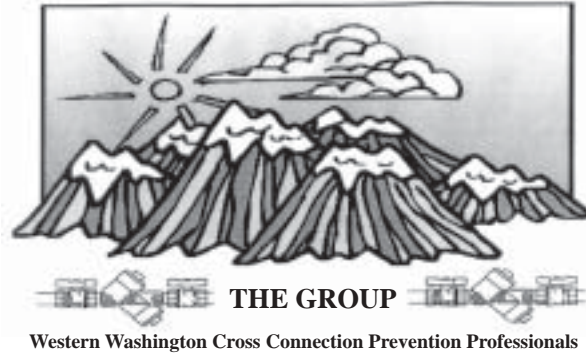


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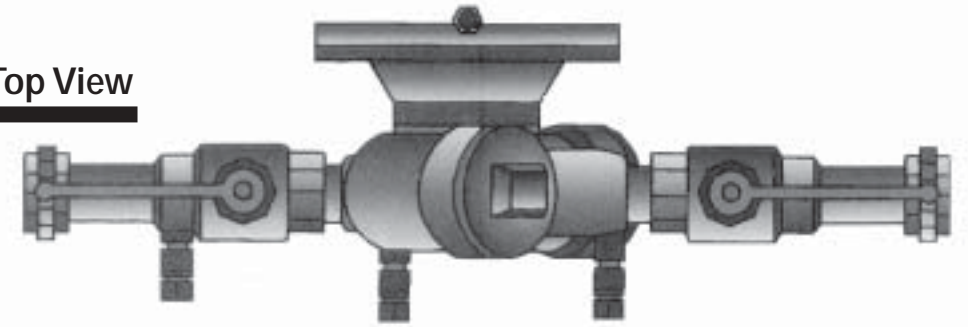
## Proper Installation Procedures for The Reduced Pressure Backflow Assembly & The Reduced Pressure Detector Assembly



Help Us Protect  
Your Drinking  
Water

For more information, special installation requirements or to schedule an initial inspection, please contact the local Water Purveyor.

### Top View

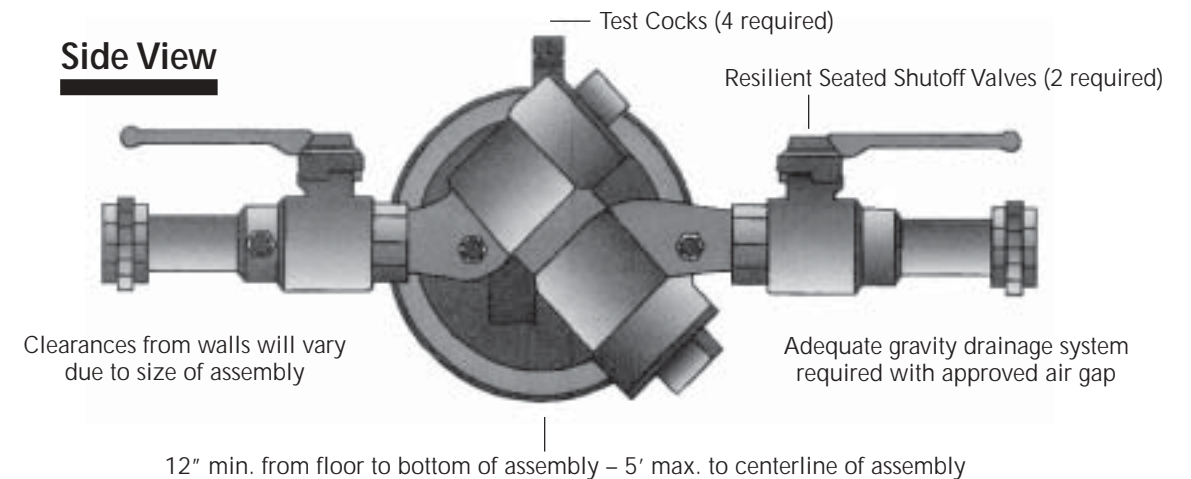


### Reduced Pressure Backflow Assembly/Reduced Pressure Detector Assembly

- 1) Thoroughly flush service line prior to installation of assembly.
- 2) The backflow assembly shall be a Washington State Approved Backflow Assembly and must be:
  - Installed as a unit,
  - Accessible for testing and maintenance,
  - Protected from freezing and vandalism, Installed no higher than 5 feet from floor to centerline of assembly and a minimum of 12 inches from floor to bottom of assembly, and
  - If installed\* in a vertical configuration, assembly must be a minimum of 23 inches from floor, and no higher than 5 feet from floor to center of #2 shut off valve.

\*Only assemblies with approval from USC & DOH
- 3) Do not install in an area subject to flooding. Assemblies must be installed above ground.
- 4) Assembly must be tested after initial installation, annually, after repairs or after relocation or reinstallation. Contact the Water Purveyor for inspection of all newly installed assemblies.
- 5) Test reports must be signed by a certified Backflow Assembly Tester and immediately sent to Local Water Purveyor.

