General Installation Guidelines for Backflow Prevention Assemblies

Below you will find general guidelines for the installation of backflow prevention assemblies within Soos Creek's system.

Assembly Requirements

1. All assemblies must be listed on the current State of Washington - Department of Health Approved Backflow Prevention Assemblies List. If not currently listed, they must have been listed at the time of original installation. Customers can obtain this list through the Department of Health.

2. All assemblies are required to be tested by a State of Washington Certified Backflow Assembly Tester upon installation, repair or replacement and annually thereafter.

3. All assemblies must be installed in the physical orientation for which they were approved.

4. Assemblies two and a half inches and larger must be supported to prevent damage.

5. Assemblies shall not be installed in a location where spillage or relief valve operation will present a hazardous condition. Example: adjacent to electrical switchgear/panels.

6. For assemblies installed below ground:
- If installed in an irrigation box, the top of assembly can be no deeper than 12 inches from the finished elevation.
- Assemblies less than two and a half inches must have a minimum of six inches clearance under the assembly.
- Assemblies two and a half inches and larger must have a minimum of one foot clearance under the assembly.
- Assemblies installed in vaults must have a permanently installed ladder to allow safe access. Plugs must be installed in each of the test cocks. Plugs must fit snugly.
- Provisions for water drainage must be provided.

7. All assembly bypasses must have backflow protection installed equivalent to the assembly being bypassed.

8. All above ground assemblies must be installed between one and five feet above the finished floor elevation unless a permanent platform is installed to facilitate testing and maintenance.

9. No assembly shall be installed in an environment containing toxic, corrosive or hazardous fumes.

10. Assemblies shall not be installed in crawl spaces or attics.

11. Assemblies shall be located such that they are protected from accidental damage.

12. Assemblies must be installed with proper clearance for testing and maintenance purposes.

Requirements specific to Reduced Pressure Backflow Assemblies (RPBA)

1. An RPBA must have provisions that allow for safe and proper drainage.

2. A minimum 12 inch air gap separation must be maintained below the relief valve port. Larger separations may be required depending on the size of the assembly.

3. All RPBAs must be installed in an insulated box.

Requirements specific to Pressure Vacuum Breaker Assemblies (PVBA)

1. PVBA's must be installed a minimum of 12 inches above the highest downstream point.

2. PVBA's must be installed in a vertical configuration.

3. Compressed air fittings cannot be used on a system using a PVBA as backflow protection.

Requirements specific to Atmospheric Vacuum Breakers (AVB)

1. AVB's must be installed a minimum of six inches above the highest downstream point.

2. AVB's must be installed in a vertical configuration.

3. Compressed air fittings cannot be used on a system using an AVB as backflow protection.

4. There can be no control valves nor shut off valves installed downstream of the AVB.

5. There must be one AVB for each zone of the system.