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# Performance Requirements for Spill Resistant Vacuum Breaker

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## Section I

### 1.0 General

#### 1.1 Application

Spill Resistant Vacuum Breakers (herein referred to as “device”) are installed in the potable water supply lines to prevent the backflow of non-potable material into the potable water supply caused by back-siphonage only. They are not for use in any system where back pressure is applied to the device. When the system is pressurized, the vent closes to prevent a flow through the upstream check valve, and to eliminate vent spillage.

#### 1.2 Scope

##### 1.2.1 Description

This standard applies only to those devices classified as Spill Resistant Vacuum Breakers - SVB. These devices are designed for installation in those portions of the domestic potable water systems that are normally under continuous pressure conditions.

The device includes one (1) check valve force-loaded closed and an air inlet vent valve force loaded open to atmosphere, positioned downstream of the check valve, and located between and including two (2) tightly closing shut-off valves and two (2) test cocks.

##### 1.2.2 Size Range

The inlet and outlet nominal pipe sizes are 6 DN, 8 DN, 10 DN, 15 DN, 20 DN, 25 DN, 32 DN, 40 DN and 50 DN (1/8 NPS, 1/4 NPS, 3/8 NPS, 1/2 NPS, 3/4 NPS, 1 NPS, 1-1/4 NPS, 1-1/2 NPS, and 2 NPS).

##### 1.2.3 Pressure

These devices are designed for a minimum working pressure of 1034 kPa (150 psi).

##### 1.2.4 Temperature Range

These devices are designed for flow temperatures between 0.55 °C and 82.2 °C (33 °F and 180 °F).

#### 1.3 Limitations on Design

##### 1.3.1 Flow Capacity

The device shall meet, as a minimum, the flows specified in Table 3 at the maximum allowable pressure drop.