

# VENTILATION VIEWS:

Specialty Applications

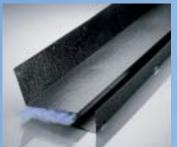
Issue Focus:

**Specialty Applications** 

News, opinions, ideas and technical advice from the ventilation specialists at Air Vent

## Specialty Ridge Vents

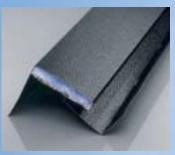
Some jobs call for special ridge vents, such as where a roof meets a vertical wall or when the ridge slot needs to be cut extra wide. For such applications, Air Vent manufactures Specialty Ridge Vents. Each of the vents described below features Air Vent's unique combination of an external baffle and an internal weather filter.



Flash FilterVent
provides ventilation
where a roof meets a
vertical wall. It delivers 9
square inches of Net Free
Area per linear foot. Flash
FilterVent comes with an
extra reverse flashing which
helps prevent water backup in

areas where snow can drift over the vent or in heavy run-off areas against high vertical walls.

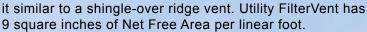
Available in black, brown, gray, bronze and copper.



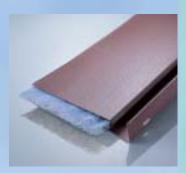
Peak FilterVent is designed for contemporary roofs formed by a pitched roof and a vertical wall that drops off from the pitched roof. It provides 9 square inches of Net Free Area per linear foot.

Available in black, brown, gray and bronze.

Utility FilterVent can be used when you need to build your own ridge vent. For example, an oversized ridge board that calls for an extra wide slot. The general application is to cut the slot where needed to provide the airflow opening, place the vent on wood blocks to maintain its shape, and continue shingling above



Available in black, brown, gray and bronze.





#### YESI

Send me a FREE "Why Homes Need Attic Ventilation" CD-ROM.

(Complete and return this card, or call 1-800-AIR-VENT.)

NAME				
COMPANY				
ADDRESS (Ca	annot deliver to P	P.O. Box)		
CITY		STATE	ZIP	
PHONE (	)	FAX (	)	
E-MAIL				

Have you ever used ridge vents? ☐ Yes ☐ No If yes, what brands?
Comments

## Air Vent's CD-ROM Makes Homeowner Presentations Easier

Here's a tool that will help with your homeowner presentations: "Why Homes Need Attic Ventilation" CD-ROM by Air Vent. The 4-minute CD plays on a laptop or any computer that plays CD-ROMs. It is narrated, animated and packed with useful information to help you explain the need for proper attic ventilation to homeowners.

- Animated graphics show intake and exhaust airflow
- Photographs reveal the potential damages resulting from improper attic ventilation
- Building code and shingle warranty requirements are referenced to support the need for ventilation
- Air Vent's ShingleVent® II ridge vents, PowerCool™ power attic ventilators and intake vents are featured

There's a handy index that allows you to reverse or fast forward to any topic. And there is a built-in stop after each section to give you time to add your own comments or answer questions.

The CD-ROM, a \$5.95 value, is yours free when you complete and return the card above or call 1-800-AIR-VENT.

# How Much Intake is Needed with a Power Attic Ventilator?

Use the following formula to determine the amount of intake venting required with a power attic ventilator: **CFM rating** of the power attic ventilator ÷ 300 = square feet of intake ventilation needed.

For example: 700 (CFM) ÷ 300 = 2.3 square feet of intake ventilation required. (*Note: Dividing by 300 is a predetermined calculation established by the Home Ventilating Institute*.)

To turn that number into square inches, which is the common method of specifying net free area, multiply it by 144 (there are 144 square inches in a square foot).

For example: 2.3 (square feet) x 144 = 331 square inches of net free intake area.

## Sizing Up Power Attic Ventilators

Power attic ventilators are rated in CFM - cubic feet per minute of air movement. The higher the CFM, the more powerful the ventilator and the more air exchanges per hour it provides. Explaining this to your customers gives you an opportunity to sell-up to high-performance models.

To determine the correct CFM rating needed for an attic, multiply the attic square footage by 0.7, which is a predetermined calculation that provides 10-12 air exchanges per hour and is recommended by the Home Ventilating Institute.

For example: 1500 square feet x 0.7 = 1050 CFM. Thus, a fan rated 1050 CFM is needed.

The chart at the right provides the required CFM for a variety of attic sizes.

## Attic Square Footage CFM Required

1200	840	
1400	980	
1600	1120	
1800	1260	
2000	1400	
2200	1540	
2400	1680	

Note: For roofs with a 7/12 roof pitch or higher, you may want to add 20% more CFM to handle the larger volume of attic space, and 30% more CFM for roofs with an 11/12 pitch or higher. Be sure to increase the intake ventilation accordingly.



