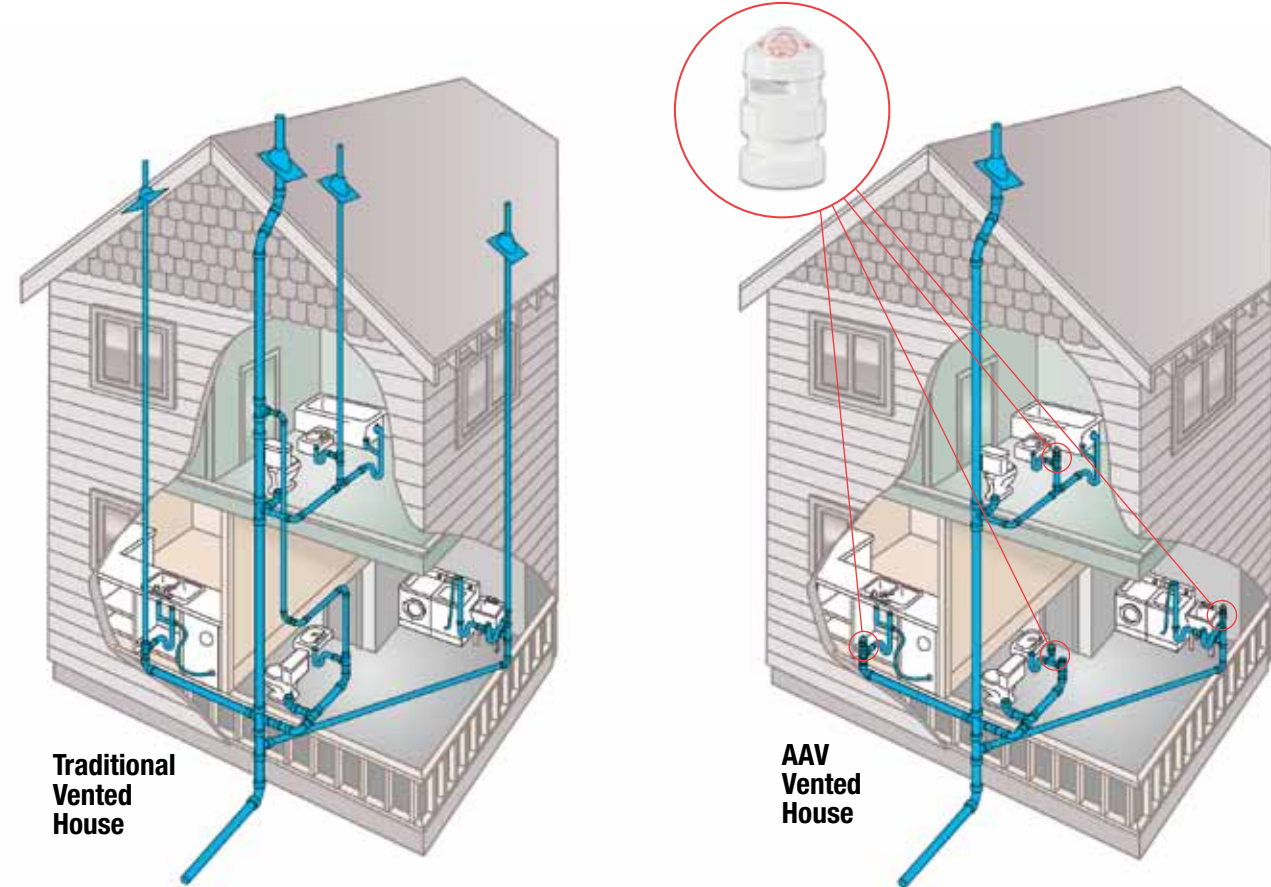


## No New Roof Penetrations!

Plumbing Drain, Waste and Vent systems, known as DWV, consist of the DRAIN pipes that provide a network for the removal of WASTE and the VENT pipes that prevent traps from siphoning and maintain an equalized pressure. The DWV system uses gravity and air displacement throughout the piping network to function and breathe. In a simplified example, water in an inverted bottle without an air hole will glug and gasp when emptied. Adding an opening to the bottom of the bottle will turn the process into an efficient, steady flow because the bottle “breathes.”



### EVERY DRAIN NEEDS A TRAP. EVERY TRAP NEEDS A VENT.

To prevent sewer gases from being released into the structure, plumbing code requires a trap to be installed at every fixture. A trap is a U-shaped bend of pipe filled with water that acts as a barrier between the structure and the sewer system. Trap seals can only be compromised under two conditions — high sewer pressures and water siphons, 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.

