



Backflow Preventers FAQ's

Q. What is backflow?

A. Backflow refers to the reverse flow of non-potable water, or other substances, through a cross-connection and into the piping of a public water system or customer's potable water system. Two types of backflow are backpressure backflow and back-siphonage.

Q. What is a cross-connection?

A. Is any temporary or permanent connection between a public water system and any source or system containing non-potable water.

Common cross-connections:

- **Private wells** – where the private well connection is connected to a service line receiving water from a public water supply. The untreated water could be pumped into the potable water supply which serves the home and the public water system.
- **Lawn sprinkler systems** – where the stagnant/contaminated water from the sprinkler system could be drawn into the drinkable water supply for your home.

Q. Why do water suppliers need to control cross-connections and protect their public water systems against backflow?

A. Backflow into a public water system can pollute or contaminate the water in that system. Water suppliers must take precautions to protect its public water system against backflow

Q. What is a backflow preventer?

A. A backflow prevention device or assembly is mechanism to prevent backflow. The basic means for preventing backflow is an air gap, which either eliminates a cross-connection or provides barrier from backflow. The basic mechanism for preventing backflow is a mechanical backflow preventer, which provides a physical barrier to backflow.

Q. Why do backflow prevention devices need to be tested?

A. Mechanical backflow prevention devices have internal seals, springs, and moving parts that are subject to fouling, wear or fatigue. Also, mechanical backflow preventers and air gaps can be bypassed. Therefore, all backflow prevention devices have to be tested periodically to ensure that they are functioning correctly. Mechanical backflow prevention devices have to be tested with properly calibrated gauge equipment.

Q. How often does the backflow prevention device need to be tested?

A. Backflow prevention devices must be tested and certified upon installation and at least once every three years for residential devices and once a year for commercial devices per City ordinance, (No. 030847) the testing and certification must be performed by a licensed backflow tester.

Q. Does a lawn irrigation system require a backflow prevention device?

A. Yes. Section 312. 10. 1 of the Plumbing Code, connections to lawn irrigation systems, states that the potable water supply to lawn irrigation systems shall be protected against backflow and potential hazards.

Q. What is considered a potential hazard?

A. A potential hazard is defined as any possibility of pollutants, contaminants, and system or plumbing hazards. For example, fire protection systems, irrigation systems, gasoline refineries and stations, restaurants, hospitals and manufacturers.

Q. What is back-siphonage?

A. Back-siphonage is backflow caused by negative pressure (i.e. vacuum or partial vacuum) in a public water system or customer's potable water system. The effect is similar to drinking water through a straw. Back-siphonage can occur when there is a stoppage of water supply due to nearby fire-fighting, a break in a water main, among other reasons.