

Backflow Prevention Assembly Standard Installation Criteria

The minimum acceptable criteria for the installation of reduced pressure backflow prevention assemblies, double check valve assemblies, or other approved backflow prevention assemblies requiring regular inspection and testing shall include the following:

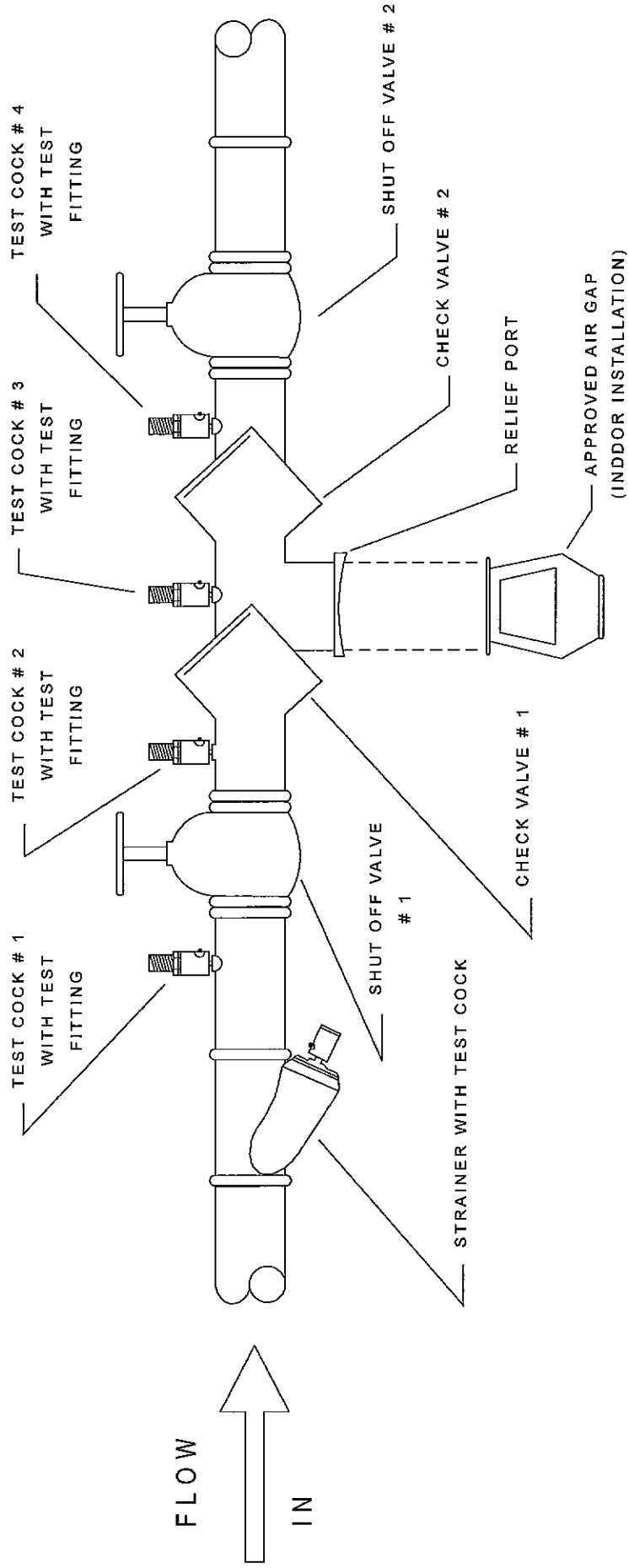
1. All required assemblies shall be installed in accordance with Section 17-94(5) of the Gallatin Municipal Code. Only licensed sprinkler contractors may install backflow prevention assemblies on fire protection systems.
2. All assemblies shall be installed in accordance with the manufacturer's instructions, and shall be equipped with the appropriate test cocks, fittings, and caps required for the testing of the device. All fittings shall be of brass construction, unless otherwise approved by the Department, and shall permit the direct connection of Department test equipment to the device for testing.
3. The entire assembly, including valves and test cocks, shall be easily accessible for testing and repair.
4. All assemblies shall be installed in the upright position in a horizontal run of pipe, unless the assembly is approved for vertical installation.
5. All assemblies shall be protected from freezing, vandalism, mechanical abuse, and from any corrosive, sticky, greasy, abrasive, or other damaging environment.
6. Assemblies shall be installed a minimum of twelve (12) inches plus the nominal diameter of the assembly above either; a) the floor, b) the top opening(s) in an enclosure, c) maximum flood level, which ever is higher. The maximum height above the floor surface shall not exceed sixty (60) inches.
7. Assemblies shall be installed with a clearance from wall surfaces or other obstructions of a minimum of six (6) inches. Assemblies installed in non-removable enclosures shall have a minimum of twenty-four (24) inches of clearance on each side of the assembly for testing and repair.
8. Assemblies shall not be installed where discharges from the relief port would create undesirable conditions. The relief port must never be plugged, restricted, or solidly piped to a drain.
9. Assemblies shall be installed such that an approved air-gap separates the relief port from any drainage system. An approved air-gap shall be at a

