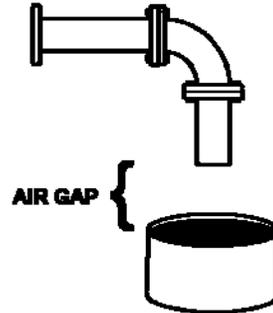


Description of Backflow Preventers and Their Applications

Approved Air Gap

An air gap is a vertical, physical separation between the end of a water supply outlet and the flood-level rim of a receiving vessel. This separation must be at least twice the diameter of the water supply outlet and never less than one inch. An air gap is considered the maximum protection available against back pressure backflow or back-siphonage, but is not always practical and can easily be bypassed.



Double Check Backflow Assembly (DC)

A DC is a testable mechanical backflow preventer that consists of two independently acting, spring-loaded check valves. It includes shutoff valves at each end of the assembly and is equipped with test cocks against back pressure backflow and back-siphonage, but should be used only on non-health hazards. These devices are required to be tested annually by a State certified backflow specialist.



Reduced Pressure Principle Backflow Assembly (RP)

An RP is a testable mechanical backflow preventer that consists of two independently acting, spring-loaded check valves with a hydraulically operating, mechanically independent, spring-loaded pressure differential relief valve between the check valves and below the first check valve. It includes shutoff valves at each end of the assembly and is equipped with test cocks. An RP is effective against back pressure backflow and back-siphonage, and may be used on health or non-health hazards. These devices are required to be tested annually by a State certified backflow specialist.



Pressure Vacuum Breaker Assembly (PVB)

A PVB is a testable mechanical backflow preventer that consists of an independently acting, spring-loaded check valve and an independently acting, spring-loaded air inlet valve on the discharge side of the check valve. It includes shutoff valves at each end of the assembly and is equipped with test cocks. A PVB may be used to isolate health or non-health hazards, and is to be installed 12-inches above the highest downstream water discharge. It is effective against back-siphonage only and is most commonly used on lawn sprinkler systems. These devices are required to be tested annually by a State certified backflow specialist.



Atmospheric Vacuum Breaker (AVB)

An AVB is a non-testable mechanical backflow preventer with a gravity opening poppet air opening, designed to admit atmosphere into the downstream sides of the unit under a no flow condition to prevent back-siphonage. It must be installed 6-inches above highest downstream water discharge. There shall be no valves or reduction of pipe size on its downstream side. (Note: This device is typically installed by the manufacturer or contracted installer on certain equipment that uses potable water, i.e., dishwashers, soap dispensers, faucets and deep sinks, etc.)



Hose Bibb Vacuum Breaker

Hose bibb vacuum breakers are small inexpensive devices with hose connections which are simply attached to sill cocks and threaded faucets or wherever there is a possibility of a hose being attached which could be introduced to a contaminant. However, like the atmospheric vacuum breaker they should not be used under continuous pressure.

