

**Appendix B.**  
**Cross-Connection Control Program**

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## **Policy on Cross-Connections**

JEA agrees with the American Water Works Association's (AWWA) statement issued on cross-connection and it is as follows:

The American Water Works Association (AWWA) recognizes water purveyors have the responsibility to supply potable water to their customers. In the exercise of this responsibility, water purveyors or other responsible authorities must implement, administer and maintain ongoing backflow prevention and cross-connection control programs to protect public water systems from the hazards originating on the premises of their customers and from temporary connections that may impair or alter the water in the public water systems. The return of any water to the public water system after the water has been used for any purpose on the customer's premises or within the customer's piping system is unacceptable and opposed by AWWA.

The water purveyor shall assure that effective backflow prevention measures, commensurate with the degree of hazard, are implemented to ensure continual protection of the water in the public water distribution system. Customers, together with other authorities, are responsible for preventing contamination of the private plumbing system under their control and the associated protection of the public water system.

A statement adopted by Board of Directors of the American Water Works Association on Jan. 26, 1970, revised June 24, 1979 and reaffirmed June 10, 1984 and revised Jan, 28, 1990 and Jan. 21, 2001, reaffirmed Jan. 16, 2005; and, revised Jan. 17, 2010.

## Introduction

A cross-connection is defined in the rules of the Department of Environmental Protection (DEP), of the State of Florida, Chapter 62-550 of the Florida Administrative Code (FAC) as "Any physical arrangement whereby a public water supply is connected, directly or indirectly with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains or may contain contaminated water, sewage and other waste or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as the result of backflow. By-pass arrangements, jumper connections, removable sections, swivel or changeable devices and other temporary or permanent devices through which or because of which backflow could occur are considered to be cross-connections." Consequently, either cross-connection or the chance of backflow must be eliminated to prevent degrading the high quality of water that water purveyors strive to maintain.

Initially, the primary responsibility for safeguarding water quality on private property and eliminating cross connections and preventing backflow, was left to local health agencies and building and inspection departments. Then, beginning with the Safe Drinking Water Act, signed by President Ford on Dec. 16, 1974, a chain of laws and regulation evolved that resulted in the State requirement (Florida Safe Drinking Water Act, Sections 403.850-403.864, Florida Statutes) for all the public water systems to have a cross-connection control program contained within the Rules of Department of Environmental Protection (DEP), Chapter 62-555, FAC, State of Florida, on Jan. 3, 1991, amended Aug. 28, 2003, adopted the following policy:

Community water systems shall establish a routine cross-connection program for the purpose of detecting and preventing cross-connections that create an imminent and substantial danger to the public health by and from contamination due to the cross-connection. Upon discovery of a prohibited cross-connection, both community and non-community water systems shall either eliminate the cross-connection by installation of an appropriate backflow prevention device acceptable to the Department (DEP) or discontinue service until the contaminate source is eliminated, Chapter 62-555.360(3), FAC.

This statement was later updated to include that "Such program shall be developed utilizing accepted practices of the American Water Works Association guidelines as set forth in AWWA manual M14, "Recommended Practice for Backflow Prevention and Cross-Connection Control, 3rd Edition." In compliance with this mandate, the following is JEA's Policy on Cross-Connection Control.

We urge you to acquaint yourself with the policies and information presented in this manual. It is only through the education and commitment of persons like yourself that we can control the hazards presented by cross connections within our public drinking water supply. JEA stands behind this policy and its enforcement and will offer its assistance to all who share the responsibility of safe water.

## **B-1 Overview**

### **B-1.01 Purpose**

The purpose of this Policy is to protect JEA's public potable water supply from the possibility of contamination. This policy is to promote the elimination or control of existing cross-connections, actual or potential, between its customers' in-plant plumbing fixtures and industrial piping and the public water supply; and to provide for the maintenance of a continuing program of cross-connection control that will systematic and effectively prevent the contamination of the potable water distribution system. More exactly, the Policy is intended to prevent delivered water (water that has passed beyond the public water system and into the private distribution systems of consumers) from re-entering the public distribution system and being subsequently delivered to consumers. This allows persons active in piping design and installation to incorporate and install appropriate backflow prevention assemblies correctly.

### **B-1.02 Causes of Backflow**

The causes of backflow are not usually eliminated completely since backflow is often initiated by accident or unexpected circumstances. However, some causes of backflow can be partially controlled by good design and informed maintenance. Listed below are the major causes of backflow as outlined under the two types: backsiphonage and backpressure.

