Backflow and Cross Conneciton Program

Acton Municipal Utility District

Please call 817-326-4720 if you have any questions or concerns.

OUR REQUIREMENTS

The Texas Environmental on Quality Commission (TECQ) has many requirements on all water purveyors. One of the requirements that they impose on us is that we have an effective backflow and cross connection program in place to eliminate any unwanted substances into our potable water supply.

A cross-connection is any non-potable source of water or gas that is attached to any potable water supply. A very common cross-connection exist between irrigation systems and drinking water supplies. To help protect our water system we must make sure that there is sufficient backflow protection against any possible back flow.

The main goal of the backflow program is to ensure the safety of our customers. We believe that a good program will eliminate any potential problems from existing. As a condition of water service, all customers shall install, maintain, and operate their piping and plumbing systems in accordance with the UPC Plumbing code 2006. If there is a conflict between this guidance document and these codes, the more restrictive provision shall apply.

1. All installers are required to register with AMUD.
   a. A copy of current license and drivers' license is required to be on file at the AMUD office.
   b. Homeowners can install assembly if they occupy and homestead the home. Permit is required.
2. The District will perform customer inspections on all new construction before lines are covered up.
3. The District will conduct inspections on all existing facilities, including residential sprinkler systems. Customers will be required to repair, replace or install a viable backflow prevention assembly if any cross-connection hazards are found.
4. A permit will be required for all new sprinkler installations or when the backflow prevention assembly is replaced. Permit is not required when repairing existing sprinkler system unless the backflow prevention assembly is changed. Permit is to be completed prior to the installation of the new backflow prevention assembly or sprinkler system installation. The permit fee is to collected at time of permit issuance.
5. The District will perform the backflow prevention assembly testing on a periodic basis to ensure continued protection. Testing charge will be billed to customer account. We also test backflow prevention assemblies on new service to insure proper working condition of backflow devices.
6. **24 HOUR NOTICE TO AMUD IS REQUIRED TO SCHEDULE INSPECTIONS.**

A Good Backflow program is essential. We thank you for assisting us with our program in which the State Code (290.44) mandates us to maintain in good standing.

The type of Backflow Prevention Assembly is determined by the potential health risk involved. Typical applications listed below, if in doubt contact District Inspector:

Double Check Valve Assembly

- Sprinkler systems,

Reduced Pressure Valve Assembly (air Gap)

- Sprinkler systems with onsite sewer (septic)
- Carbonated Drink Dispensers
- Medical Services
- Swimming Pools

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Circumstances Requiring Use of Backflow Assemblies

At a minimum, a backflow prevention assembly is required in each of the following circumstances:

1. When the nature and extent of any activity at a premise, or the materials used in connection with any activity at a premise, or materials stored at a premise, could contaminate or pollute the potable water supply.
2. When a premise has one or more cross connections.
3. When internal cross connections are present that are not correctable.
4. When intricate plumbing arrangements are present that make it impractical to ascertain whether cross connection exists.
5. When a premise has a repeated history of cross contaminations being established or re-established.
6. When entry to a premise is unduly restricted so that inspections for cross connections cannot be made with sufficient frequency to assure that cross connections do not exists.
7. When materials are being used such that, if backflow should occur, a health hazard could result.
8. When installation of an approved backflow prevention assembly is deemed by an inspector to be ne3cessary to accomplish the purpose of these regulations.
9. When an appropriate cross connection survey report form has not been filed with the District.
10. When a fire sprinkler system using non-potable piping, material is connected to the District's water system.
11. In all new non-residential construction, there shall be installed an approved backflow assembly at the service connection. The type of the assembly will be commensurate with the degree of hazard as determined by an inspector.
12. When a building is constructed on commercial premises, and the end use of such building is not determined or could change, a reduced pressure principle backflow prevention assembly shall be installed at the service connection to provide protection on the public water supply in the event of the most hazardous use of the building.
13. If a premise is required to have backflow prevention assemblies, but water cannot be turned off during the testing of such assemblies, the premise shall be equipped with dual backflow prevention assemblies of the same type so that testing, repair and maintenance can be performed.
14. Any used water return system that has received approval from the District.
15. If a point-of-use assembly has not been tested or repaired as required by inspectors of the District, a premise isolation assembly shall be required.
16. If a backflow or plumbing inspector determines that additions or rearrangements have been made to the plumbing system without proper permits as required by the Plumbing Code, premise isolation shall be required.
17. All multistory buildings or any building with a booster pump or elevated storage tank.
18. Retrofitting shall be required on all health hazard connections and whenever else the District deems retrofitting necessary.
19. Any premise requiring multiple service connections for adequacy of supply and or fire protection shall have a backflow assembly on each service connection. The assembly shall be commensurate with the degree or protentional hazard that could occur in the event of an interconnect between any of the buildings on the premises.

Special Considerations

Thermal expansion – It is the responsibility of the property owner to eliminate the possibility of thermal expansion, if a closed system has been created by the installation of a backflow assembly.

