Architectural Testing

PERFORMANCE TEST REPORT

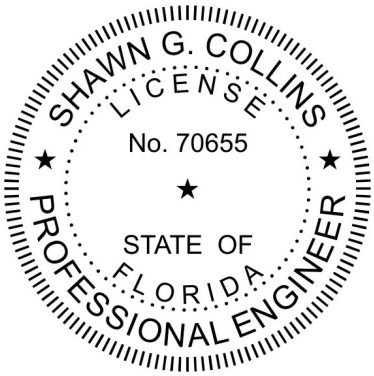
Rendered to:

AIR VENT, INC.

SERIES/MODEL: Hip Ridge™ Vent
PRODUCT TYPE: Ridge Vent

This report contains in its entirety:

Cover Page:	**1 page**
Report Body:	**6 pages**
Sketch:	**1 page**
Photographs:	**3 pages**
Drawings:	**2 pages**



Digitally Signed by: Shawn G. Collins

2011.04.29 16:18:52 -04'00'

Report No.:	**A3223.01-801-44**
Start Test Date:	**03/23/11**
End Test Date:	**03/24/11**
Report Date:	**04/25/11**
Expiration Date:	**03/24/21**

2865 Market Loop
Southlake, Texas 76092
phone: 817-410-7202
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Architectural Testing

PERFORMANCE TEST REPORT

Rendered to:

AIR VENT, INC.
4117 Pinnacle Point Drive, Suite 400
Dallas, Texas 75211

Report No.:	A3223.01-801-44
Start Test Date:	03/23/11
End Test Date:	03/24/11
Report Date:	04/25/11
Expiration Date:	03/24/21

Project Summary: Architectural Testing, Inc. was contracted by Air Vent, Inc. to perform testing on hip ridge vents, Series/Model Hip Ridge™ Vent. Test specimen description and results are reported herein. The samples were provided by the client.

Test Method: The test specimens were evaluated in accordance with TAS 100(A)-95, *Test Procedure For Wind And Wind Driven Rain Resistance And/Or Increased Windspeed Resistance Of Soffit Ventilation Strip And Continuous Or Intermittent Ventilation System Installed At The Ridge Area*.

Test Specimen Description:

Specimen #1: 3:12 pitch

Specimen #2: 12:12 pitch

Series/Model: Hip Ridge Vent

Product: Ridge Vent

Vent Configuration: The vent was a plastic matrix. It was supplied in 48" sections. Two 48" sections were installed together to make a 96" long vent.

Roof Deck Description: A roof deck with two 10' long hip ridges was utilized. The roof deck consisted of #2 Spruce-Pine-Fir nominal 2 x 6 rafters sheathed with nominal 1/2" plywood. The rafters were spaced 16" on center. The plywood was secured to the rafters using #6 x 1-5/8" long screws spaced 6" on center around the plywood perimeter and 12" on center at the intermediate supports. The sheathing was covered with 60 pound felt and standard architectural asphalt shingles. The shingles were secured to the deck per the manufacturer's instructions with galvanized 1-1/2" long roofing nails. Two 3" wide by 32" long slots were cut into the plywood underneath the specimen. The slots extended from 12" from the lower end to 6" from the upper end of each 48" section.

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Test Specimen Description: (Continued)

Installation & Anchorage: The vent was installed per the manufacturer's instructions over the ridge opening. The vent extended 96" along the ridge with 6-1/2" of the vent on either side of the ridge and was secured with 2-1/2" galvanized ring shank nails through preformed nail bosses along the vent. Asphalt cap shingles were installed over the vent and were secured with 2-1/2" long galvanized ring shank roofing nails, located 8" on center, through the cap shingles and vent into the plywood roof deck. No air dry type sealant was added between the ridge vent and the shingles.

Wind and Rain Supply: Gas engine-powered 7' diameter wind generator with calibrated water spray distribution system. Water spray was calibrated to 4.3 gallons per minute. Calibrated area is 8' x 8'.

Test Results:

Test Specimen #1: 3:12 pitch

Test #1: (Positioned 45° to wind stream)

Interval	Wind Speed (mph)	Time (min)	Water Spray	Water Penetration	Allowed
1	35	15	On	No entry	
2	0	5	Off	No entry	
3	70	15	On	No entry	
4	0	5	Off	1/2 oz	
5	90	15	On	No entry	
6	0	5	Off	No entry	
7	110	5	On	No entry	
8	0	5	Off	No entry	
			Total:	1/2 oz	17-3/4 oz

Test #2: (Positioned parallel to wind stream)

Interval	Wind Speed (mph)	Time (min)	Water Spray	Water Penetration	Allowed
1	35	15	On	No entry	
2	0	5	Off	No entry	
3	70	15	On	No entry	
4	0	5	Off	No entry	
5	90	15	On	No entry	
6	0	5	Off	No entry	
7	110	5	On	No entry	
8	0	5	Off	No entry	
			Total:	0 oz	17-3/4 oz