1. **Backsiphonage** - is caused by reduced or negative pressure being created in the supply piping. The principal causes of backsiphonage are:
  - a) Line repair or break lower than a service point. This will allow negative pressures to be created by water trying to flow to a lower point in the system.
  - b) Undersized piping - if water is withdrawn from a pipe at a very high velocity, the pressure in the pipe is reduced and the pressure differential created can cause water to flow into the pipe from a contaminated source.
  - c) Lowered pressure in water main due to high water withdrawal rate such as fire fighting, water main flushing, or water main breaks.
  - d) Reduced main pressure on suction side of a booster pump.
2. **Backpressure** - may cause backflow to occur where a potable water system is connected to a non-potable system of piping, and the pressure in the non-potable system exceeds that in the potable system. The principal causes of back pressure are:
  - a) Booster pump systems designed without backflow prevention assemblies.
  - b) Potable water connections to boilers and other pressure systems without backflow prevention assemblies.
  - c) Connections with another system which may at times have a higher pressure.

- d) Water stored in tanks or plumbing systems which, by virtue of their elevation, would create head sufficient to cause backflow if pressure were lowered in the public system.

## **B-2 Responsibilities**

### **B-2.01 Cross-Connection Control Program**

The responsibilities of JEA's cross-connection control program in accordance with State Law Chapter 62-555, FAC are as follows:

1. To protect JEA's public water supply from the possibility of contamination by isolating within its consumers' private water systems, contaminants or pollutants which could, under adverse conditions, backflow through uncontrolled cross-connections into the public water system.
2. To eliminate or control existing cross-connections, actual or potential, between the consumer on site potable water system(s) (i.e. well) and non-potable water system(s) plumbing fixtures, and industrial piping systems.
3. To provide a continuing inspection program, of cross-connection control, which will systematically and effectively control all actual or potential cross-connecting which may be installed in the future.

### **B-2.02 Customers**

The customers' responsibility starts at the point of delivery from the public potable water system and includes all of their water systems. The customer, at their own expense, shall install, operate, test and maintain approved backflow prevention assemblies, as directed by JEA. The customer shall maintain accurate records of tests and repairs made to backflow prevention assemblies and provide JEA with copies of such records. The records shall be on forms approved by JEA.

In event of accidental pollution or contamination of the public or consumers' potable water system due to backflow on or from customer's premises, the owner shall promptly take steps to confine further spread of pollution or contamination within the customers' premises, and shall immediately notify JEA of the hazard.

### **B-2.03 Backflow Prevention Assembly Installers**

Installation of backflow preventers shall be by certified plumbers and requires a permit through the City of Jacksonville Plumbing Inspection Division. Backflow preventers installation shall be in accordance with the manufacturers' installation instructions and any additional instructions approved by JEA. All backflow devices shall be installed adjacent to the right-of-way on private property within 10 feet of the water meter, unless approved by JEA.

When replacing a failed, damaged or stolen backflow preventer, the installer shall follow JEA requirements to install a reduced pressure backflow preventer in commercial applications, with the possible exception of fire devices where water pressure is an issue.

Installer is also responsible to make sure an assembly is working properly when it is installed, and is required to furnish the following information to the Cross-Connection Control Office immediately after a backflow prevention assembly is installed:

1. Service address and ZIP code where device is located
2. Owner and JEA account number
3. Description of device's location and meter number
4. Date of installation
5. Type of device
6. Manufacturer
7. Model number
8. Serial number

All backflow preventers are required to be tested following installation by a JEA approved certified backflow preventer tester. All test reports shall be submitted to JEA upon installation.

### **B-3 Inspections**

#### **B-3.01 Frequency**

JEA shall have free access to the premises of any user of its water supply for the purpose of inspecting, and/or testing the backflow devices installed or to inspect the premises to determine if there are any cross-connections. Devices shall be installed so that they are easily accessible for inspection, testing, maintenance and repair.

For premises where reclaimed water is available JEA will perform site inspections. These inspections will be on the customer's premises and will consist of, but are not limited to:

1. Notifying customer of site inspection
2. Checking Irrigation system for excess runoff
3. Visual check for Cross-connection
4. Test potable water for signs of reclaimed water
5. Verify backflow device is installed and has current certification
6. Physical check of all outside hose connections

The initial inspections will be performed by JEA when the reclaimed water meter is installed and connected to the irrigation system. The periodic inspection will be performed by JEA every two years. JEA will also perform site inspection when the reclaimed service is cut on in a new customer's name or when the service status changes to active.

