

exchangers shall separate the potable water from the heat-transfer medium by providing a space between the two walls that are vented to the atmosphere.

603.4.5 Water supply inlets to tanks, vats, sumps, and other receptors shall be protected by one of the following means:

- (1) An approved airgap.
- (2) A listed vacuum breaker installed on the discharge side of the last valve with the critical level not less than 15cm (6 in.) or in accordance with its listing.
- (3) A backflow preventer suitable for contamination or pollution, installed in accordance with the requirements for that type of device or assembly as set forth in this chapter.

603.4.6 Protection from Lawn Sprinklers and Irrigation Systems.

603.4.6.1 Potable water supplies to systems having no pumps or connections for pumping equipment, and no chemical injection or provisions for chemical injection, shall be protected from backflow by one of the following devices:

- (1) Atmospheric vacuum breaker.
- (2) Pressure vacuum breaker.
- (3) Spill resistant pressure vacuum breaker.
- (4) Reduced-pressure backflow preventer.

603.4.6.2 Where sprinkler and irrigation systems have pumps, connections for pumping equipment, auxiliary air tanks, or are otherwise capable of creating back-pressure, the potable water supply shall be protected by the following type of device if the backflow device is located upstream from the source of back-pressure:

- (1) Reduced-pressure backflow preventer.

603.4.6.3 Where systems have a backflow device installed downstream from a potable water supply pump or a potable water supply pump connection, the device shall be one of the following:

- (1) Atmospheric vacuum breaker.
- (2) Pressure vacuum breaker.
- (3) Spill resistant pressure vacuum breaker.
- (4) Reduced-pressure backflow preventer.

603.4.6.4 Where systems include a chemical injector or any provisions for chemical injection, the potable water supply shall be protected by the following:

- (1) Reduced-pressure backflow preventer.

603.4.7 Potable water outlets with hose attachments, other than water heater drains, boiler drains, and clothes washer connections, shall be protected by a nonremovable hose-bibb type backflow preventer, a nonremovable hose-bibb type vacuum breaker, or by an atmospheric vacuum breaker installed not less than 15cm (6 in.) above the highest point of usage located on the discharge side of the last valve.

603.4.8 Watercooled compressors, degreasers, or any other watercooled equipment shall be protected by a backflow preventer installed in accordance with the requirements of this chapter.

Note: Watercooled equipment that produces back-pressure shall be equipped with the appropriate protection.

603.4.9 Water inlets to water-supplied aspirators shall be equipped with a vacuum breaker installed in accordance with its listing requirements and this chapter. The discharge shall drain through an airgap. When the tail-piece of a fixture to receive the discharge of an aspirator is used, the airgap shall be located above the flood-level rim of the fixture.

603.4.10 Potable water makeup connections to steam or hot water boilers shall be provided with a listed backflow protection assembly.

603.4.11 Nonpotable Water Piping. In cases where it is impractical to correct individual cross-connections on the domestic water line, the line supplying such outlets shall be considered a nonpotable water line. No drinking or domestic water outlets shall be connected to the nonpotable water line. Whenever possible, portions of the nonpotable water line shall be exposed, and exposed portions shall be properly identified in a manner satisfactory to the Authority Having Jurisdiction. Each outlet on the nonpotable water line that is permitted to be used for drinking or domestic purposes shall be posted:

“CAUTION: NONPOTABLE WATER,
DO NOT DRINK.”

603.4.12 Potable water supply to carbonators shall be protected by either an airgap or a vented backflow preventer for carbonated beverage dispensers installed within the carbonated beverage dispenser. The carbonated beverage dispenser shall bear the label of an approved testing agency, certifying and attesting that such equipment has been tested, inspected and meets the requirements of the approved applicable standard. Carbonated beverage dispensers without an approved internal airgap or vented backflow preventer for carbonated beverage dispensers and carbonated beverage dispensing