

FULL FLOW

SHINGLE OVER RIDGE VENT



Now available with... WEATHER FIGHTER FILTER

Passed simulated blowing snow tests at
30, 50, 70, 90 and 110mph.
Tested at Architectural Testing, Inc on 1-21-02.

SHINGLE ALIGNMENT AND CUTTING LINES

These lines speed ridge cap shingle application!

DRAINED UNDERLAP
Full width drain enhances leak protection!

EXTERIOR WIND BAFFLE

Adds extra resistance to rain and helps pull hot air out of the attic!

BAFFLED WEEP HOLES
Rain blocking baffles behind each weep hole resist rain penetration!

ROOF CONFORMING END WALLS

Conforms to roof pitches from 2/12 to 16/12!

OVERLAP LEAK PROTECTION

Overlap combined with drained underlap insures leak resistance!

CERTIFIED NET FREE VENTILATING AREA

Net free ventilating area of this certified by the Home Ventilating Institute!



**30 EZ remove nails -
enough for the vent
and ridge cap shingles!**

The right nails in the right place at the right time speeds installation!

3" ring shank nails for maximum holding power and corrosion resistance!



Specifications

- Shingle Over Ridge Vent
- FULL FLOW Model - SORVBL
- Manufactured by Headrick Building Products, Inc.
- Black Polypropylene
- Provides 18 sq. in. net free ventilating area per linear foot - 72 sq. in. per 4ft vent
- Net free area certified by the Home Ventilating Institute Division of the Air Movement and Control Association (HV/AMCA).

- Wind and rain laboratory tested at 110 mph and 8.8 in/hr water with 0 water infiltration. Tested in accordance with Miami-Dade County protocol PA 100(A) 95 on 11-2-00.

Miami-Dade County Notice Of Acceptance (NOA) number 01-0814.10.
Expiration date 10/18/2006.

- This product has been evaluated to withstand the wind loads specified in Section 120 of the Texas Department of Insurance Windstorm Resistant Construction Guide and Section 103 of the Texas Windstorm Insurance Association Building Code for Windstorm Resistant Construction. See Product Evaluation Report RV-29.
- 30 year warranty against manufacturing defects - details in each box.

Airflow Test Methods Show Major Differences in Ridge Vent Products*

Ridge vents were tested to determine the opening area that would allow the same airflow.



An airflow test chamber was built to ANSI/ASHRAE 210 specifications



A blower generated airflow that was regulated to AMCA/HVI requirements



The airflow was smoothed out by special screens



Pressure drop was measured as the airflow was channeled through specially streamlined nozzles to calculate cubic feet per minute of airflow



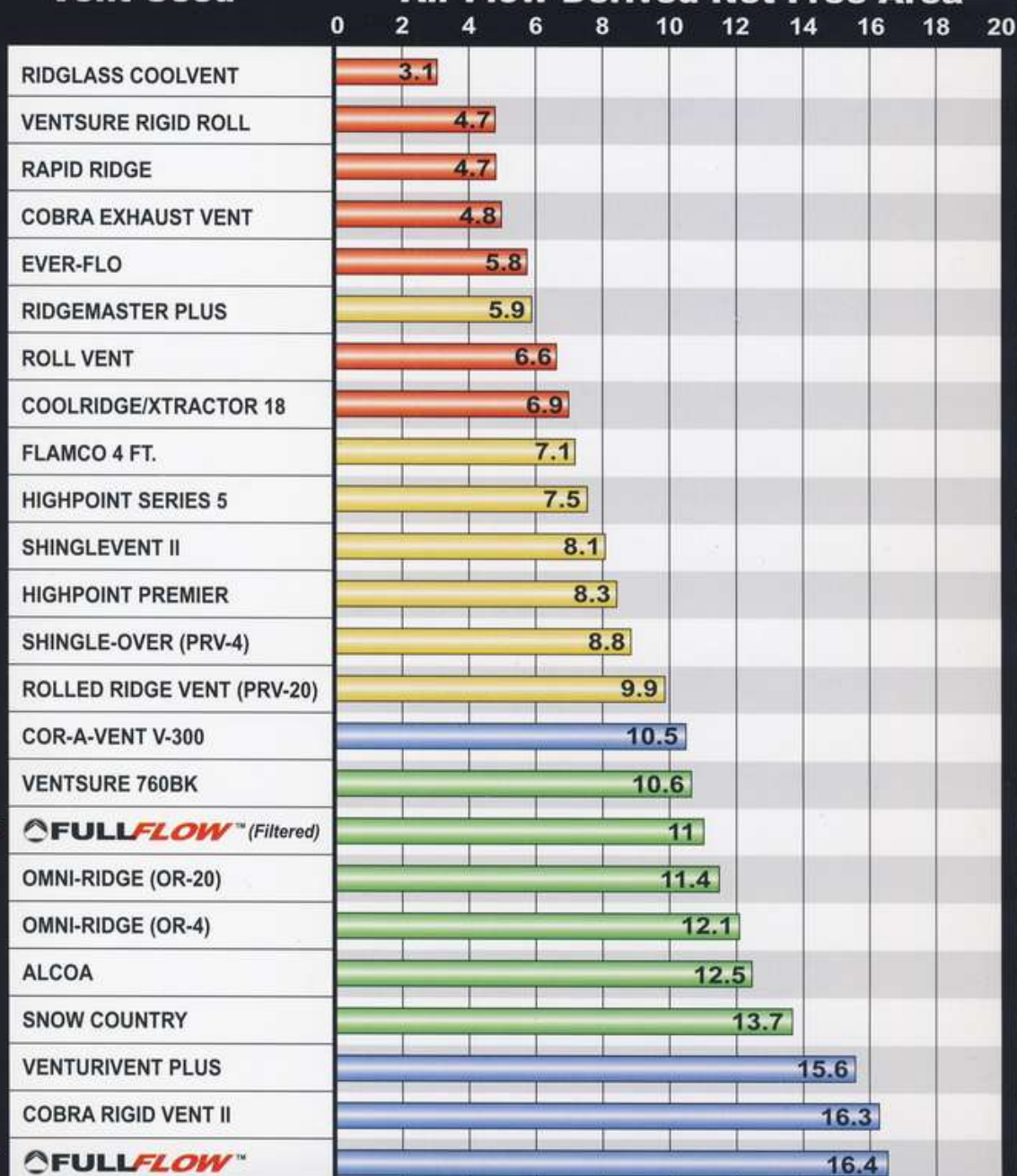
Measuring the pressure drop across the vent produced data to be used for calculations