### WHY USE A SURE-VENT® AIR ADMITTANCE VALVE?

Air Admittance Valves (AAVs) open and close in conjunction with normal DWV system operation, effectively eliminating the need for secondary vent pipes. An AAV provides an alternative to secondary venting when utilized within the scope of model plumbing codes, referenced standards and Oatey installation instructions.

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.

AAVs are often more economical than running vent pipe in new construction because they reduce the added need for supplies and labor.

The Oatey Sure-Vent® offers *UNMATCHED PERFORMANCE* by opening and closing under the smallest pressures, multiple sizes for *OPTIMIZED DFUs* and *SUPERIOR SEALING* technology, providing a lifetime of reliability.

## Oatey® SURE-VENT® AIR ADMITTANCE VALVES TECHNICAL SPECIFICATIONS



### Engineering Specification:

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.

### FEATURES

- Four vents rated at 6, 20, 160 and 500 DFUs for optimized installations
- Sweet Spot™ technology opens at -0.01 psi (-0.25" H<sub>2</sub>O) and seals at 0 psi and above
- Screening on air inlets to guard the seal
- Protective rubber sleeve provides grip for installation and keeps valve free from debris
- 100% functionally tested at 0.25" water and 30" water ensuring trouble-free performance
- Limited Lifetime Warranty

### LISTINGS

- ASSE 1050 & 1051 (Rev. 2002)
- NES NER-670
- NSF Standard 14
- IAPMO – Classified Mark
- ASTM D2661/D2665/F409

### CODE APPROVALS

- International Plumbing Code (IPC) 2003
- International Residential Code (IRC) 2003
- Uniform Plumbing Code (UPC) 2003 – Section 301.2

### INSTALLATION

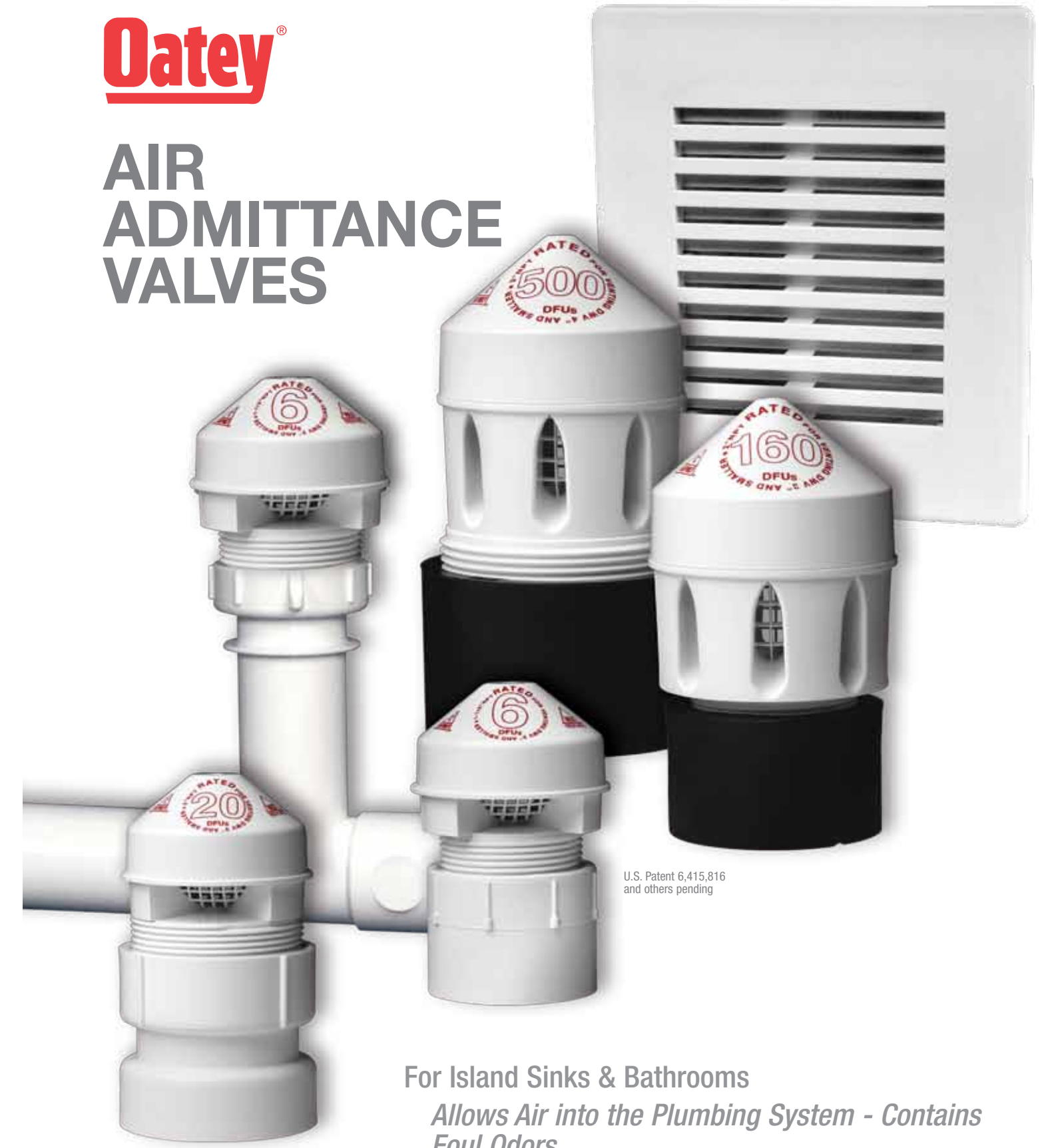
Read installation instructions prior to use of this product. Always consult local plumbing codes prior to installing an AAV. Individual, branch and circuit vents are permitted to terminate with a connection to a Sure-Vent® AAV. The Sure-Vent® AAV will only vent fixtures that are on the same floor level 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 Sure-Vent® AAV should be located within the maximum developed length permitted for the vent. The Sure-Vent® 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.