minimum of twice (2x) the inside diameter of the supply line, but in no case less than one (1) inch.

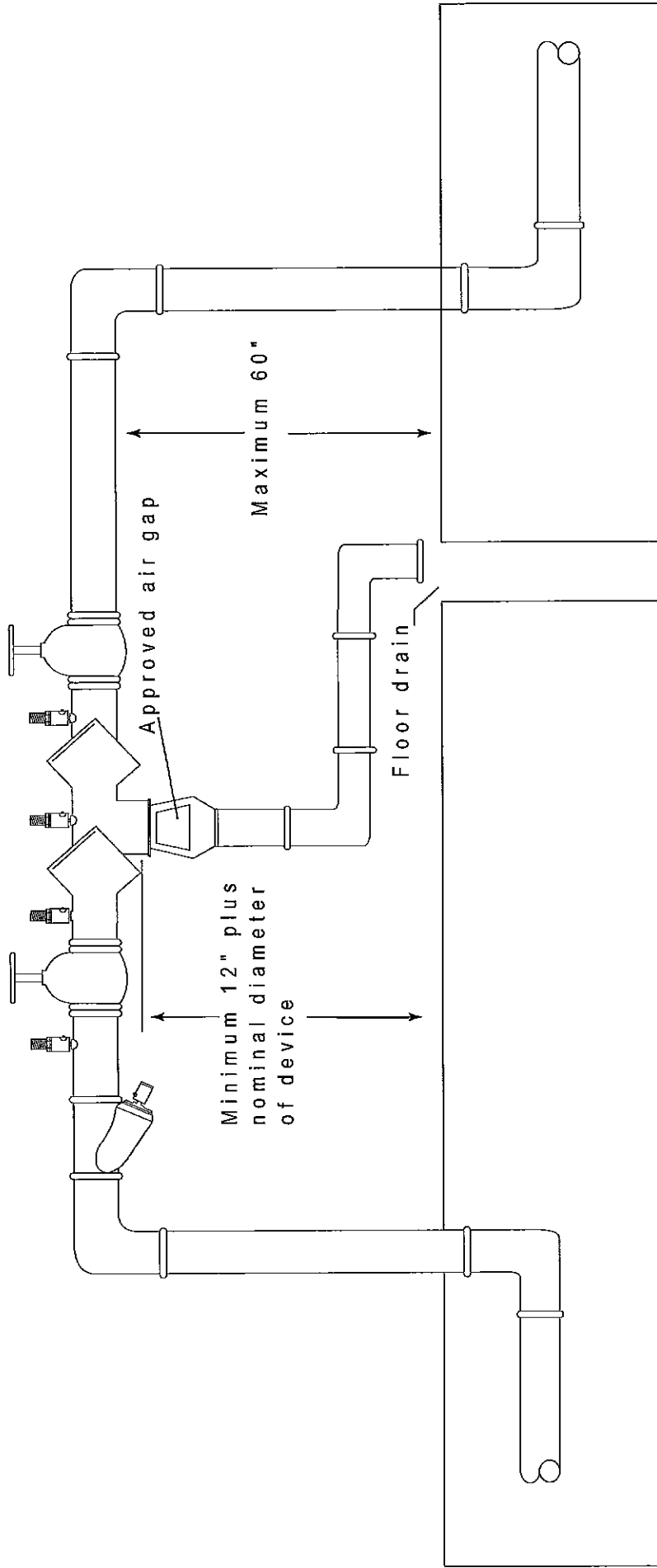
10. Assemblies shall be installed with an approved strainer immediately upstream of the backflow prevention assembly, except in the case of fire protection systems.
11. Assemblies shall be installed in areas free from submergence or flood potential, and therefore **never** in a below grade pit or vault.
12. Assemblies shall be adequately supported to prevent sagging.
13. Adequate drainage shall be provided for all assemblies. Reduced pressure backflow prevention assemblies shall be drained to the outside whenever possible.
14. Enclosures for outside installation of backflow prevention assemblies shall meet the requirements of ASSE 1060, *The Standard for Outdoor Enclosures for Backflow Prevention Assemblies*.
15. Where the use of water is critical to the continuance of normal operations or the protection of life, property, or equipment, duplicate backflow prevention assemblies shall be installed to avoid the necessity of discontinuing water service to test or repair the backflow prevention assembly. Where it is found that only one (1) assembly has been installed and the continuance of water service is critical, the Department shall notify, in writing, the customer of plans to interrupt water services and to arrange for a mutually acceptable time to test the assembly. In such cases the Department may require the installation of a duplicate assembly.
16. The Department shall require the customer and/or occupant of the premises to maintain any backflow prevention assemblies in proper working order, and to make all indicated repairs promptly (in no case greater than ninety (90) days, unless specifically approved by the Department). Expense of repairs shall be borne by the customer, owner, or occupant of the premises. Failure to maintain a backflow prevention assembly in proper working condition shall be grounds for discontinuance of water service to a premise. Likewise the removal, bypassing, or alteration of a backflow prevention assembly or the installation thereof, so as to render the assembly ineffective, shall constitute a violation of the Gallatin Municipal Code and shall be grounds for discontinuance of water service. Water service to such premises shall not be restored until the customer has corrected or eliminated such conditions to the satisfaction of the Department.

