



## **Cross Connection Control for Residential Irrigation Systems**



[www.fkaa.com](http://www.fkaa.com)

### **Irrigation systems**

Irrigation systems are considered a potential hazard for a variety of reasons. Most systems are constructed of materials that are not suitable for use with potable water. Sprinklers, bubbler outlets, emitters and other equipment are exposed to substances such as fecal material, fertilizer, pesticides and other chemical and biological contaminants. Sprinklers often remain submerged under water after system use or storms. They may be subject to various onsite conditions such as additional water supplies, chemical injection, booster pumps and elevation changes.



Submerged  
Sprinkler Head

The FCAA strongly supports conservation measures such as the utilization of cisterns, rain barrels and Florida Friendly landscaping. For more information please contact Shelli Johnson at the contact information provided.

### **Protecting the Public Water Supply**



The Florida Keys Aqueduct Authority is committed to safeguarding the public water supply from contamination. As required by Federal and State regulations the Authority has developed a Cross Connection Control Program to ensure the water supply is protected.

A critical component of this program is to ensure that appropriate backflow protection is installed based on the hazard existing on the property.

A reverse flow of water from the a private system back into the potable water system is called backflow. Backflow can occur due to backpressure and/or backsiphonage conditions.

Installation of adequate backflow protects both you and your neighbors.

#### **Florida Keys Aqueduct Authority**



Shelli Johnson  
Water Quality & Env. Manager  
Email: [sjohnson@fkaa.com](mailto:sjohnson@fkaa.com)  
Phone: (305) 295-2219



# Residential Irrigation Cross Connection Control

## Proper Installation of PVB/AVB

As set forth in Section 608.16.5 of Florida Plumbing Code a Pressure Vacuum Breaker (PVB) or an Atmospheric Vacuum Breaker (AVB) must be installed on irrigation systems not protected by an RPZ or air gap. In addition, hose bibs should have vacuum breakers as well.

AVBs must be installed 6 inches above downstream piping and outlets and no control valves are allowed downstream of (after) the AVB.

The proper use of pressure vacuum



Pressure Vacuum Breaker (PVB)

breakers (PVB) require that they be installed above all downstream piping and outlets. This eliminates the potential of backpressure. If the downstream piping or outlets are above the vacuum breaker, then the resulting

backpressure may flow back (backflow) through the vacuum breaker. The PVB must be installed 12 inches above the downstream piping and outlets.

Manufacturers instructions should always be followed.

## BACKFLOW PROTECTION REQUIRED

### RESIDENTIAL IRRIGATION

#### 5/8" METER

Hazard	Protection
Irrigation w/ Chemicals	RPZ
Irrigation w/ Pumps	RPZ
Irrigation Only	T10-DC Meet Plumbing Code*

\*All irrigation systems must meet Florida Plumbing Code 608.16.5, including installation of a Pressure Vacuum Breaker (PVB) or an Atmospheric Vacuum Breaker as required. More information on these devices is located at left.

The FCAA installs a Neptune T10 Double Check (T10-DC) meter for all irrigation applications that do not require an RPZ. This meter is tested regularly by the FCAA at no additional expense to the consumer.

Appropriate backflow protection requirements for meters greater than 5/8" will be evaluated through the Authority's Engineering Division.

RPZ = Reduced Pressure Zone Assembly

## Customer Responsibilities

- Customers with irrigation systems not connected to pumps or chemicals are simply required to ensure that the AVB/PVB is installed and operating correctly.
- Customers with irrigation systems connected to chemicals or pumps are required to ensure that the RPZ is installed, operating correctly, and tested every three years.

To comply with cross connection control regulations, the FCAA is required to keep the meter locked until appropriate backflow devices are installed and in proper working order. Please allow up to 48 hours for FCAA staff to conduct a cross connection control inspection and unlock the meter.

## FCAA Irrigation Meter Program

Customers with excessive water use that does not return to the wastewater system may want to take advantage of the FCAA Irrigation Meter Program. Wastewater charges are not assessed on consumption through a verified FCAA irrigation meter. Please call (305) 296-2454 for more information.