

AIR ADMITTANCE VALVES (AAV)

SPECIFICATIONS

The purpose of an Air Admittance Valve (AAV) is to provide a method of allowing air to enter the plumbing drainage system without the use of a vent to prevent sewer gases from escaping into a building. An Air Admittance Valve is a one-way valve designed to allow air to enter the plumbing drainage system when negative pressures develops in the piping system. The device shall close by gravity and seal the vent terminal at zero differential pressure (no flow conditions) and under positive internal pressures. Each AAV is scientifically tested and designed never to fail.

*An Air Admittance Valve is not designed to relief positive pressure.

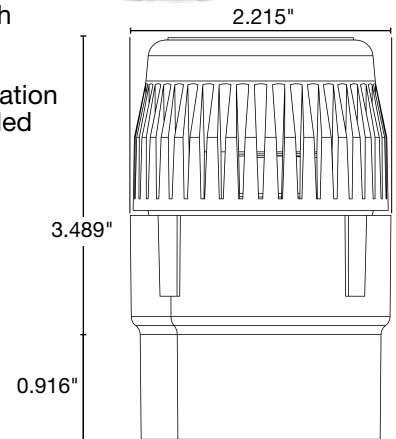
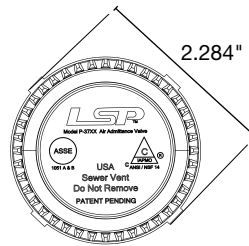
**Air Admittance Valves are not designed to function below -40°F or above 150°F

INSTALLATION

Always consult local plumbing codes prior to installing an AAV. Individual, branch and circuit vents are permitted to terminate with a connection to an AAV. The AAV will only vent fixtures that are on the same floor and connect to a horizontal branch drain. The horizontal branch drain shall connect to the drainage stack a maximum of four branch intervals from the top of the stack. The AAV should be located within the maximum developed length permitted for the vent. The AAV must be located a minimum of 4 inches above the horizontal branch drain and 6 inches above any insulation material and within 15 degrees of vertical. Every structure in which plumbing is installed shall have at least one primary stack vent. The stack vent should run as directly as possible from the building drain through to the open air. Apply approved pipe joint compound or thread seal tape to the male threads of the valve.

APPROVALS/LISTINGS

- ASSE 1050 & 1051
- NSF Standard
- IAPMO - Classified Mark
- ASTM D 2665/D 2661
- International Plumbing Code (IPC) 2003
- International Residential Code (IRC) 2003



Part Number	Description
P-3702	Air Admittance Valve, ABS, 1-1/2" - 2", w/Adapter
P-3703	Air Admittance Valve, PVC, 1-1/2" - 2", w/Adapter

	DFU Rating	Connection	Membrane	Adapter
A	20 Branch, 8 Stack	1.5" PVC NPT Threads	Silicone/EPDM	1.5" PVC or ABS
B	160 Branch, 24 Stack	2" PVC NPT Threads	Silicone/EPDM	1.5" x 2" PVC or ABS
C	160 Branch, 72 Stack	2" PVC NPT Threads	Silicone/EPDM	2" x 3" PVC or ABS
D	160 Branch, 500 Stack	3" PVC NPT Threads	Silicone/EPDM	3" x 4" PVC or ABS

Tension Membrane	Silicone/EPDM
Opening	AAV opens at -0.01 PSI and seals at 0 PSI and above
Screening	Screening on air inlets to guard the seal
Tested	100% functionally tested at 1/4" H ₂ O and 30" H ₂ O ensuring trouble free performance
Warranty	Limited Warranty

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Minimal Roof Penetrations

The purpose of an air admittance valve is to provide a method of allowing air to enter the plumbing system without the use of a vent extended to open air and to prevent sewer gases from escaping inside a building.

AAVs provide the ideal venting solution for island sinks, remote bathroom groups and remodeling jobs by eliminating the need to tie into a stack vent.

To prevent sewer gases from being released into the structure, plumbing code states that a trap is required for all fixtures. A trap is designed to create a barrier between the structure and sewer system. Trap seals can only be compromised under two conditions – high sewer pressure and water siphonage, in both cases vents prevent this from happening.

Under high sewer pressures without a vent, trap seals will allow sewer gases to escape and enter the structure. This happens when the sewer pressure is greater than the pressure from the column of water in the trap. A vent will keep the sewer and atmospheric pressures equalized to maintain the trap seal. Water moving through pipes can create a negative pressure or a siphon. The siphon will pull the water from a trap, leaving a clear path for sewer gases to enter the structure. A vent will prohibit siphoning, maintaining the trap seal.

Drainage Fixture Units (DFUs), is the amount of air flow required for a specific plumbing group to function properly. In the Maximum Drainage Fixture Units table, you can find the amount of airflow common plumbing fixtures require. DFUs per stack refers to the amount of DFUs required for vertical venting, and Branch DFUs refer to amount of DFUs required per floor/horizontal venting. When determining the necessary AAV, calculate the DFU load using the table below, and select an AAV that can process at least the recommended DFU. Proper AAV sizing is required for proper venting and appliance function.

Fixture Applications	DFU Load
Traditional Public Bathroom Group (Toilet (1.6 GPF), Bathtub w/ Shower, and Sink)	6
Traditional Private Bathroom Group (Toilet (1.6 GPF), Bathtub w/ Shower, and Sink)	5
Public Toilet (1.6 GPF)	4
Private Toilet (1.6 GPF)	3
Washing Machine	3
Bathtub w/ Shower	2
Sink & Disposal	2
Dishwasher	2
Shower Stall (5.7 GPM or less)	2
Sink	2
Drinking Fountain	0.5

2012 International Plumbing Code Section 709 Fixture Units

Maximum Drainage Fixture Units

Maximum Number of Drainage Fixture Units			
Drain, Branch or Stack Size		Maximum DFUs on Branch	Maximum DFUs on Stack
1-1/2"	40mm	3	8
2"	50mm	6	24
3"	75mm	20	72
4"	100mm	160	500

Source: 2015 IPC Table 710.1(2) "Horizontal Fixture Branches & Stacks."

Product Submittal	
Job Name:	Date:
Part Number:	Quantity:
Architect:	
Contractor:	

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