phone (763-717-2765) if you have any questions.

- Permits: A *residential* plumbing permit is required for new installations, replacements, and removals (not repairs) at homes and townhomes. A *commercial* plumbing permit is required for work at apartments and other residential occupancies where the occupants are primarily permanent in nature other than homes and townhomes.

Additional Information

Pressure Vacuum Breakers (PVB) (Standard ASSE 1015)

PVB

Double Check Valves (DC) (Standard ASSE 1020), Spill Resistant Pressure Vacuum Breaker (SVB) (Standard ASSE 1056), Double Check Detector Fire Protection (Standard ASSE 1047)

DC

Reduce Pressure Principle Assemblies (RP) (Standard ASSE 1013), Reduced Pressure Detector Fire Protection (Standard ASSE 1047).

RP

All sections of the 2020 Minnesota State Plumbing Code can be found at: https://epubs.iapmo.org/2020/MPC/

Minnesota Department of Labor and Industry Backflow Prevention Fact Sheet: https://www.dli.mn.gov/sites/default/files/pdf/fs_backflow.pdf