

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the slide.

# **BACKFLOW PREVENTION FOR SINGLE FAMILY RESIDENCES**

# BACKFLOW CONSIDERATIONS

- WHILE SINGLE-FAMILY RESIDENCES ARE NOT GENERALLY REQUIRED TO HAVE A BACKFLOW DEVICE, YOU CAN HELP PREVENT BACKFLOW CONTAMINATION BY:
  - NOT LEAVING HOSES ATTACHED OR SUBMERGED IN UNSAFE WATER SUCH AS FERTILIZER OR CLEANING SOLUTION
  - CONFIRMING THAT ANTI-SIPHON TYPE IRRIGATION VALVES ARE PROPERLY INSTALLED ON IRRIGATION VALVES
  - INSTALLING A HOSE BIB VACUUM BREAKER
    - **NOTE:** A MAJORITY OF NEW HOMES ARE ALREADY EQUIPPED WITH ANTI-SIPHON VACUUM BREAKERS. THESE CAN BE PURCHASED AT LOCAL HARDWARE STORES IF YOUR HOME DOES NOT HAVE THESE ALREADY. INSTALLATION ONLY TAKES A FEW MINUTES.
- HOWEVER, SOME SITUATIONS WILL REQUIRE A HIGHER LEVEL OF PROTECTION:
  - IF A FERTILIZER INJECTOR IS BEING USED OR ANY OTHER HEALTH HAZARD IS ON SITE, A REDUCED PRESSURE (RP) ASSEMBLY MAY BE REQUIRED.

# TYPES OF BACKFLOWS

## Atmospheric Vacuum Breaker



The term "atmospheric vacuum breaker" (also known as the 'non-pressure type vacuum breaker') shall mean an assembly containing a float-check, a check seat and an air inlet port. The flow of water into the body causes the float to close the air inlet port. When the flow of water stops the float falls and forms a check valve against backsiphonage and at the same time opens the air inlet port to allow air to enter and satisfy the vacuum. A shut-off valve immediately upstream may be an integral part of the assembly. An atmospheric vacuum breaker is designed to protect against a health hazard (i.e., contaminant) under a backsiphonage condition only.

## Pressure - Vacuum - Breaker

The term "pressure vacuum breaker" shall mean an assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly is to be equipped with properly located test cocks and tightly closing shut-off valves attached at each end of the assembly (see Specifications Section for additional details). This assembly is designed to protect against a health hazard (i.e., contaminant) under a backsiphonage condition only.

## Double Check Valve Assembly

The term "double check valve assembly" shall mean an assembly composed of two independently acting, approved check valves, including tightly closing shut-off valves attached at each end of the assembly and fitted with properly located testcocks (see Specifications Section for additional details). This assembly shall only be used to protect against a non-health hazard (i.e., pollutant).

