

**4715.2100 BACKFLOW PREVENTERS.****A. Atmospheric vacuum breaker (AVB):**

(1) must be installed at least six inches above spill line (see special requirements in part 4715.2150);

(2) no possibility of back pressure permitted;

(3) only permitted on discharge side of last control valve;

(4) no more than eight hours of continuous line pressure permitted; and

(5) must be listed to ASSE Standard 1001.

**B. Pressure vacuum breaker assembly (PVB):**

(1) must be installed at least 12 inches above spill line;

(2) no possibility of back pressure permitted;

(3) continuous line pressure permitted; and

(4) must be listed to ASSE Standard 1020.

**C. Spill-proof vacuum breaker (SVB):**

(1) must be installed at least 12 inches above spill line;

(2) no possibility of back pressure permitted;

(3) continuous line pressure permitted;

(4) field testable; and

(5) must be listed to ASSE Standard 1056.

**D. Hose connection vacuum breaker (Hose VB):**

(1) required for threaded hose connections;

(2) back pressure not permitted;

(3) continuous line pressure not permitted;

(4) any new device must be field testable. Exception: a vacuum breaker installed as an integral part of a product, approved to ASSE Standard 1011, and installed at the factory will not be required to be field testable; and

(5) must be listed to ASSE Standard 1052. Wall hydrant vacuum breaker must be listed to ASSE Standard 1019.

**E. Double-check valve with intermediate atmospheric vent (DCVIAV):**

(1) permitted for low hazard with small pipe sizes;

- (2) back pressure permitted;
- (3) continuous line pressure permitted;
- (4) must be listed to ASSE Standard 1012; and

(5) device for beverage dispensing equipment must be listed to ASSE Standard 1022. For carbonated beverage machines, the additional requirements in part 4715.2163 apply.

F. Reduced pressure zone backflow preventer assembly (RPZ):

- (1) any degree of hazard permitted;
- (2) back pressure permitted;
- (3) continuous line pressure permitted;
- (4) must be listed to ASSE Standard 1013; and

(5) fire sprinkler system backflow preventer must be listed to ASSE Standard 1013 or 1047.

G. Double-check valve assembly (DCVA):

- (1) permitted only for nontoxic, low hazard installations with nuisance or aesthetic concern;
- (2) back pressure permitted;
- (3) continuous line pressure permitted;
- (4) must be listed to ASSE Standard 1015; and
- (5) fire sprinkler systems must be listed to ASSE Standard 1015 or 1048.

H. Deck-mounted and equipment-mounted vacuum breakers and faucets with integral atmospheric or spill-proof vacuum breakers shall be installed according to the manufacturer's instructions with the critical level not less than one inch (25 mm) above the flood level rim. The vacuum breaker device must comply with ASSE Standard 1001.

**Statutory Authority:** *MS s 16B.59 to 16B.75; 326.37 to 326.45; 326B.101 to 326B.194; 326B.43 to 326B.49; 326B.52*

**History:** *15 SR 76; 19 SR 590; 23 SR 686; 28 SR 146; L 2007 c 140 art 4 s 61; art 6 s 15; art 13 s 4; L 2008 c 337 s 64; 36 SR 1479*

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