#### **B-3.02 Proposed Constructions**

All new construction plans and specifications for commercial facilities shall be reviewed by JEA to determine the degree of potential cross-connection hazard. At this time, backflow prevention requirements in accordance with this policy will be made.

### **B-3.03 New and Existing Facilities**

To determine the degree of hazard to the public potable water system, a survey will be made of the consumers' presently installed water system. This survey need not be a detailed inspection of the location or disposition of the water mains but can be confined to establishing the water uses on the premises for the existence of cross-connections, and the availability of auxiliary or used water supplies. On-site inspections are made of new and existing facilities and should any devices or plumbing change be required, a follow-up inspection will be made of the same facilities at a later date.

## **B-4 Cross-Connection Hazards and Required Protections**

### **B – 4.01 Facilities - Type of Backflow Protection Required**

In most cases, a cross-connection to the public water supply is eliminated by the presence of an approved backflow preventer. The following details the types of backflow prevention required on commercial, residential and fire service water lines. This list is presented as a guideline and should not be construed as being complete. Abbreviations used are as follows:

AG - Air Gap Separation- B-8.01

RP - Reduced Pressure Backflow Assembly –B-8.04

RPDA - Reduced Pressure Detector Assembly–B-8.04

DCDA – Double Check Detector Assembly – B-8.03

DCVA or DC- Double Check Valve Assembly – B-8.02

RDC – Residential Dual Check – B-8.05

#### **Commercial Facilities –**

Since before 1990, the Building Inspection Division has required the installation of backflow preventers on all new commercial water service lines. JEA supports this policy and requires backflow preventers to be maintained on all commercial facilities built since 1990. Commercial facilities built prior to 1990 that present a hazard to the public water system must also maintain a backflow preventer. Unless otherwise authorized, commercial facilities must maintain a reduced pressure backflow preventer on their water service lines. The following tables provides examples of facilities presenting a hazard to the water system and the required backflow preventer.



JEA Rules and Regulations for Water, Sewer, & Reclaimed Services  
Appendix B. Cross-Connection Control

<b>TYPE OF FACILITY</b>	<b>MINIMUM TYPE OF PROTECTION</b>
Apartments with fire hydrants, blow offs, pools, or irrigation systems	AG at pool or RP
Automobile Service Centers	RP
Beverage Plant or Bottling Plant	RP
Breweries, Distilleries	RP.
Car Wash with recycling system and/or Wax Inductor	RP
Chemical Plants	RP
Chemical or petroleum storage facilities	RP
Commercial services where reclaimed water is available	RP
Commercial services with an auxiliary water system connected or not connected to public water system	RP
Commercial services using a steam boiler, cooling system, or hot water heating system where chemical water conditioners are used	RP
Commercial services utilizing a water storage tank, reservoir, pond, or similar appurtenance as a water supply.	RP
Commercial services with submerged water supply inlets.	RP
Dairies	AG or RP
Dentist or Doctors Office	RP
Exterminating Company (Pesticides) <sup>2</sup>	AG or RP
Fertilizer Plants	RP
Film Laboratory or Processing Plant	RP
Hospitals, Clinics, Medical Facilities	RP (Parallel)
Hotels and Motels	RP
Irrigation Systems with elevated or pop-up sprinkler heads	RP
Irrigation Systems with chemical injectors	RP
Laundries, Dry Cleaning, or Dye Works	RP
Laundromats	RP
Machine Tool Plants	RP
Master Metered Strip Shops	RP
Metal Plating Plant	RP

JEA Rules and Regulations for Water, Sewer, & Reclaimed Services  
Appendix B. Cross-Connection Control

<b>TYPE OF FACILITY</b>	<b>MINIMUM TYPE OF PROTECTION</b>
Mobile Home/Travel Trailer Parks with fire hydrants, blow offs, pools, or irrigation systems.	RP
Morgues or Mortuaries	RP
Nursing Homes	RP
Packing Houses or Rendering Plants	RP
Paper Products Plant	RP
Parks/Recreational Facilities	RP
Petroleum Processing Plant	RP
Petroleum Storage Plant	RP
Pharmaceutical or Cosmetic Plant	RP
Piers, Docks or Waterfront Facilities	RP
Power Plants	RP
Radioactive Material Plants	RP
Restaurants / Food Service Establishments	RP
Sand and Gravel Plants	RP
Schools	RP
Swimming Pools with Piped Fill Line	AG at pool or RP
Sewage Treatment Plants	RP
Sewage Pumping Stations	RP
Storm Water Pumping	RP
Tall Buildings over three stories	RP
Veterinary Establishments	RP

<sup>1</sup> Refer to Appendix A. Reclaimed Water for more information on Reclaimed Water.

