**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** Only carbonated beverage dispensers require a backflow preventer that is designed for exposure to carbon dioxide gas. Also, because of the potential for cross-contamination between noncarbonated drink dispensers and or coffee machines, each dispenser or machine supplied with potable water must have a backflow preventer (or air gap) at the connection to the potable water supply.

**2018 CODE:** 608.16.1 608.17.1.1 Beverage. Carbonated beverage dispensers. The water supply connection to carbonated beverage dispenser shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or by an air gap. The portion of the backflow preventer device downstream from the second check valve of the device and the piping downstream therefrom shall not be affected by carbon dioxide gas.

**608.17.1.2 Coffee machines and noncarbonated drink dispensers.** The water supply connection to each coffee machine and each noncarbonated beverage dispenser shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or ASSE 1024, or protected by an air gap.

**CHANGE SIGNIFICANCE:** An ASSE 1022 backflow preventer, specially designed for carbon dioxide exposure, is only required for a carbonated drink dispenser, not for noncarbonated drink dispensers or coffee machines. Coffee machines and noncarbonated beverage dispensers can now be connected to the potable water supply using ASSE 1024 backflow preventers. The ASSE 1022 device has a vent opening that leaks water when the downstream check valve of the device fails. The leaking water requires a safe point of discharge (a drain) which sometimes necessitates a complex air gap drainage arrangement. The ASSE 1024 device (which does not have a vent opening) does not need a drain, thus simplifying many installations. Also, in order to protect against cross-contamination among individual coffee machines and noncarbonated beverage dispensers, each machine and each dispenser requires its own ASSE 1024 device.

This excerpt is taken from *Significant Changes to the International Plumbing Code®, International Mechanical Code®, International Fuel Gas Code®, 2018 Edition*. Significant Changes publications take you directly to the most important changes that impact projects. Key changes are identified then followed by in-depth discussion of how the change affects real-world application. Photos, tables and illustrations are included to further clarify application. Available for the IBC, IRC, IFC and IPC/IMC/IFGC, the Significant Changes publications are very useful training and review tools for transitioning to a new code edition.