1	1.0000	1.0000	1.0000
2	0.9999	0.9999	0.9999
3	0.9998	0.9998	0.9998
4	0.9997	0.9997	0.9997
5	0.9996	0.9996	0.9996
6	0.9995	0.9995	0.9995
7	0.9994	0.9994	0.9994
8	0.9993	0.9993	0.9993
9	0.9992	0.9992	0.9992
10	0.9991	0.9991	0.9991
11	0.9990	0.9990	0.9990
12	0.9989	0.9989	0.9989
13	0.9988	0.9988	0.9988
14	0.9987	0.9987	0.9987
15	0.9986	0.9986	0.9986
16	0.9985	0.9985	0.9985
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20	0.9981	0.9981	0.9981
21	0.9980	0.9980	0.9980
22	0.9979	0.9979	0.9979
23	0.9978	0.9978	0.9978
24	0.9977	0.9977	0.9977
25	0.9976	0.9976	0.9976
26	0.9975	0.9975	0.9975
27	0.9974	0.9974	0.9974
28	0.9973	0.9973	0.9973
29	0.9972	0.9972	0.9972
30	0.9971	0.9971	0.9971
31	0.9970	0.9970	0.9970
32	0.9969	0.9969	0.9969
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34	0.9967	0.9967	0.9967
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64	0.9937	0.9937	0.9937
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70	0.9931	0.9931	0.9931
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93	0.9908	0.9908	0.9908
94	0.9907	0.9907	0.9907
95	0.9906	0.9906	0.9906
96	0.9905	0.9905	0.9905
97	0.9904	0.9904	0.9904
98	0.9903	0.9903	0.9903
99	0.9902	0.9902	0.9902
100	0.9901	0.9901	0.9901

The AMCA/HVI program gave Net Free Area results in square inches of an opening in a flat plate that would give the same airflow.

Vent Used

Air Flow Derived Net Free Area



*You Compare
You Decide!*

* Based on Independent Lab Report of testing with equipment built to ASHRAE/AMCA 210 parameters. Calculations and test protocol were based on ASHRAE Fundamentals, AMCA/ASHRAE 210 and AMCA/HVI 916



An attic simulator was built to test ridge vents



The attic space was covered with a shingle roof heated by radiant heaters



The test was conducted by turning on the radiant heaters and measuring attic temperature rise



When the test was conducted without a vent to restrict the 2" opening the temperature rose 30.9°F



Next the test was conducted with 20 different ridge vents installed per manufacturers instructions



As a worst-case comparison, the attic ridge was sealed with duct tape and ridge cap shingles. The attic temperature rose 65.8°F

Attic Temperature Rise Test Results*

Some ridge vents perform similar to duct tape!

Vent Used	Attic Temperature Rise					Roll Type	4 ft.	Filtered	Ext. Baffl
	25°F	35°F	45°F	55°F	65°F				
DUCT TAPE					65.8	•			
RAPID RIDGE					64.3	•		•	
VENTSURE RIGID ROLL					61.7	•		•	
ROLL VENT					60.9	•		•	
COBRA EXHAUST VENT					59.3	•			
COR-A-VENT V-300					54.8		•		
SHINGLE VENT II					51.5		•	•	•
RIDGEMASTER PLUS					49.0		•	•	
HIGHPOINT SERIES 5					48.7		•		
4' PLASTIC RIDGEVENT					47.5		•		
★ FULLFLOW™ (Filtered)					46.5		•	•	•
HIGHPOINT PREMIER					45.0		•		•
COOLRIDGE/XTRACTOR-18					44.5		•		•
SHINGLE OVER (PRV4)					41.3		•		•
SNOW COUNTRY					41.1		•	•	•
VENTSURE/760BK					40.8		•		•
ROLLED RIDGE VENT (PRV-20)					40.4	•			•
OMNI-RIDGE (OR4)					38.0		•		•
OMNI-RIDGE (OR20)					37.5	•			•
ROOF OVER VENT-A-RIDGE					36.1		•		•
VENTURI VENT PLUS					36.0		•		•
RIGID VENT II					33.9		•		•
★ FULLFLOW™					33.9		•		•
OPEN 2" SLOT					30.9				

