

Lawn Irrigation Requirements

The Minnesota State Plumbing Code requires that a backflow preventer be installed on each lawn irrigation system. This is to prevent lawn fertilizers, weed killers and other contaminants from being drawn back into the drinking water system. A licensed plumber or the property owner must install the backflow preventer. A plumbing permit is required prior to installation.

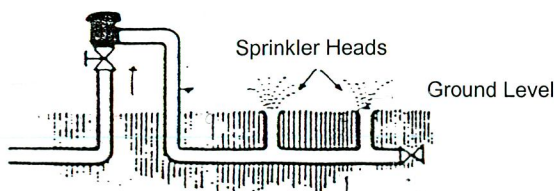
Typically, type L or K copper pipe is used to connect the backflow preventer. A shutoff valve is placed before the device inside the house, with a capped or plugged opening for drainage directly following the valve. Any drains installed outside must also be capped or plugged when installed before the backflow device.

There are three common types of backflow preventers:

1. Atmospheric - The bottom of the device must be 12 inches above all sprinklers. No valves are allowed beyond this type of device.
2. Pressure type - The bottom of the device must be 12 inches above all sprinklers. Zone/yard valves may be installed after this type of device.
3. Reduced Pressure Zone - Required when neither of the above types can be used due to elevation restrictions of the yard or dwelling; must be tested by a certified person each year.

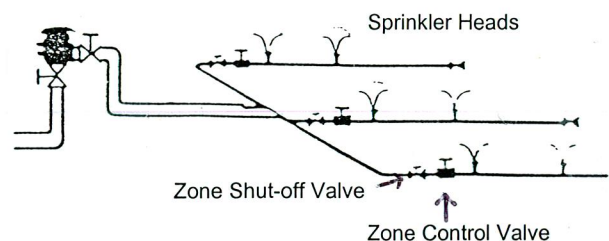
Typical Installations:

Atmospheric type backflow preventer



SINGLE ZONE SYSTEM

Pressure type backflow preventer



MULTI-ZONE SYSTEM