## COMMON NON- TESTABLE BACKFLOW PREVENTERS



Air Gap = An air gap is a physical unobstructed separation through free atmosphere between the free-flowing discharge end of any pipe or outlet supplying potable water and the flood-level rim of a receiving receptacle. The air gap, when maintained and inspected, is the most reliable means of protection because it is not subject to any mechanical failure. A common air gap in a plumbing system are bathtubs, swimming pool fills, and sinks.

Intermediate Air Vent Type Backflow Preventer = The air vent type backflow preventer is used in low hazard areas and can be subject to continuous pressure. This device consists of two independently operating check valves separated by a chamber which can vent to the atmosphere if backflow occurs. These devices are commonly found on residential boiler systems for makeup water supply for the boiler.





Hose Bibb Vacuum Breakers (HBVB) = HBVBs consists of a check valve biased to normally closed position and an atmospheric vent valve, which is loaded to a normally open position. When the device is pressurized, the check valve will open, and the vent will close allowing water to flow through the device. In an event of a backflow condition, the check valve will close and the vent will open allowing air into the system to prevent back siphonage. Older style outside faucets require the use of these. Some newer frost free style outside faucets have a vacuum breaker installed next to and on top of the handle already, therefore not needing a HBVB installed.

**Atmospheric Vacuum Breaker** = These backflows are a mechanical device which automatically air vents a pipeline to prevent back siphonage. These devices are commonly found on commercial dishwashers, commercial soap dispensers, and hair wash sinks.





**Air Vent Backflow Preventer For Beverage Machine Carbonators =** The air vent type backflow preventer for beverage machines are used to prevent backflow of carbon dioxide gas and carbonated water into the water supply to vending machines, thus eliminating the hazardous reaction of carbon dioxide with copper tubing.