<sup>2</sup>Exterminating Companies-All tanks, tank trucks, and spraying apparatus used to convey pesticides in an exterminating process are required to use only designated-protected potable water fill locations. Filling with potable water at unspecified locations or private residences is prohibited. All filling locations will consist of overhead piping arrangements with correctly installed air-gap. If, for any reason, an overhead piping arrangement cannot be used, a reduced pressure zone backflow assembly must be installed on the fill line. All filling locations must be approved by JEA.

An approved backflow preventer of the type designated shall be installed on each residential water service connection to any premises containing the following real or potential hazards.

<b>MINIMUM TYPE OF PROTECTION (RESIDENTIAL SERVICE CONNECTIONS)</b>	
Premises utilizing an auxiliary water system (well, pond, or other system connected or not connected to the public water system).	RP
Premises utilizing a solar hot water system with chemical addition.	RP
Premises with swimming pools with piped fill line.	AG or RP
Premises with piped fill lines for fountains.	AG or RP
Premises utilizing in-ground irrigation systems.	DCVA <sup>3</sup> ,RP <sup>4</sup>
Premises that have reclaimed water available for irrigation or other uses. <sup>1</sup>	DCVA,RP,RDC <sup>2</sup>

<sup>1</sup> Refer to Appendix A. Reclaimed Water for more information on Reclaimed Water.

<sup>2</sup> Refer to Section B-4.02 for conditions allowing the use of RDC devices.

<sup>3</sup> DCVA allowed if the residential irrigation service connection was made prior to May 2014 and there is no chemical feed system.

<sup>4</sup> RP required if backpressure may exist, if a pump is utilized, or if chemicals are added to the irrigation system. RP is allowable in lieu of DCVA.

#### **B-4.02 Residential Premises with a Reclaimed Water System**

For residential premises serviced with reclaimed water, any one of the three options below is available.

1. Reduced-Pressure Principle Assembly (RP)<sup>1</sup>
2. Double Check Valve Assembly (DCVA)<sup>1</sup>
3. Residential Dual Check (RDC) device<sup>2</sup> plus any ***one*** of the following measures:
  - a. Customer Agreement<sup>3</sup>
  - b. Managed Properties<sup>4</sup>

According to Florida Plumbing code, installation of a backflow preventer on the domestic water line necessitates the installation of an expansion tank on the home's hot water tank.

Notes:

<sup>1</sup>All residential RPs and DCVAs must be tested once every two years.

<sup>2</sup>Upon installation of a RDC, a certification of installation must be submitted to JEA. Dual check devices must be replaced at least every five years.

<sup>3</sup>Customer Agreements: The customer shall sign an agreement provided by JEA that prohibits the customer from cross-connecting the customer's reclaimed water system to the customer's potable water system. Failure to abide by the agreement will result in discontinuation of service. Service may be restored once the cross connection is eliminated and a residential dual check device is replaced by a reduced pressure backflow preventer.

<sup>4</sup>**Managed Property:** Managed properties are those under the jurisdictional control of a third-party with established restrictions on the use/modification of the properties such that the customer is prohibited from altering/tampering with the property's potable water system and auxiliary or reclaimed water system. The third-party's legal instrument establishing the restrictions shall be reviewed and kept on file by JEA.

**B-4.03 Installations Requiring Continuous Service: Parallel Installation**

All non-residential backflow prevention assemblies with test cocks are required to be tested with a minimum frequency of once per year. Testing requires a water shutdown usually lasting five (5) to twenty (20) minutes. For facilities that require an uninterrupted supply of water, and when it is not possible to provide water service from two separate meters, provisions shall be made for a "parallel installation" of backflow preventer.

Multi-story buildings that have a number of flush-o-meter toilets should be equipped with parallel assemblies. Experience has shown if the water supply is shut off to this type of building, flush-o-meters may have to be manually reset. During testing, one assembly is left on while the other is being tested. Usually the two assemblies are sized one device size smaller than the service line, e.g. one 2-inch device or two 1½-inch devices, one 8-inch device or two 6-inch devices. JEA will not accept an unprotected bypass around a backflow assembly when the assembly is in need of testing, repair, or replacement.