Use approved pipe joint compound on the threads of the valve and remove protective orange rubber sleeve after installation.

Sure-Vent® AAVs are intended for installation in the confines of a structure, cannot be exposed to outside elements and are intended for use between -40°F and 150°F. AAVs must be accessible for inspection and service.

# Oatey®

## AIR ADMITTANCE VALVES



U.S. Patent 6,415,816  
and others pending

For Island Sinks & Bathrooms  
*Allows Air into the Plumbing System - Contains Foul Odors*

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# Oatey®

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## Which DFU Is Right for You?

### Make the right choice

Sensitivity to pressure changes, combined with its ability to consistently open and close, is what distinguishes the Oatey® Sure-Vent® AAV from all others. Superior engineering along with stringent quality standards ensure a lifetime of unmatched performance.

Available in 6, 20, 160, and 500 DFU. An air admittance valve's ability to breathe is measured in Drainage Fixture Units or DFUs. The higher the DFU rating on the valve, the greater amount of air that can enter the DWV system. DFU loads are assigned to plumbing fixtures dependent on the volume rate of discharge, the duration of operation and the time between operations. Common fixture load ratings are shown in the table.

To ensure proper breathing capability, determine all fixtures to be vented and calculate the total DFU load, then select the appropriate Sure-Vent® for the application. Each Oatey Sure-Vent® cap indicates its maximum DFU rating — 6, 20, 160 and 500 DFUs.

**Example:** In a house with a laundry room and bathroom sharing a common wall, the DFU load would total nine. Five for the bathroom, three for the washing machine and one for the laundry tub. The 20 DFU Sure-Vent® is the right AAV for the job.

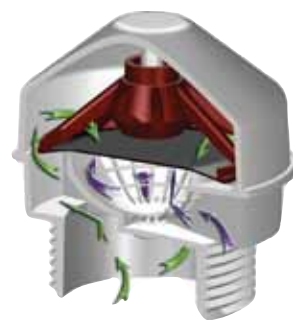
It is acceptable to oversize a Sure-Vent®; however, an undersized Sure-Vent® will not allow the plumbing system to breathe properly.

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

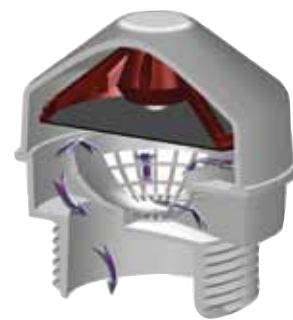
2012 International Plumbing Code Section 709 Fixture Units

## Unmatched Performance

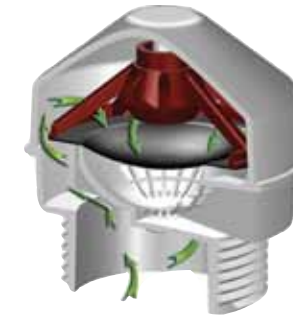
Sensitivity to pressure changes, combined with its ability to consistently open and close, distinguishes the Oatey Sure-Vent® AAV from all others. Superior engineering along with stringent quality standards ensure a lifetime of unmatched performance.



**ZERO PRESSURE**  
At zero pressure the Sure-Vent® AAV is sealed, ready to react to pressure changes. The Sure-Vent® AAV will not allow sewer gas to enter the structure.