17. Assemblies shall be inspected and tested annually by Department personnel.
A fee of \$40.00 per device shall be added to the customers account and billed with the normal utility bill.

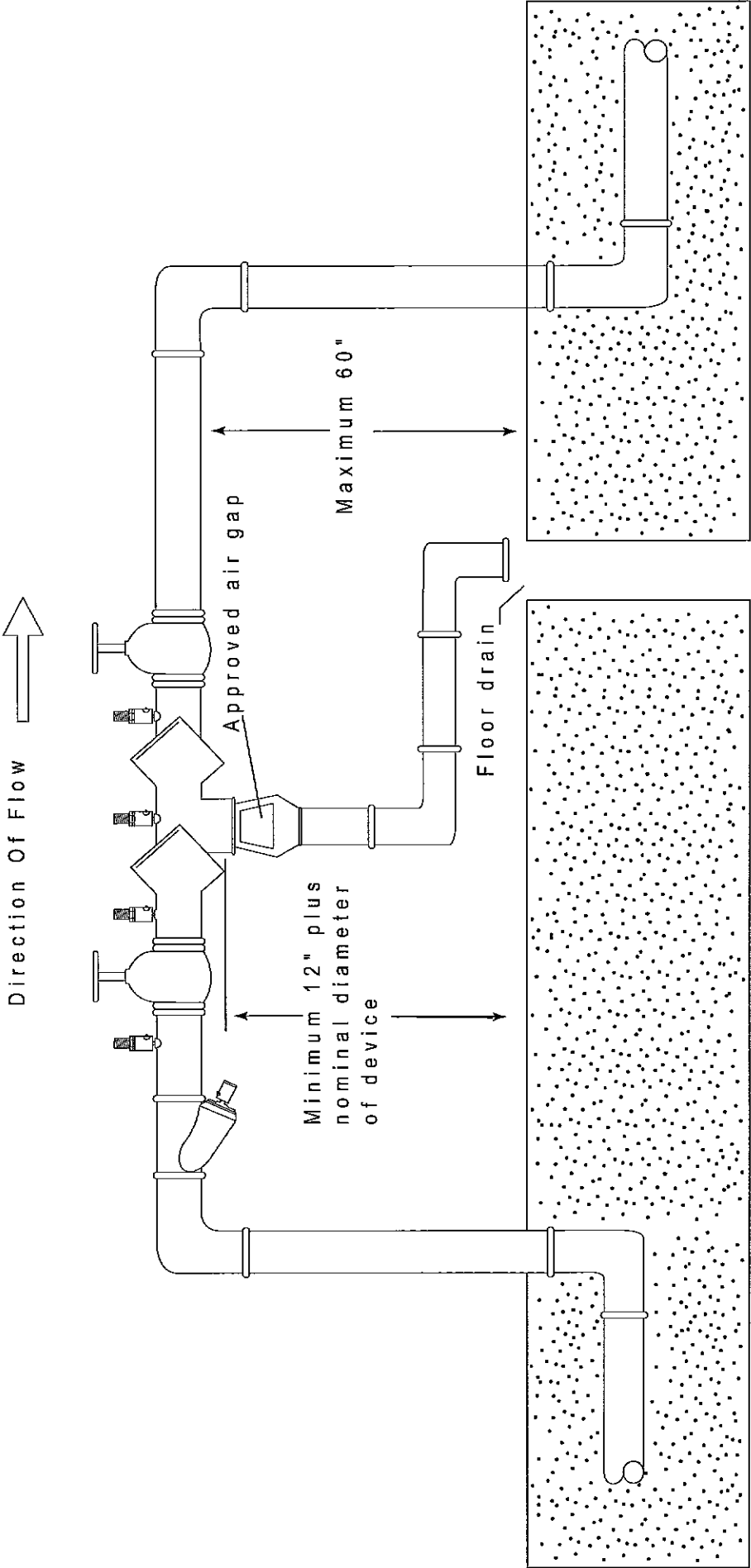
Detail of Reduced Pressure Backflow Prevention Device - Typical