**B-4.04 Type of Backflow Protection Required - Fire Protection Services**

An approved backflow preventer of the type designated shall be installed on each fire protection service to any premises where the fire protection system contains any of the following components unless JEA determines that there is no real or potential hazard to the public water system. The following are typical:

<b>MINIMUM PROTECTION</b>		
<b>Metered Service</b>	<b>Unmetered Service</b>	
DC	DCDA	None of the following are present: booster pumping; connection to auxiliary water supply or chemical feeds
RP	RPDA	Any of the following are present: booster pumping; connection to auxiliary water supply or chemical feeds

#### **B-4.05 Other Cross-Connection Hazards**

1. **Fixture Inlets (or Valved Outlets)** with hose attachments, which may constitute a cross-connection, shall be protected by the proper approved vacuum breaker (AVB, HBVB, etc.) installed at least six (6) inches above the highest point of usage and located on the discharge side of the last valve. Fixtures with an integral vacuum breaker, manufactured as a unit may be installed in accordance with their approved requirements.
2. **Air condition Cooling Tower** - Potable water inlet shall have a reduced pressure zone backflow assembly attached.
3. **Aspirators and Ejectors** - Shall have an AVB or PVB, depending upon the degree of hazard, on the faucet from which these devices are attached or operated.
4. **Booster Pumps** - Shall not be interconnected unless the public supply is protected by an RP at the service connection, and approval is given by JEA.
5. **Private Wells** - Shall not be interconnected unless the public supply is protected by an RP at the service connection, and approval is given by JEA.
6. **Portable Spray and Cleaning Equipment** - Any portable pressure spray or cleaning units that have the capability of connecting to any potable water supply and do not contain a built-in approved air gap, should be fitted with a reduced pressure backflow assembly.
7. **Miscellaneous uses of Water from Fire Hydrants** - The operation of fire hydrants by other than authorized personnel is prohibited. The department may permit the use of water from a hydrant for construction or other purposes provided the applicant shall properly apply for and adhere to the backflow requirements on a hydrant permit. Any backflow devices used on a fire hydrant shall be tested and recertified every 6 months.
8. **Vacuum Breakers** (vacuum relief valves) designed to prevent collapse or implosion of a heated pressure vessel when being cooled are not acceptable devices for protection against backflow in potable water line.

**Note:** Any device, equipment, or situation not covered by this cross-connection policy that may constitute a potential health hazard will be examined for appropriate treatment by JEA's authorized agent.

**Note:** Single-check valves will not be accepted as a means of protecting the potable drinking water and therefore may only be used to prevent backflow which would affect the functioning of a plumbing system, such as to prevent recirculation of potable hot water. Where single-check valves are improperly used, they will be required to be replaced by an appropriate approved backflow prevention assembly.

### **B-5 Testing of Backflow Preventers**

It shall be the duty of the customer-user at any premises where a testable device is installed, to have thorough inspections and operational tests made at a frequency equal to or greater than the minimum frequencies stipulated by JEA for each customer category. The minimum testing frequency for non-residential backflow preventers is once every year. The minimum testing frequency for residential backflow preventers is once every two years. If inspections warrant, JEA may require the customer-user to test backflow preventers on a more frequent basis. These inspections and tests shall be at the expense of the water user and be performed by the assembly manufacturers' representative, by JEA personnel, or by a certified device technician. The water purveyor will notify the customer-user when tests are required. A passed test result report will be completed and submitted to JEA by the required date. JEA will supply the necessary test forms and instructions. The following data is required to be able to update the customer's record:

1. Service address and ZIP code where the device is located
2. Owner and JEA account number
3. Description of device's location and meter number
4. Date of installation
5. Type of device
6. Manufacturer
7. Model number
8. Serial number

### **B-6 Penalties for Non-Compliance**

#### **B-6.01 Termination of Service**

A written notification detailing all cross-connections found during the inspection will be sent to the owner or authorized agent of the owner of the building or premises, stating that corrections must be made and setting a reasonable time for compliance. Upon failure of the owner or authorized agent of the owner of the building or premises to have defect(s) corrected by the specified time, the water purveyor shall cause the water service to the building or premises to be terminated.

The water purveyor shall cause discontinuance of water service if a required backflow prevention assembly has been bypassed or failed to be tested or properly maintained as required by this policy.

The water purveyor shall also cause discontinuance of water service if an air-gap separation system is compromised.