*You Compare
You Decide!*

* Based on Independent Lab Report

Your RIDGE VENT CHOICE

can be an important part of your MOLD PREVENTION STRATEGY

Attic Ventilation/Liability Control

Mold prevention is a very complex issue. Typically, there is no one direct cause for a mold problem. This complex nature forces builders to keep mold prevention considerations in all aspects of building decisions, from site selection to finish painting. Even decisions about attic spaces should be made with consideration for mold prevention.

Attic spaces may have conditions conducive to mold growth. Typically, they are constructed from possible mold nutrients - wood rafters and sheathing. The nature of an attic space can easily provide the three other conditions needed for mold growth - moisture, low light and stagnant air. * These elements are very hard for the builder to control.

Moisture

Roof leaks are the most common source of moisture in attic. Vigilance by the builder and subcontractors can reduce this source of moisture. Even if the roof does not leak, the occupants introduce moisture to the home. Activities such as breathing, bathing, washing clothes and cooking meals generate warm moist air. As this warm moist air naturally rises, it is constantly working its way into the attic through even the smallest crevices around light fixtures, wiring and HVAC vents. Even with so-called vapor barriers, it is naive to expect to keep 100% of the occupant generated moisture from penetrating the attic spaces. As a result, efforts to prevent moisture intrusion to the attic space may only be partially effective.

Low light

Most architectural styles and the need to have a continuous roof makes almost every attic a low light area.

Stagnant Air

The prevention of stagnant air is one of the times that **a builder can make a choice that influences mold formation conditions in an attic.** The fact that some occupant generated moisture-laden air will get into an attic space makes attic ventilation an important part of a comprehensive MOLD PREVENTION STRATEGY. Although no vent can totally prevent mold, venting to meet building codes can be a positive contributing factor in an overall mold prevention strategy. In many applications, prevention of stagnant air has been effectively achieved through the use of ridge ventilation combined with adequate under-eave ventilation.

Natural Ventilation

Ridge vents function on Natural Ventilation principles. **NATURAL VENTILATION IS THE FLOW OF AIR** driven by pressure differentials. ** In attic spaces, the wind and the buoyancy of warm air produce the pressure differentials that can create airflow.

Due Diligence Documentation

There are significant differences in the airflow performance of various ridge vents. As part of your liability control, you should maintain files documenting your **due diligence** in vent selection. **Requesting independent certified reports** supporting your vent manufacturers net free ventilating area (NFA) and other performance claims is one method of documenting that due diligence. If your current vent manufacturer starts a lot of double talk when you request independent certification of his claims -BUYER BEWARE!

* APA - The Engineered Wood Association, Build A Better Home Program, A525

** 2001 ASHRAE Handbook, Fundamentals, Chapter 26

Net Free Area and Certification

The key element of ventilation is the flow of air. ASHRAE defines natural ventilation as "the flow of outdoor air due to wind and thermal pressures." The purpose of static vents is to facilitate the flow of air while providing resistance to weather intrusion.

IF IT
DOESN'T SAY
CERTIFIED

BUILDING
INSPECTOR

In the process of setting minimum property standards 60 years ago, the Department of Housing and Urban Development (HUD) prescribed methodology for rating static vents by simple measurement methods. They further specified the application ratio of minimum vent net free area (NFA) to attic floor area. Those simple vent and attic measurement methods have served the industry well for many years.

Over the last 10-15 years there has been significant growth in the numbers and types of vents available for "meeting code." Many of the vent designs require convoluted air passageways and/or filters to provide resistance to weather intrusion. There has been a significant growth in the number of ridge vents with filters.

Simple engineering based testing and common sense support the fact that vents with the same measured NFA but different aerodynamic designs will have very different air flow characteristics. Thus, using the published simple measured NFA of different vents, the builder may find it difficult or even impossible to get consistent ventilation results.

IT'S NOT

For many years, the Home Ventilating Institute Division of the Air Movement and Control Association (HV/AMCA) has had two methods for determining static vent NFA. Those two methods are the HUD-originated measurement method and the Air Flow Test method. The simple measurement of static vents NFA for ratings and comparison does not take into consideration the product design induced resistance to the flow of air. In the interest of maintaining the engineering integrity and technical soundness of its Certified Ratings Programs, HV/AMCA will discontinue certification of static vent NFA by the measurement method. **Beginning January 1, 2004, the only method of static vent certification to be recognized by HV/AMCA will be the Air Flow Test Standard (HVI 916).**



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