### Side View



## Reduced pressure backflow assembly/reduced pressure detector assembly procedure requirements:

- 1) All assemblies must be on the Washington State Approved Backflow Assembly List. This list is available through the Department of Heath, (360) 236-3140/1800-521-0323.
- 2) **ALL ASSEMBLIES ARE REQUIRED TO BE TESTED BY A WASHINGTON STATE CERTIFIED TESTER UPON INSTALLATION AND ANNUALLY. IN ADDITION, ASSEMBLIES MUST BE TESTED AFTER REPAIRS, RELOCATION OR REINSTALLATION.**  
  
*Please note: Air gaps installed in lieu of a reduced pressure backflow assembly also require annual inspection. Test reports must be submitted immediately to Local Water Purveyor.*
- 3) Contact Local Water Purveyor for inspection of all newly installed assemblies.
- 4) When choosing the backflow assembly, consult Local Water Purveyor to ensure it is the right assembly for the application, is appropriate for the water temperature and is sized hydraulically to avoid excessive pressure loss.
- 5) When installing an assembly inside a building, ensure assembly is located where occasional spitting from the relief valve port, a fouled check, or water flushed out during the annual test will not be objectionable. Proper drainage must be provided.
- 6) Protect assembly from freezing, flooding and mechanical damage due to water hammer and excessive pressure build up.

## Assembly installation requirements for reduced pressure backflow assembly/reduced pressure detector assembly:

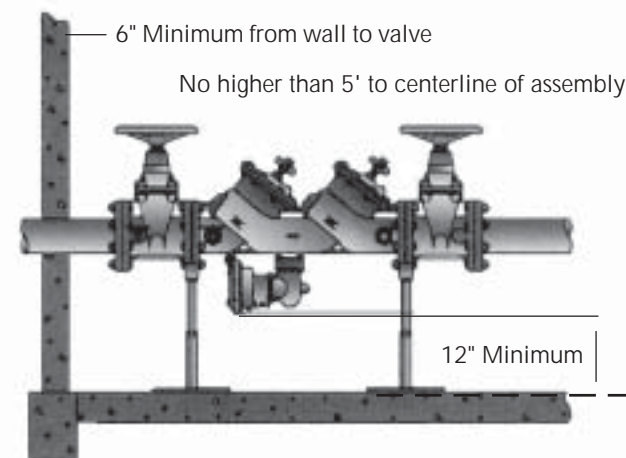
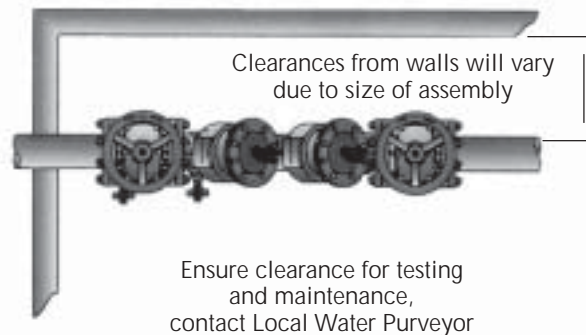
- 1) **CONTACT LOCAL WATER PURVEYOR TO ENSURE YOU ARE INSTALLING THE CORRECT ASSEMBLY FOR THE DEGREE OF HAZARD.**
- 2) Assembly must be installed as a unit, including two shut off valves, relief port, two check valves and four test cocks. All assemblies are required to be installed as a unit in the configuration they were approved by USC.
- 3) **THOROUGHLY FLUSH** the waterline prior to installing assemblies.
- 4) Assemblies must be installed a minimum of 12 inches from the bottom of the relief port, and no higher than 5 feet from floor\* to centerline of assembly. All assemblies must be installed horizontally, unless they have Washington State approval to be installed vertically. If installed in a vertical configuration, it must be a minimum of 12 inches from floor, and no higher than 5 feet from floor\* to center of the #2 shut off valve. All assemblies must maintain a sufficient clearance from any wall to ensure accessibility of maintenance and testing. Clearances may vary on small units - contact the Local Water Purveyor. Sizes 2 1/2 inches and larger in diameter may require additional space on one side of the assembly. Assemblies 2 1/2 inches and larger in diameter shall have support blocks to prevent flange damage.

\* An assembly installed more than 5 feet above floor or ground level must have a permanent platform under it for the tester or maintenance person to stand on. The platform must comply with all applicable safety standards and codes in effect.

**REDUCED PRESSURE BACKFLOW ASSEMBLIES CANNOT BE INSTALLED BELOW GROUND AT ANYTIME.**

**ASSEMBLIES MUST MEET ABOVE REQUIREMENTS TO ENSURE ACCESSIBILITY FOR TESTING, MAINTENANCE AND APPROVAL OF THE WATER PURVEYOR. VARIANCE OF ANY INSTALLATION MUST HAVE PRIOR WRITTEN APPROVAL OF LOCAL WATER PURVEYOR.**

### Top View



## Requirements for air gaps:

- 1) Air gap must be twice the diameter of the inlet pipe, minimum of 1 inch.
- 2) The air gap must provide a physical separation from the bottom of the inlet piping to the top of the overflow rim of the receiving vessel.
- 3) If inlet piping is cut diagonally to decrease splashing, the air gap separation is measured from the bottom of the cut to the receiving vessel.
- 4) If air gap is located near sidewalks, the separation increases to three times the diameter of the inlet piping, minimum of 1 1/2 inches.

## Reduced pressure detector assembly:

- 1) Assembly shall be installed as a unit as it is approved by DOH and USC.
- 2) All assemblies must maintain a sufficient clearance from any wall to ensure accessibility for maintenance and testing.
- 3) When testing a Reduced Pressure Detector Assembly, both assemblies must be tested and two test reports submitted to the Local Water Purveyor.
- 4) All other requirements are the same as the Reduced Pressure Backflow Assembly.

### Side View