In lieu of discontinuance of service JEA may install, test, repair, or replace a backflow device at the customer's point of service and bill the customer for all costs associated with the install, test, repair, or replacement of a backflow device at the customer's premise.

#### **B-6.02 Monetary Penalties and Imprisonment**

Violations of provisions concerning cross-connections within the City Building Code may result in fines of up to \$100 or imprisonment of up to 60 days. Violations of JEA's Rules and Regulations pertinent to cross-connections may carry fines of not more than \$500 or not more than 90 days of imprisonment. Under both the Plumbing Code and JEA's Rules and Regulations, each day any violation shall continue shall constitute a separate offense.

Continued failure to respond to notices of violation may necessitate a site compliance inspection by JEA. JEA will assess a \$100 inspection fee on the customer of record.

## **B-7 Pertinent Sections of Local Codes**

### **B-7.01 City Building Code - Chapter 341**

#### **(Construction Regulations and Building Codes)**

Chapter 341 (Plumbing Code)

Section 1. Section 341.101, Ordinance Code is amended in part to read as follows:

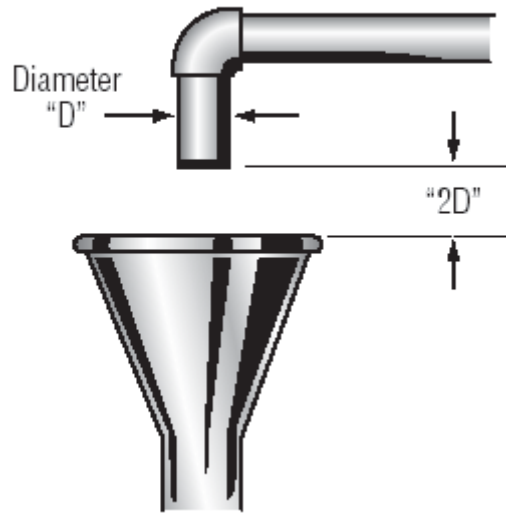
Adoption of Florida Building Code 2001 as the Plumbing Code for the City of Jacksonville.

## **B-8 Backflow Prevention Devices (Illustrated)**

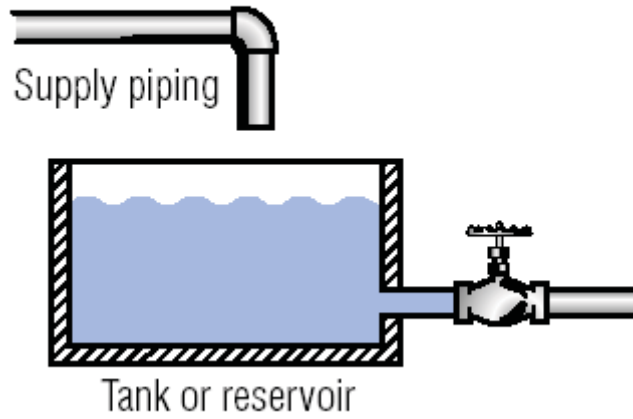
### **B-8.01 Air-Gap Separation – AG**

The term air-gap separation shall mean a physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. An approved air-gap separation shall be a distance of at least two times the diameter of the supply pipe measured vertically above the top rim of the vessel, with a minimum distance of 1 inch.

**Air gap.**



**Air gap in a piping system.**



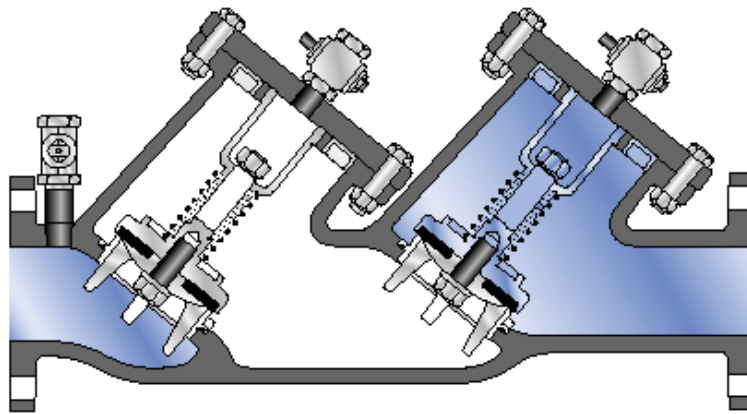


### B-8.02 Double Check Valve Assembly – DCVA

An assembly composed of two single, independently acting, approved check valves, including tightly closing shut-off valves located at each end of the assembly and fitted with properly located test cocks.