Pressure Loss – Any water pressure drop caused by the installation of a backflow assembly shall not be the responsibility of the District.

The intent of this regulation is to protect the public water supply against actual or potential hazards which may jeopardize the safety of the water supply or which may endanger the health and welfare of the general public. Please call 817-326-4720 if you have any questions or concerns.

Additional Information may be found on our Web Site www.amud.com.

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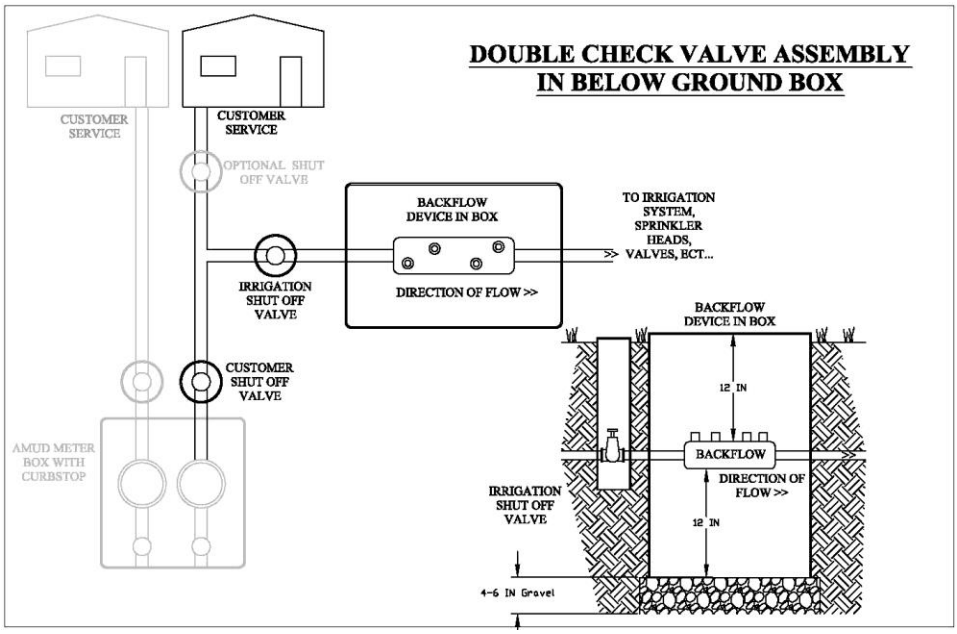
Installation Specifications

Backflow prevention assemblies shall be installed in accordance with the Plumbing Code and this Division. The assembly installed shall obtain the required plumbing permits prior to installation and shall have the assembly inspected by a certified cross connection inspector and as required by the Plumbing Code.

1. No part of a reduced pressure principle backflow prevention assembly shall be submerged in water or installed in a location subject to flooding. All assemblies installed below grade shall have non-ferrous threaded plugs inserted in the test ports.
2. The Backflow prevention assemblies must be installed prior to the irrigation system and after the water meter.
   a. Backflow prevention assembly must be within 2 feet of the meter box, *(See note 5a below).*
   b. A tee with a ball valve is required before you install your backflow prevention assembly. This is to ensure a continuous water supply to the residence during a leak or mechanical breakdown of the sprinkler system. An inspector may specify other areas for installation of the assembly.



3. A Double Check backflow assembly shall be protected from freezing and other severe weather conditions.
   a. Install valve box to grade or 1 inch above grade.
   b. Caps are required on all test cocks and ports to protect from dirt and debris.
   c. The box must have a minimum clearance of 6-inches on all sides of the assembly for testing purposes.
   d. The assembly is to be 12-inches below grade. The Box requires 12 inches of clearance under the Double Check Valve.
      i. Adequate drainage is required, do not install in a low-lying area where drainage could be a problem or in a flood prone area. Consult with AMUD inspector if location looks problematic.
      ii. The Backflow Device will need to be installed above grade if the Backflow Device is subject to standing water.
   e. The Double Check Valve MUST be installed to Manufactures Requirements. A copy of the manufacture's installation literature is to be left for homeowner and inspector.
4. All vertical installations shall be approved, in writing, prior to installation and all vertical installations must be of an assembly approved by the District.
5. The assembly shall be readily accessible with adequate room for maintenance and testing.
   a. Assemblies two (2) inches and smaller shall have at least 6-inch clearance on all sides of the assembly.
   b. Assemblies two (2) inches and larger shall have a minimum 12-inch clearance on the backside, 24-inch on the test cock side, 12-inches below the assembly and 36-inch above the assembly.
6. If the District grants written permission to install the backflow assembly inside of a building, the assembly shall be readily accessible between 8:00am and 4:30pm., Monday through Friday.
7. RP assemblies may be installed in a vault only if relief valve discharge can be drained through a bore sight type drain. The drain shall be of adequate capacity to carry the full rated flow of the assembly and shall be screened on both sides.
8. An approved air gap shall be located at the relief valve orifice of RP assemblies. This air gap shall be at least twice the inside diameter of the incoming supply line as measured vertically above the top rim of the drain and in no case less than 1-inch.