

SECTION 05200 - BACKFLOW PREVENTERS

PART 1 - GENERAL

1.1 WORK INCLUDED IN THIS SECTION

- A. The WORK of this Section includes providing materials, installation, and testing of backflow prevention assemblies.

1.2 SUBMITTALS

- A. The following shall be submitted in compliance with Section 01300.
 - 1. Shop Drawings
 - a. Manufacturer's catalog data.
 - b. Manufacturer's installation instructions.
 - c. Manufacturer's certification that products comply with the indicated requirements. The selected backflow prevention assembly shall be selected from the approved California Department of Health Services list on file with the DISTRICT.

PART 2 - PRODUCTS

2.1 GENERAL

- A. General
 - 1. Backflow preventers shall work on the reduced pressure principle.
 - 2. Backflow preventers shall consist of 2 spring-loaded check valves, automatic differential pressure relief valve, drain valves, shut-off valves as well as test ports at each pressure chamber.
 - 3. Body material shall be bronze or cast iron for a working pressure of not less than 150 psi, with bronze or stainless steel trim.
 - 4. Drain lines with air gaps shall be provided.
- B. The water service installed on all commercial, industrial, fire, construction and irrigation services shall be locked or kept closed until an approved backflow device is installed in compliance with Standard Drawings.
- C. Each backflow preventer must be inspected and certified by the DISTRICT prior to the water meter being placed into service.

- D. The DISTRICT shall be the final authority as to location, installation, and type of backflow prevention device required.
- E. Approved and certified backflow preventers shall be required when temporary connections are made to the potable water system for flushing and disinfection or where directed by the DISTRICT.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Installation shall comply with the latest edition of the Uniform Plumbing Code, applicable DISTRICT requirements.
- B. Plumbing from the meter to the downstream side of the backflow device will be installed per DISTRICT specifications.
- C. Backflow preventers shall be installed in potable water lines where required by applicable codes or regulations, or wherever there is any danger or contamination, and where indicated.
- D. The nominal size of the backflow device shall be equal to or greater than the size of the purchased meter.
- E. A Reduced Pressure Backflow Device (RP) shall be required on all fire service installations. These devices shall be Reduced Pressure Detector Assembly (RPDA) type, installed with a ½-inch bypass meter and ½-inch RP. The ½-inch bypass meter shall be supplied by the manufacturer of the larger RPDA device.
- F. When two (2) or more BFD's or RPDA's are installed to supply the same private water system, certification of the devices, through testing, will be required to determine the primary device that opens first and the secondary device that opens after the primary device and so forth.

1.2 TESTING

- A. Upon completion of the installation and inspection by the DISTRICT, an initial test shall be performed by the DISTRICT Personnel to certify the adequacy and operational compliance with DISTRICT Standards.
- B. The main line and by-pass Reduced Pressure Backflow Device will require initial and annual certification.
- C. The by-pass meter on RPDA's will be tested and repaired or replaced every 5 years or sooner, if not in compliance with AWWA Standards for meters.
- D. Annual certifications will be the responsibility of the Customer.

END OF SECTION