A check valve that is drip-tight in the normal direction of flow when the inlet pressure is one psi and the outlet pressure is zero. The check valve shall permit no leakage in a direction reverse to the normal flow. The closure element (e.g., clapper) shall be internally weighted or otherwise internally loaded to promote rapid and positive closure and suitable connections for testing.

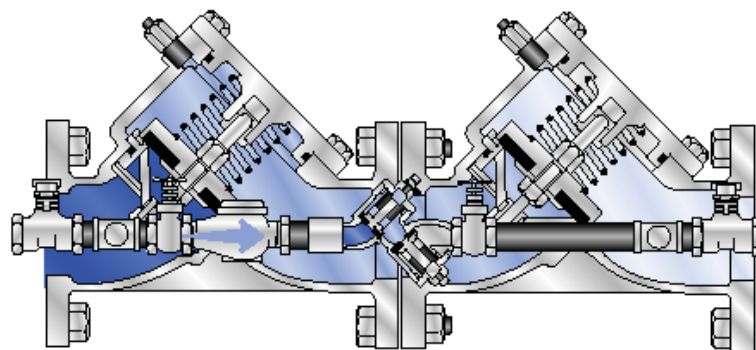
Double check valve.



### B-8.03 Double Check Detector Backflow Assembly – DCDA

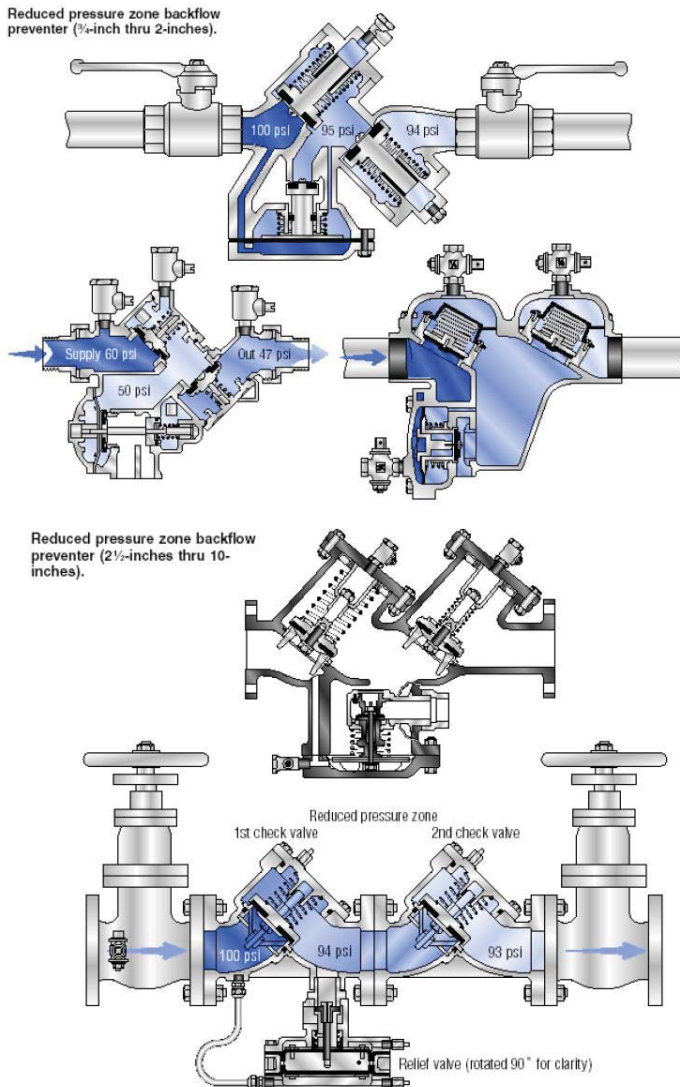
A specially designed assembly composed of a line-sized approved double check valve assembly with a bypass containing a specific water meter and an approved double check valve assembly. Meter will register very low flows of water up to three gallons per minute and shall show a registration for all rates of flow. This assembly should only be used against a non-health hazard (i.e., pollutant).

Double check detector check.



### B – 8.04 Reduced Pressure Backflow Assembly – RP

A reduced-pressure principle backflow-prevention assembly (RP) is an assembly that shall contain two loaded, independently acting check valves with a hydraulically operating, mechanically independent pressure-differential relief valve located between the check valves. The RP is an assembly that can prevent backflow from backpressure and/or backsiphonage. An RP is designed for both high and low hazard applications.



