

8-1-6: CROSS CONNECTIONS:

- A. **Protection Required:** No water service connection to any premises shall be installed or maintained by the city unless the water supply is protected as required by state laws, regulations, codes and this chapter. Service of water to any premises shall be discontinued by the city if a backflow prevention assembly required by this chapter for control of backflow and cross connections is not installed, tested and maintained, or if it is found that a backflow prevention assembly has been removed, bypassed, or if an unprotected cross connection exists on the premises. Service will not be restored until such conditions or defects are corrected. (1995 Code § 91-6-1)
- B. **Inspections Authorized:** The water user's system shall be open for inspection at all reasonable times to authorized representatives of the city to determine whether cross connections or other structural or sanitary hazards, including violation of this chapter, exist. When such a condition becomes known, the city shall deny or immediately discontinue service to the premises by providing a physical break in the service line until the customer has corrected the condition in conformance with the state statutes and city ordinances relating to plumbing, water supplies and the regulations adopted thereto. (1995 Code § 91-6-2)
- C. **Backflow Devices Installed:** An approved backflow prevention assembly shall be installed on each service line at the water user's expense to a water user's system at or near the property line, or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line, whenever the city deems the protection of the water supply to be in the best interest of the water supply customers. (1995 Code § 91-6-3)
- D. **Type Defined By Degree Of Hazard:** The type of protective assembly required under this section shall depend upon the degree of hazard which exists at the point of cross connection (whether direct or indirect) as stipulated in the plumbing code. (1995 Code § 91-6-4)
- E. **Current Installations Excluded:** All presently installed backflow prevention assemblies which do not meet the requirements of this section, but were approved assemblies for the purposes described herein at the time of installation, and which have been properly maintained, shall, except for the inspection and maintenance requirements, be excluded from the requirements of these rules so long as the city is assured that they will satisfactorily protect the public water system. Whenever the existing assembly is moved from the present location, or requires more than minimum maintenance, or when the city

finds that the maintenance of this assembly constitutes a hazard to health, the unit shall be replaced by an approved backflow prevention assembly meeting the requirements of this chapter. (1995 Code § 91-6-5)

- F. Responsibility For Inspections: It shall be the duty and responsibility of the water user at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made at least once per year at the water user's expense. In those instances where the city deems the hazard to be great, the city may require certified inspections and tests at more frequent intervals. These inspections and tests shall be performed by a certified backflow assembly technician, licensed through the state department of health. It shall be the duty of the city to see that these tests are made according to the standards set forth by the state department of health, bureau of public water supplies. Annual testing will be completed prior to September 1 of each year. (1995 Code § 91-6-6)
- G. Installation Of Backflow Devices: Backflow prevention assemblies shall be installed in water supply lines to provide at least the degree of protection stipulated in the plumbing code. All backflow prevention assemblies shall be readily accessible for inspection and testing. No backflow prevention assembly shall be installed so as to create a safety hazard, i.e., installed over an electrical panel, steam pipes, boilers, pits or above ceiling level. All hose bibs that have threads to accept a garden hose must have an approved hose bib vacuum breaker. (1995 Code § 91-6-7; amd. 2003 Code)
- H. Maintenance Of Backflow Devices: All backflow prevention assemblies installed in the city water system for protection against backflow shall be maintained in good working condition by the person or persons having control of such assemblies. The state department of health, bureau of public water supplies, and the city may inspect such assemblies and, if found to be defective or inoperative, shall require the replacement thereof. No assembly shall be removed from use, relocated or another assembly substituted, without the approval of the city. (1995 Code § 91-6-8)
- I. Testing Of Backflow Devices: All backflow prevention assemblies shall be tested within ten (10) working days of installation. (1995 Code § 91-6-9)
- J. Backflow Devices Mandatory: In order to protect the public potable water supply of the city from the possibility of contamination or pollution by isolating within the water user's internal distribution system or the water user's private water system such contaminants or pollutants which could backflow into the public water systems, and to promote the elimination or control of existing cross connections, actual or potential, between the water

user's in plant potable water system, and nonpotable water system, plumbing fixtures and industrial piping system, it shall be mandatory that all water users install backflow prevention devices in accordance with the currently adopted plumbing code. All sprinkling systems connected to the city potable water system shall have backflow protection. (1995 Code § 91-6-10; amd. 2003 Code)

- K. **Water Superintendent Responsible For Protection:** The water superintendent shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connection. If, in the judgment of said water superintendent, an approved backflow prevention assembly is required (at the water user's water service connection, or within the water user's private water system) for the safety of the water system, the water superintendent or his designated agent shall give notice in writing to said water user to install such an approved backflow prevention assembly at specific locations on his premises. The water user shall immediately install such approved assembly at the water user's own expense, and failure, refusal or inability on the part of the water user to install, have tested and maintain said assembly shall constitute grounds for discontinuing water service to the premises until such requirements have been satisfactorily met. (1995 Code § 91-6-11)
- L. **Responsibility Of Building Official:** The building official has the responsibility, not only to review building plans and inspect plumbing as it is installed, but it also has the explicit responsibility of preventing cross connections from being designed and built into the structures within its jurisdiction. Where the review of building plans suggests or detects the potential for a cross connection being made an integral part of the plumbing system, the building official has the responsibility to require such cross connections be either eliminated, or provided with an approved backflow prevention assembly in accordance with the plumbing code. The building official's responsibility begins at the point of service (the downstream side of the meter) and carries throughout the entire length of water user's water system. The building official should inquire about the intended use of water at any point where it is suspected that a cross connection might be made or where one is actually called for by the plans. When such a cross connection is discovered, it will be mandatory that a suitable, approved backflow prevention assembly be required by the plans and be properly installed, in accordance with the plumbing code. (1995 Code § 91-6-12; amd. 2003 Code)
- M. **Certified Backflow Assembly Technician:** When employed by the water user or the city to test, repair, overhaul and/or maintain backflow prevention assemblies, a backflow assembly technician will have the following responsibilities:
1. Be responsible for ensuring acceptable testing equipment and procedures are used for testing, repairing or overhauling backflow prevention assemblies.

2. Make reports of such testing and/or repair to the water user, the city, and the bureau of public water supplies on forms approved for such by the bureau of public water supplies.
3. The report shall include the list of materials or replacement parts used.
4. It is the technician's responsibility to ensure replacement parts are equal in quality to parts originally supplied by the manufacturer of the assembly being repaired.
5. It will be the technician's responsibility not to change the design, material or operational characteristics of the assembly during repair or maintenance.
6. A certified technician shall perform the work tests and be responsible for the competence and accuracy of all tests and reports.
7. It will be the technician's responsibility to ensure his license is current, the testing equipment being used is acceptable to the state, and is in proper operating condition.
8. Failure to report a failing assembly to the bureau of public water supplies and the city within five (5) working days, may be grounds for revocation of the technician's certification.
9. The technician shall be equipped with, and be competent to use, all necessary tools, gauges and other equipment necessary to properly test, repair and maintain backflow prevention assemblies.
10. The certified technician must tag each double check valve, pressure vacuum breaker, reduced pressure backflow assembly and air gaps, showing the serial number, date tested and by whom. The technician's license number must also be on this tag.
11. In the case of a water user requiring a commercially available technician, any certified technician is authorized to make the test and report the results of that test to the water user, the city and the bureau of public water supplies. If such a commercially tested assembly is in need of repair, a licensed plumber shall make the actual repair. (1995 Code § 91-6-13; amd. 2003 Code)