

1.0 GENERAL

1.1 Scope

1.1.1 This section refers to the supply of backflow prevention devices.

1.2 Related Sections

1.2.1 Section 15408 Installation of Water Meters

2.0 PRODUCTS

- Use only those products in the Approved Products List, product ID:
 - WP – 23: Hose Connection Vacuum Breaker (HCVB)
 - WP – 24: Double Check Valve Assembly (DCVA)
 - WP – 25: Reduced Pressure Principle Backflow Assembly (RPPBA)

2.1 Hose Connection Vacuum Breakers (HCVB)

2.1.1 Hose connection vacuum breakers to be of bronze, brass or reinforced thermoplastic construction with internals suitable for long-term use in contact with potable quality water. Ends to be standard hose thread, male x female.

2.1.2 Hose connection vacuum breakers must meet or exceed current CSA B64.2 and ASSE 1011 requirements and be listed by IAPMO.

2.1.3 Hose connection vacuum breakers to have a working pressure rating of at least 875 kPa (125 psi).

2.2 Double Check Valve Assembly (DCVA)

2.2.1 An “assembly” is deemed to be a one-piece factory assembled unit which includes an upstream and downstream shutoff valve factory mounted to the double check valve design backflow prevention valve module with required test cocks and, which can be tested in-line.

2.2.2 Double-check valve assemblies shall meet or exceed the materials of construction and capacity vs. pressure drop requirements of the latest edition of AWWA C510 and must carry a current certification from one or more of the following agencies:

- .1 CSA
- .2 USC-FCCCHR

2.2.3 The assembly and all components of the assembly must have a minimum rated working pressure of 1050 kPa (150 psi) at temperatures up 82°C (140°F).

2.2.4 Shutoff valves on assemblies 50 mm and smaller to be resilient seated, quarter turn, ball style valves with female NPT end connections. Shutoff valves on assemblies 65 mm and larger to be resilient seated, non-rising stem, cast iron body gate valves with 125 lb ANSI flanged end connections.

Note: If the preventer is to be mounted in a fire system, the shutoff gate valves must be rising stem.

- 2.2.5 Test cocks to be quarter-turn bronze body ball style valves.
- 2.2.6 Assemblies must be certified by the manufacturer to operate when mounted in either the horizontal or the vertical position.
- 2.3 Reduced Pressure Principle Backflow Assembly (RPPBA)
 - 2.3.1 An “assembly” is deemed to be a one-piece factory assembled unit which includes an upstream and downstream shutoff valve factory mounted to the reduced pressure, double check/relief valve design, and backflow prevention module with required test cocks and, which can be tested in-line.
 - 2.3.2 Reduced pressure principle backflow assemblies shall meet or exceed the materials of construction and capacity vs. pressure drop requirements of the latest edition of AWWA C511 and must carry a certification from one or more of the following agencies:
 - .1 CSA
 - .2 USC-FCCCHR
 - 2.3.3 The assembly and all components of the assembly must have a minimum rated working pressure of 1050 kPa (150 psi) at temperatures up to 82°C (140°F).
 - 2.3.4 Shutoff valves on assemblies 50 mm and smaller to be resilient seated, quarter turn, ball style valves with female NPT end connections. Shutoff valves on assemblies 65 mm and larger to be resilient seated, non-rising stem, cast iron body gate valves with 125 lb ANSI flanged end connections. Note: If the preventer is to be mounted in a fire system, the shutoff gate valves must be rising stem.
 - 2.3.5 Test cocks to be quarter-turn bronze body ball style valves.
 - 2.3.6 Assemblies must be certified by the manufacturer to operate when mounted in either the horizontal or the vertical position.
- 2.4 Other types of prevention devices
 - 2.4.1 Other types of devices not specified herein may be submitted to the Engineer for consideration and approval on a specific application basis. In all such instances the decision of the Engineer will be final.
 - 2.4.2 All other types of devices submitted for consideration must meet or exceed the requirements of the applicable section of CSA B64 and other relevant standards.

3.0 EXECUTION

None in this section