### Reduced Pressure Detector Assembly – RPDA

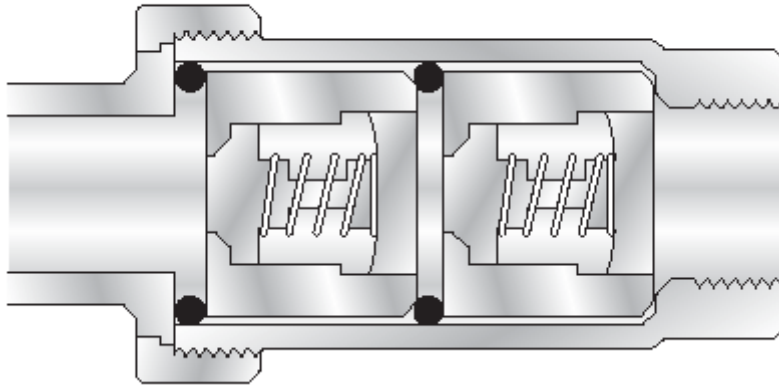
A specially designed assembly composed of a line-sized approved reduced pressure principle backflow prevention assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter will show low flows of up to three gallons per minute. Assembly will protect against non-health hazard (i.e. pollutant) or a health hazard (i.e. contaminant).

### **B-8.05 Residential Dual-Check**

An assembly composed of two single, independently acting, approved check valves, including tightly closing shut-off valves located at each end of the assembly.

The check valve shall permit no leakage in a direction reverse to the normal flow. The closure element (e.g., clapper) shall be internally weighted or otherwise internally loaded to promote rapid and positive closure. This assembly shall only be used at residential premises where reclaimed water is used for irrigation. Refer to section B-4.02 for requirements to utilize this device.

**Residential dual check.**



**JEA RESIDENTIAL IRRIGATION CUSTOMER AFFIDAVIT FORM**

1. THIS FORM TO BE COMPLETED BY PROPERTY OWNER OR RESIDENT RESPONSIBLE FOR JEA UTILITY ACCOUNT.
2. ONCE COMPLETED AND WITNESSED BY THE BACKFLOW INSTALLER THIS FORM SHALL BE SUBMITTED TO:  
JEA CROSS CONNECTION CONTROL  
21 W. CHURCH STREET T-8  
JACKSONVILLE, FL 32202  
EMAIL: [backflow@jea.com](mailto:backflow@jea.com)

STATE OF FLORIDA

COUNTY OF \_\_\_\_\_

I \_\_\_\_\_ (PROPERTY OWNER OR RESPONSIBLE RESIDENT) ATTEST TO THE FOLLOWING:

- A. I AM AWARE THAT IT IS A VIOLATION OF JEA'S RULES & REGULATIONS FOR WATER, SEWER AND REUSE POLICY TO HAVE ADDITIONAL SERVICE CONNECTIONS BETWEEN THE IRRIGATION METER AND THE BACKFLOW PREVENTER, AND
- B. TO THE BEST OF MY KNOWLEDGE, THERE ARE NO ADDITIONAL SERVICE CONNECTIONS BETWEEN THE IRRIGATION METER AND THE BACKFLOW PREVENTER.
- C. BACKFLOW PREVENTER LOCATION IS IN A LOCATION THAT IS EASILY ACCESSIBLE FOR JEA AND THIRD PARTY ACCESS FOR INSPECTION.

\_\_\_\_\_  
(PRINT NAME)

OWNER  
 RESPONSIBLE RESIDENT

\_\_\_\_\_  
(SIGNATURE)

\_\_\_\_\_  
(DATE)

RESIDENCE REQUESTING ALTERNATE LOCATION OF BACKFLOW ASSEMBLY INSTALLATION:

ADDRESS: \_\_\_\_\_  
(STREET) (CITY) (STATE)

WITNESS NAME: \_\_\_\_\_ WITNESS: \_\_\_\_\_

WITNESS ADDRESS: STREET: \_\_\_\_\_ COUNTY: \_\_\_\_\_

WITNESS DATE: \_\_\_\_\_

## REFERENCES

- “Accepted Procedure and Practice in Cross-Connection Control,” Pacific Northwest Section, AWWA, 1973, 1985, 1990,
- Cincinnati Water Works - Division L-“Cross-Connection Control and Water Quality Protection,” Cincinnati, Ohio November 18, 1974.
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