## Reduced Pressure Principle Backflow Prevention Assembly

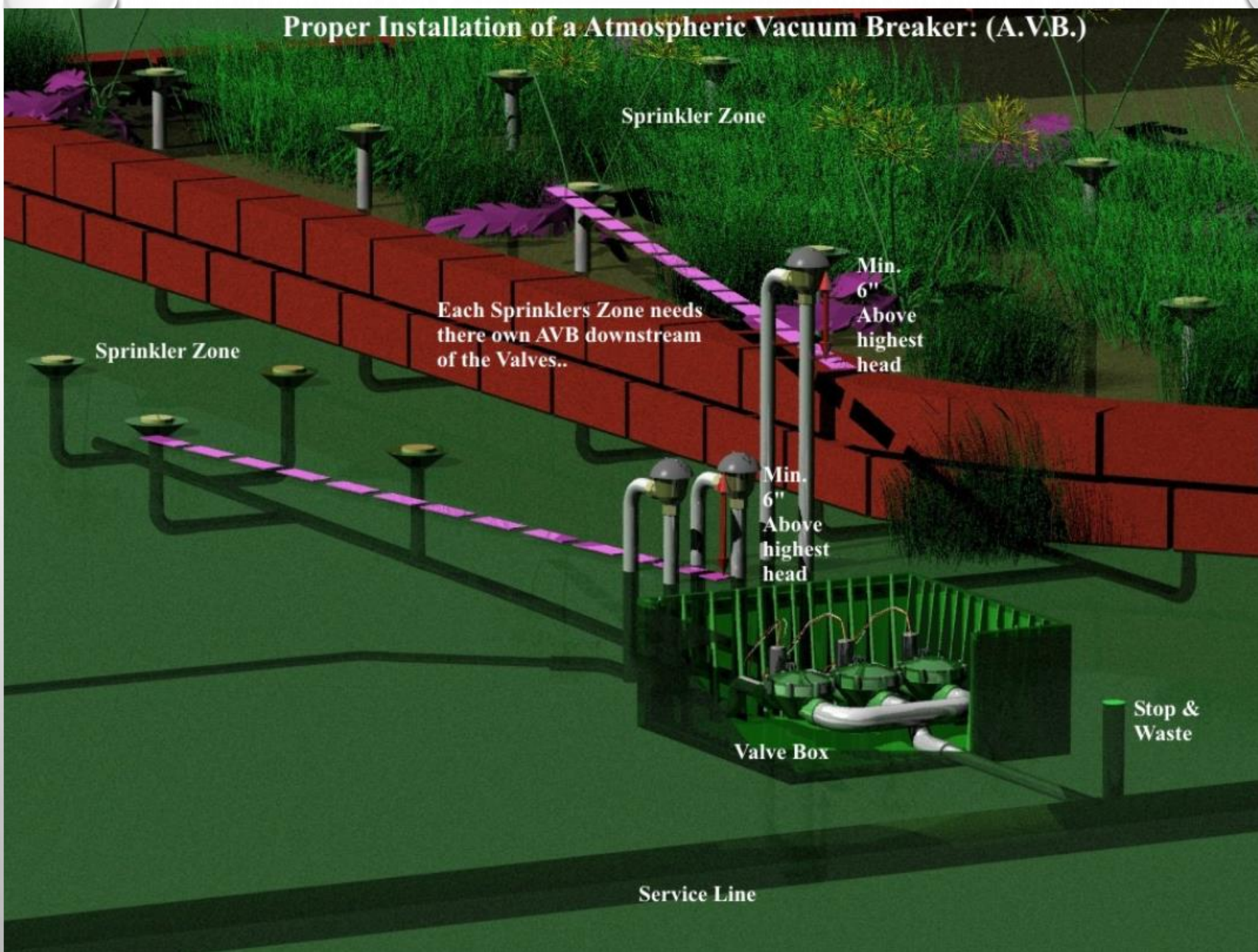


The term "reduced pressure principle backflow prevention assembly" shall mean an assembly containing two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located testcocks and tightly closing shut-off valves at each end of the assembly (see Specifications Section for additional details). This assembly is designed to protect against a health hazard (i.e., contaminant).

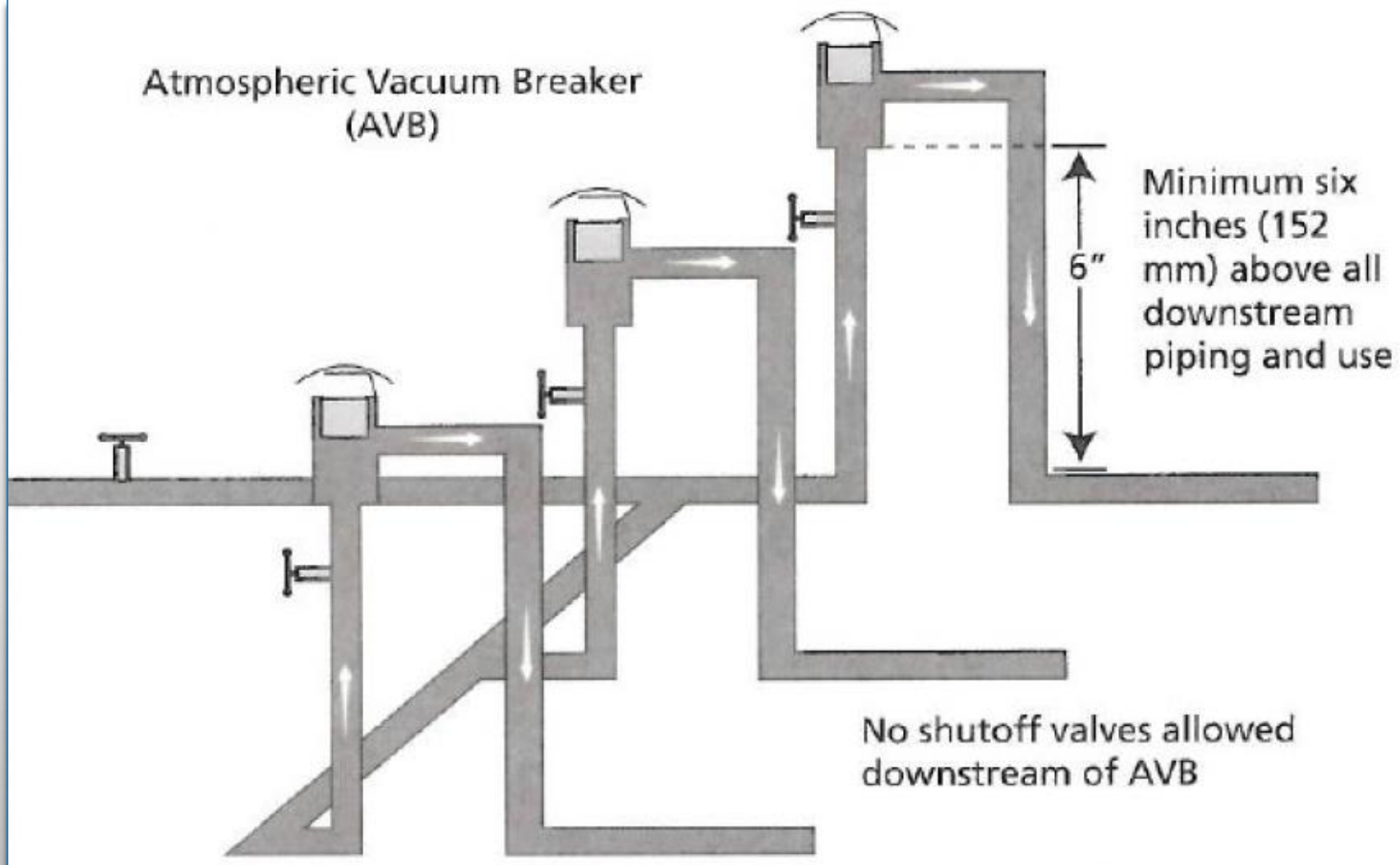


Most common residential application

# Proper Installation of a Atmospheric Vacuum Breaker: (A.V.B.)



# Atmospheric Vacuum Breaker (AVB)



Minimum six inches (152 mm) above all downstream piping and use

No shutoff valves allowed downstream of AVB