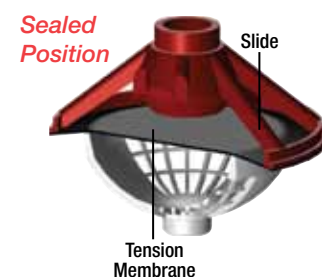
**NEGATIVE PRESSURE**  
A pressure change of -0.01 psi (-0.25" H<sub>2</sub>O) will cause the Sure-Vent® AAV to open. When open, air will flow from the room, through the protective screening, past the seal and into the DWV system as the arrows indicate. When pressure is equalized, the Sure-Vent® AAV returns to the zero pressure position.



**POSITIVE PRESSURE**  
The Sure-Vent® AAV seals at 0 psi and above indefinitely. The figure shows the Sure-Vent® AAV in a sealed position blocking sewer gasses. When pressure subsides, the Sure-Vent® AAV returns to the zero pressure position.

## Superior Sealing

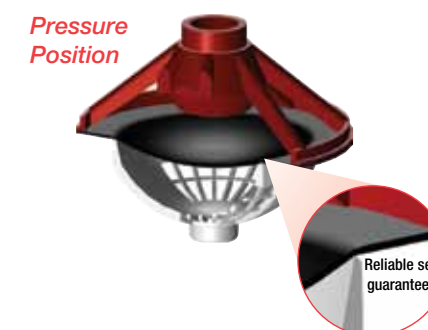
The Oatey Sure-Vent® utilizes the most advanced sealing technology available. The patented tension membrane design results in superior sealing, guaranteed.



**SWEET SPOT™**  
Securing only the perimeter of the gasket to the slide creates a soft centered tension membrane resulting in a Sweet Spot™. The flexible portion of the gasket is utilized to produce a reliable debris tolerant Sweet Spot™ seal.



**OPENING**  
Sure-Vent® is the only AAV that opens at low pressures and seals tightly. The large area of the Sweet Spot™ seal allows the Sure-Vent® to open at extremely low pressures.



**45-DEGREE EDGE**  
Designed with a 45° edge, the sealing surface of the Sure-Vent® AAV prevents particulate build-up. The self-wiping feature keeps the sealing surface clean.

## AAVs and Accessories

Oatey offers a wide range of Air Admittance Valves and accessories to enable installation in virtually any application. Included are new polystyrene wall boxes, which are a convenient, easy to use solution for recessed installations. Available with PVC or ABS adapters.

PRODUCT	DESCRIPTION	PACK
39228	6 DFU AAV with 1½" PVC Schedule 40 adapter	6
39229	6 DFU AAV with 1½" ABS Schedule 40 adapter	6
39005	6 DFU AAV with 1½" PVC Schedule 40 adapter	50
39227	6 DFU AAV with 1½" ABS Schedule 40 adapter	50
39225	6 DFU AAV with 1½" white tubular adapter	6
39226	6 DFU AAV with 1½" black tubular adapter	6
39016	20 DFU AAV with 1½" x 2" PVC Schedule 40 adapter	6
39018	20 DFU AAV with 1½" x 2" ABS Schedule 40 adapter	6
39017	20 DFU AAV with 1½" x 2" PVC Schedule 40 adapter	50
39019	20 DFU AAV with 1½" x 2" ABS Schedule 40 adapter	50
39220	160 DFU AAV with 2" x 3" PVC Schedule 40 adapter	6
39221	160 DFU AAV with 2" x 3" ABS Schedule 40 adapter	6
39223	500 DFU AAV with 3" x 4" PVC Schedule 40 adapter	6
39224	500 DFU AAV with 3" x 4" ABS Schedule 40 adapter	6
39260	Sure-Vent® Wall Box	6
39261	Sure-Vent® Wall Box Louvered Faceplate	6
39262	Sure-Vent® Box Kit with PVC Adapter and 20 DFU AAV	6
39263	Sure-Vent® Box Kit with ABS Adapter and 20 DFU AAV	6
39010	Sure-Vent Wall Box with Metal Grille Faceplate	12
39011	Metal Grille Faceplate for Wall Box	10
34247	Louvered Design Access Panel	12

## Sure-Vent® Wall Boxes

Whether you want traditional metal wall boxes or newer boxes made from polystyrene, Oatey has the box you need for your application.



### METAL WALL BOXES

- Allows access to Sure-Vent air admittance valve.
- Fits Oatey Sure-Vents – 6, 20, 160 DFU (Sold Separately.)



### POLYSTYRENE WALL BOXES

- New, smaller size: 4½" x 5¾".
- High-impact polystyrene construction.
- Accommodates 6 or 20 DFU AAVs with 1½" or 2" adapters.
- UPC listed.



(U.S. Patent 6,415,816 & others pending)