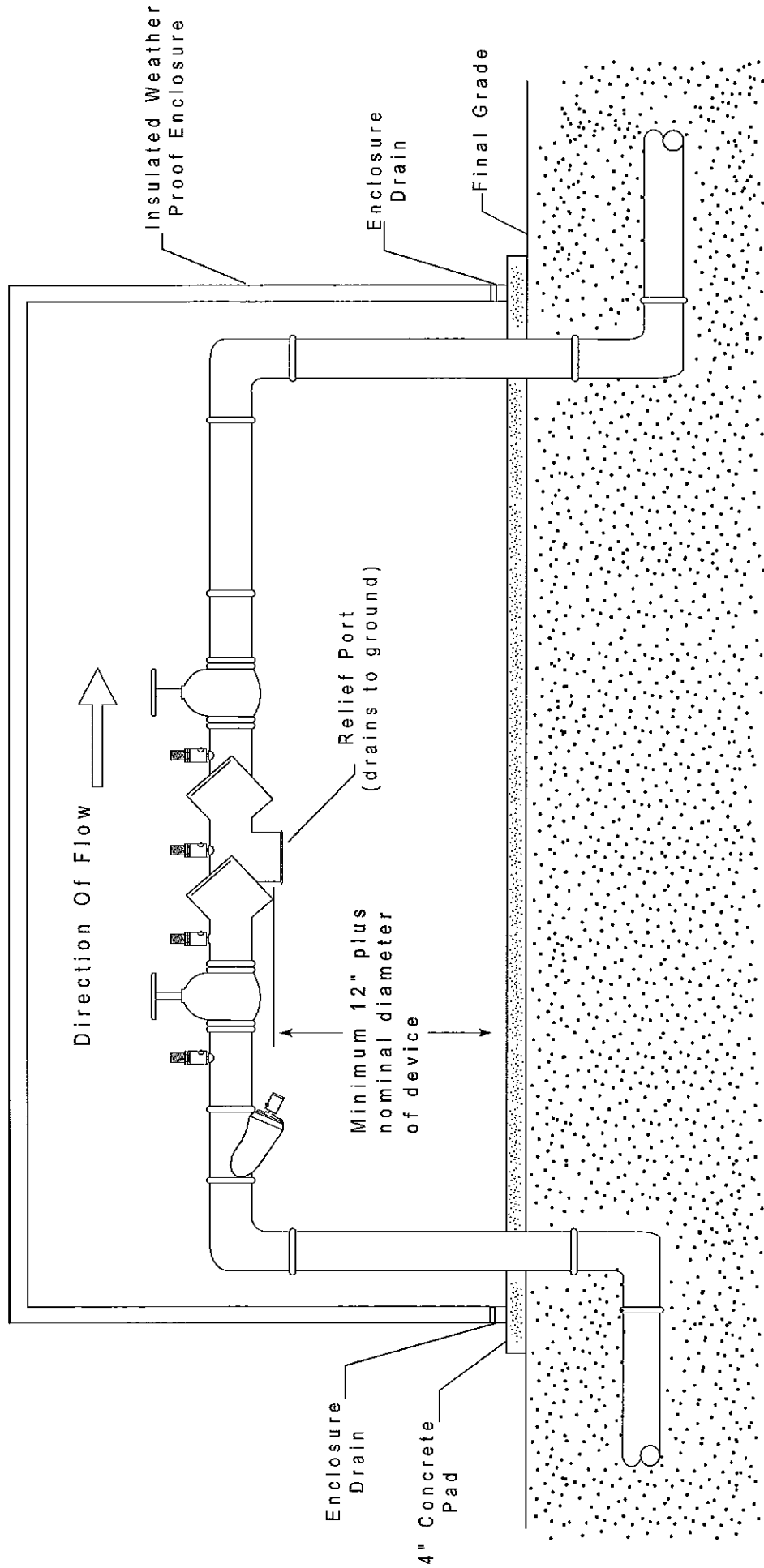
Direction Of Flow →



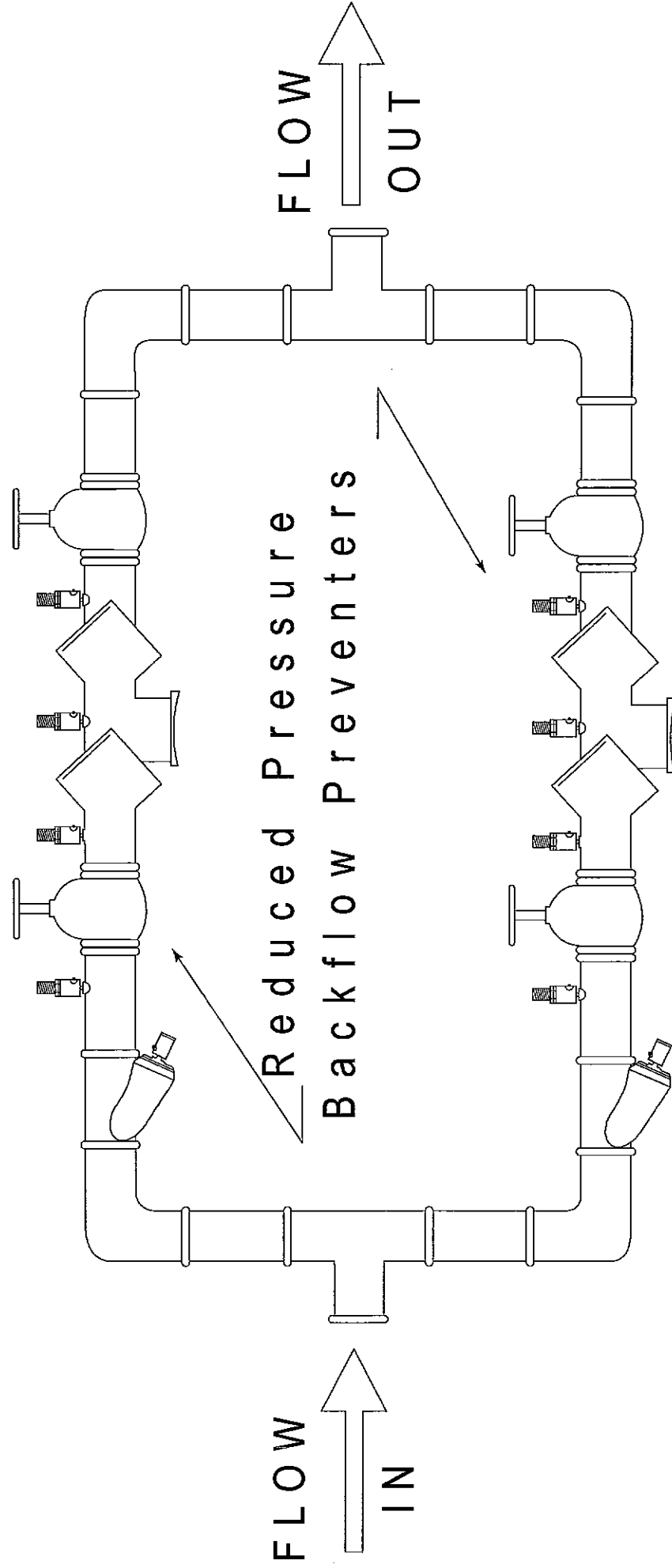
Detail of Reduced Pressure Backflow Prevention Device - Indoor Installation



Detail of Reduced Pressure Backflow Prevention Device - Outdoor Installation



Detail of Reduced Pressure Backflow Prevention Device - Dual (Manifold) Installation



Note: On dual installations, all minimum and maximum clearances must be met. On installations where one device is above the other, the clearance between the upper and lower device must also meet minimum clearance (12" plus the device diameter). The use of a single strainer is acceptable on dual units when approved by the Department.