

PVC & CPVCAIR ADMITTANCE VALVES

AAV-2-0124

A SUPERIOR ALTERNATIVE TO VENT PIPING

Air Admittance Valves are permanently sealed maintenance-free devices that prevent P-trap seals from back siphonage during operation and eliminate unsightly vent piping commonly seen at roof penetrations. Spears® PVC & CPVC Air Admittance Valves operate with a one-way pressure seal designed to maintain the required negative pressure for sanitary drainage (DWV), chemical waste and marine applications. Spears® Air Admittance Valves provide a superior, value-engineered solution to vent piping for years of worry-free service.

Air Admittance Valve Design Options

- Ball-style seal (AAV series) for DWV and chemical waste applications.
- **NEW** diaphragm-style seal (AADV series) for DWV, chemical waste and marine applications.

Drainage Fixture Units

Spears® Air Admittance Valves can replace venting for up to six (6) Drainage Fixture Units (DFU) in a plumbing system. Relief vent required.



Ball-Style
Air Admittance Valve

Limited Lifetime Warranty

Spears® Manufacturing Company is the only manufacturer to offer a Lifetime Limited Warranty that covers defects in material and workmanship for the life of the product.

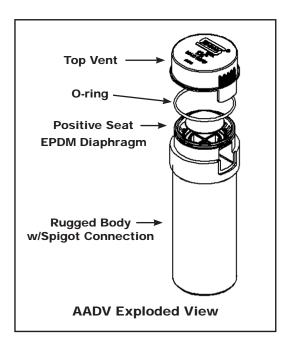


NEW PRODUCT

Diaphragm Sealed Air Admittance Valve

Spears® Manufacturing Company now offers a PVC & CPVC Air Admittance Valve with a diaphragm-style seal. Our new AADV provides a positive seat allowing for the device to operate even when experiencing intermittent centerline offset. The CPVC AADV is ideal for use in marine vessel and offshore sanitary and chemical waste applications.





Sample Engineering Specification

All thermoplastic Air Admittance Valves shall be constructed from PVC Type I Cell Classification 12454 or CPVC Type IV Cell Classification 23447. All O-rings and diaphragms shall be EPDM (FKM Optional). Spears® Air Admittance Valves shall be joined by a spigot connection using appropriate solvent cement and primer. Air Admittance valves shall be suitable for use in drainage systems as a replacement for exterior venting according to the Model Plumbing Code. Air Admittance Valves shall withstand the following temperatures: PVC: -40° F to 140° F (-40°C to 60°C) CPVC: -40° F to 220° F (-40°C to 104°C) as manufactured by Spears® Manufacturing Company.

AAV Installation Information

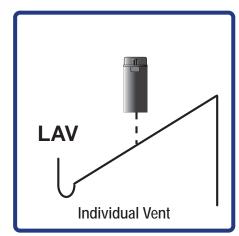
- Spears® AAV's Installation shall be in accordance with manufacturer's installation instructions and local code requirements. Failure to follow stated guidelines may result in improper unit operation. This device is not a substitute for ALL conventional venting situations.
- Spears® air admittance valves are suitable for DWV, chemical waste and marine use (marine CPVC AADV only). Spears® AAV's have spigot connections and are easily joined to a socket connection with the solvent cement process.
- The AAV device shall be installed in an accessible location, which shall permit the free (unobstructed) movement of air into the device.
- The device shall be installed in a vertical and upright orientation with the deviation not to exceed fifteen (15) degrees from vertical plumb with a minimum of one stack vent or vent stack per building system extending outdoors to the open air to serve as the positive pressure relief for the drainage system.
- When providing trap seal protection for single fixtures or branches, each AAV must be located a minimum of 4 inches (102 mm) above the weir of the fixture trap. When serving as vent terminals, Spears® AAV's must be a minimum of 6 inches (152 mm) above the flood level rim of the highest fixture

being vented in stack applications.

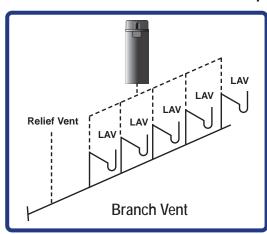
- Spears® AAV's are suitable for up to 6 DFU's in individual, branch, common and circuit vents.
- Spears® AAV's should be installed 6 inches above ceiling insulation when installed in an attic.
- For best results, install AAV on indoor systems only. Follow local plumbing codes and manufacturers recommendations.

Warning: Air Admittance Valves shall not be installed in non-neutralized special waste systems unless they are constructed of approved materials tested for chemical resistance in accordance with ASTM F2618. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves shall not be used to vent sumps or tanks. Air admittance valves shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity air intakes or mechanical air intakes. Spears® AAV's are not stack-type air admittance valves and therefore prohibited from serving as the vent terminal for vent stacks or stack vents that serve drainage stacks having more than six branch intervals.

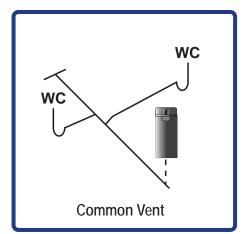
Air Admittance Valve Installation Examples



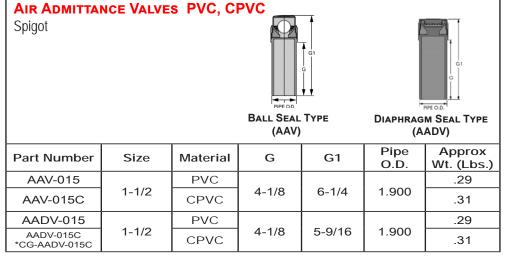
Install the AAV in close proximity to fixture trap. Locate a minimum of 4 inches above trap weir.



Install AAV with up to 6 DFU's. Provide additional relief vent beyond 6 DFU's. Can be used in a circuit vent.



Install the AAV in close proximity to the fixture traps being served.



DF ⁺ Sizing Chart	
Horizontal Branch Size	Maximum DFU's
1-1/2"	3
2"	6

⁺Drainage Fixture Unit

PROGRESSIVE PRODUCTS FROM SPEARS® INNOVATION & TECHNOLOGY



SPEARS® MANUFACTURING COMPANY

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^{*} USCG/ABS approved for marine use