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FIRST CLASS MAIL PERMIT No. 14 PEORIA

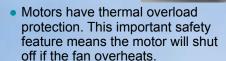
POSTAGE WILL BE PAID BY ADDRESSEE

AIR VENT, INC.
7700 HARKER DR STE A
PEORIA IL 61615-9902

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buildup in the attic.



- Large, low-profile 25" domes are positioned high to enhance airflow.
- Flashing is 24"x 24" making it easy to position, nail and shingle-over without removing the dome.

## AIR VENT INC.



 All warranties feature Replacement Plus<sup>™</sup> protection which provides reimbursement for labor costs, for a limited time, incurred in removing and replacing any parts found to be defective.

## **Battling Humidity, Too**

Besides heat, it's also important to remove humidity which can seep into the attic in the winter. Air Vent's PowerCool Plus™ 15 and PowerCool Plus™ 12 models feature a combination thermostat/humidistat for year-round ventilation. The thermostat reduces heat buildup. The humidistat reduces moisture.

# Ask Your Supplier for PowerCool™

Power Attic Ventilators that Deliver Strong Performance

Air Vent PowerCool™ roof-mount power attic ventilators can help protect a home by quickly and efficiently exhausting heat and humidity from the attic.

- Each model features a balanced motor and blade design for maximum CFM performance and motor efficiency.
- All models feature a factorywired, pre-set adjustable thermostat that's easy to install-only two wires to connect!

Model CFM Colors Warranty 1500 10-year limited with Gray, Brown, Black High-Performance PowerCool Plus 15 5-year Replacement Plus™ and Weatherwood with combination automatic thermostat/humidistat protection Gray, Brown, Black 1170 10-year limited with High-Performance PowerCool Plus 12 5-year Replacement Plus™ and Weatherwood with combination automatic thermostat/humidistat protection 1320 Gray and Weatherwood 5-year limited with PowerCool BR28 2-year Replacement Plus™ metal dome with automatic thermostat protection 1170 5-year limited with Gray, Brown, Black PowerCool BR26 2-year Replacement Plus™ and Weatherwood metal dome with automatic thermostat protection 1170 5-year limited with Gray, Black and Brown PowerCool BR26 2-year Replacement Plus™ plastic dome with automatic thermostat protection

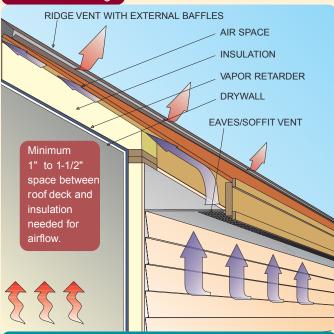
# Handling Specialty Applications:

## Cathedral Ceilings

Cathedral ceilings present special ventilation challenges. Ongoing research and debate suggests that cathedral ceilings may be prone to condensation problems, whether insulated or not, and therefore are likely to benefit from ventilation. A ridge vent combined with a balanced soffit vent system may be the only dependable choice for cathedral ceilings.

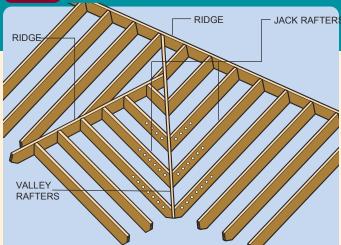
Particular cathedral ceiling designs where the presence of air blockages interfere with airflow between the ridge and eaves can be difficult to ventilate. To the right are two common situations.

### Cathedral Ceiling



A ridge vent with a balanced soffit vent system may be the only dependable choice to properly ventilate cathedral ceilings, which otherwise may be prone to ice and condensation problems.

## Valleys

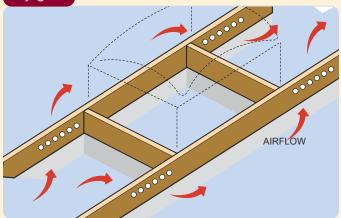


When a cathedral ceiling ends in a valley you can't access the soffit vents for intake ventilation. The solution is to drill six 1" holes in the rafter that intersects with the valley. These openings will allow intake ventilation.



Note: Do not do this with 2x4 rafters. On 2x6 and larger rafters it is important that the holes are in the center of the wood thickness, the holes are not placed in the middle 1/3 of the total length of the rafter, and the holes are no larger than I" in diameter.

### Skylights



When a skylight is installed in a rafter bay, it basically blocks the rafter bay. To unblock it, drill six 1" holes (horizontally) in the rafter below and above the skylight or other rafter bay obstruction, such as a chimney.

Note: Do not do this with 2x4 rafters. On 2x6 and larger rafters it is important that the holes are in the center of the wood thickness, the holes are not placed in the middle 1/3 of the total length of the rafter, and the holes are no larger than I" in diameter.



4117 Pinnacle Point Dr. Suite 400 Dallas, TX 75211 1-800-AIR VENT FAX: 1 800 635-7006 www.airvent.com