INSTALLATION INSTRUCTIONS

BACKFLOW PREVENTION ASSEMBLIES FOR DOMESTIC USE:

- No backflow assembly installation shall be accepted until it has been inspected, tested, and certification approved by IWA.
- To minimize shut-down time, a member may choose to have the device certified by a qualified plumber/tester provided that:
 - The tester can provide proof of active certification complete with certification number.
 - \circ $\;$ The member incurs all costs and fees for said testing.
 - IWA will provide visual inspection and maintain all jurisdiction over final approval and acceptance of the certification of the device and assembly.
- Pipelines should be thoroughly flushed to remove foreign material and debris before installing the device.
- The assembly should be installed in the horizontal position unless otherwise specified by the manufacturer and approved by IWA.
- The assembly shall be installed a minimum of eighteen (18) inches above ground from the bottom of the lowest point of assembly. In areas where installation of assembly may be in a low area subject to flooding such as a drainage or retention area, the <u>height and device type</u> shall be determined by IWA.

No underground installations are allowed.

- All Backflow prevention devices must be the same size or larger than the meter to which they are connected.
- All assemblies shall be installed with a minimum of 7 feet of clearance above and 2 feet at all sides for testing and maintenance.
- All assemblies shall be installed before the first branch line of the service and as close as possible to the meter on the customer side. If the need arises to install an assembly at any other location than the meter due to lack of space, it shall require prior approval by IWA.
- There shall be no connections between the meter and a required backflow prevention assembly. All connections for irrigation or other non-domestic use shall be made downstream of the backflow prevention assembly and shall be separately isolated by an approved device meeting all local codes.
- All assemblies shall be installed with adequate support independent of the piping system to prevent the assembly from moving and imposing loads on the piping system.

- Special consideration should be given to the location and appearance of the assembly. There are several things which can be done to improve its appearance, such as:
 - \circ The assembly can be painted to allow it to blend in with its surroundings.
 - \circ Landscaping can be used to screen the assembly, provided minimum clearances are met.
 - Readily removable (faux rock) enclosures designed for protection and security are permitted.
 - Locking enclosures are not permitted.
- Assemblies 3 inches and larger
 - Assemblies three (3) inches and larger are required to be tested and inspected at the time of installation and annually thereafter.
 - All testing and inspection of backflow assemblies three (3) inches and larger shall be the responsibility of the member.
 - \circ The member shall be responsible for furnishing annual Backflow Inspection Reports to IWA
- All assemblies shall comply with:
 - NSF/ANSI 61-G and are to be approved by the American Water Works Association
 - AWWA C510-97(-17) Standard for Double Check Valve Backflow Prevention assemblies
 - AWWA C511-97(-17) Standard for Reduced-Pressure Principal Backflow-Prevention assemblies.
 - The latest laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California, Manual of Cross Connection Control.
- Thermal Expansion
 - All customers who have a backflow prevention device installed on their system shall be notified of the possible hazards due to thermal expansion. An example of this notification is:

WARNING

BACKFLOW ASSEMBLIES INSTALLED ON MEMBER'S SERVICE LINES WITH WATER HEATERS MAY CAUSE EXCESSIVE PRESSURE INCREASES IN YOUR WATER HEATER AND PLUMBING SYSTEM DUE TO THERMAL EXPANSION. THIS PROBLEM HAS BEEN ADDRESSED BY THE SOUTHERN STANDARD PLUMBING CODE TABLE (613.2 THERMAL EXPANSION CONTROL) AND SHOULD BE NOTED BY YOUR PLUMBER:

BACKFLOW PREVENTION ASSEMBLIES FOR FIRE SPRINKLER SYSTEMS:

- Shall be a Double-Check Detector Assembly type (DCDA) if no chemical additives are used in the system.
- Shall be a Reduced-Pressure Detector Assembly type (RPDA) if the system utilizes or contains chemical additives.
- Shall meet all local fire district and NFPA codes, and all IWA specifications.
- Shall be located at the edge of the members' property.
- Shall be connected directly to the distribution main with a dedicated underground isolation valve that meets all IWA specifications and requirements.
- Shall be an above-ground installation. <u>No underground installations will be accepted</u>.
- Shall_have an installed flow detection device and shall be monitored in accordance with NFPA requirements and local fire code.
- Shall be inspected and tested by a qualified Fire Service Professional upon installation and annually thereafter.
- <u>All required testing, inspections, and maintenance are the responsibility of the member.</u>
- All repairs shall be made in a timely manner and the assembly shall be tested immediately thereafter.
- The member is responsible for furnishing to IWA all backflow inspection reports.
- All work in the right of way will require a City of Sanibel permit for Sanibel and a Lee County permit for Captiva.
- All lines longer than 50 feet and larger than 2" will require a HRS permit.