Test Results: (Continued)

Test Specimen #1: 3:12 pitch (Continued)

Test #3: (Positioned perpendicular to wind stream)

Interval	Wind Speed (mph)	Time (min)	Water Spray	Water Penetration	Allowed
1	35	15	On	No entry	
2	0	5	Off	No entry	
3	70	15	On	No entry	
4	0	5	Off	No entry	
5	90	15	On	No entry	
6	0	5	Off	No entry	
7	110	5	On	No entry	
8	0	5	Off	No entry	
			Total:	0 oz	17-3/4 oz

Test Specimen #2: 12:12 pitch

Test #1: (Positioned 45° to wind stream)

Interval	Wind Speed (mph)	Time (min)	Water Spray	Water Penetration	Allowed
1	35	15	On	1/2 oz	
2	0	5	Off	No entry	
3	70	15	On	1-1/2 oz	
4	0	5	Off	No entry	
5	90	15	On	3-1/4 oz	
6	0	5	Off	No entry	
7	110	5	On	1-1/2 oz	
8	0	5	Off	No entry	
			Total:	6-3/4 oz	17-3/4 oz

Test #2: (Positioned parallel to wind stream)

Interval	Wind Speed (mph)	Time (min)	Water Spray	Water Penetration	Allowed
1	35	15	On	3/4 oz	
2	0	5	Off	No entry	
3	70	15	On	1/2 oz	
4	0	5	Off	No entry	
5	90	15	On	1-1/2 oz	
6	0	5	Off	No entry	
7	110	5	On	1/2 oz	
8	0	5	Off	No entry	
			Total:	3-1/4 oz	17-3/4 oz

Test Results: (Continued)

Test Specimen #2: 12:12 pitch (Continued)

Test #3: (Positioned perpendicular to wind stream)

Interval	Wind Speed (mph)	Time (min)	Water Spray	Water Penetration	Allowed
1	35	15	On	No entry	
2	0	5	Off	No entry	
3	70	15	On	1/2 oz	
4	0	5	Off	No entry	
5	90	15	On	1-1/2 oz	
6	0	5	Off	No entry	
7	110	5	On	1-1/2 oz	
8	0	5	Off	No entry	
			Total:	3-1/2 oz	17-3/4 oz

Drawing Reference: The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen reported herein.

List of Official Observers:

Name	Company
Andrew Lindahl	Air Vent, Inc.
Blake Callaway	Air Vent, Inc.
Tony Brown	Architectural Testing, Inc.
Chris Longoria	Architectural Testing, Inc.
Andy Cost	Architectural Testing, Inc.

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire.

Results obtained are tested values and were secured by using the designated test methods. If test specimen contains glazing, no conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:

Digitally Signed by: Andy Cost

Andy Cost
Laboratory Manager

Digitally Signed by: John H. Waskow

John Waskow
Director – Regional Operations

Digitally Signed by: Shawn G. Collins

Shawn G. Collins, P.E.
Laboratory Support Engineer

AC:hd/cmd

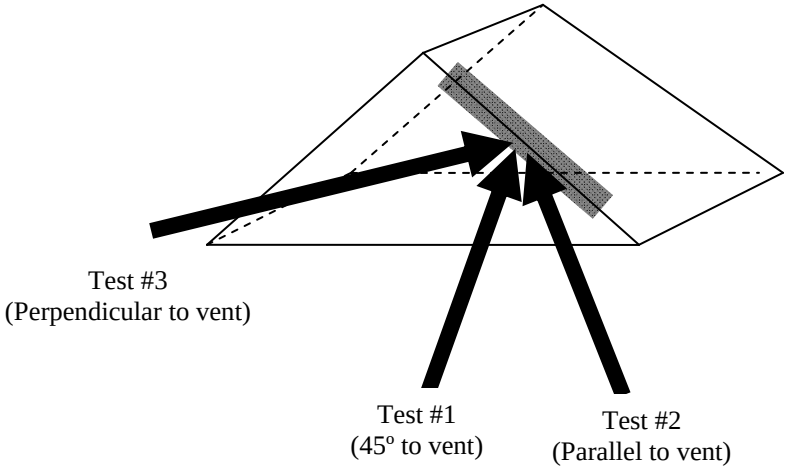
Attachments (pages): This report is complete only when all attachments listed are included.
- Appendix-A: Sketch (1)
- Appendix-B: Photographs (3)
- Appendix-C: Drawings (2)

Revision Log

Rev. #	Date	Page(s)	Revision(s)
0	04/25/11	N/A	Original report issue

Appendix A

Sketch



ATI Sketch #1
Specimen Configuration and Wind Direction

Appendix B

Photographs

Photo No. 1: Specimen #1 - Wind stream 45º to vent prior to testing

Photo No. 2: Specimen #1 - Wind stream parallel and perpendicular to vents

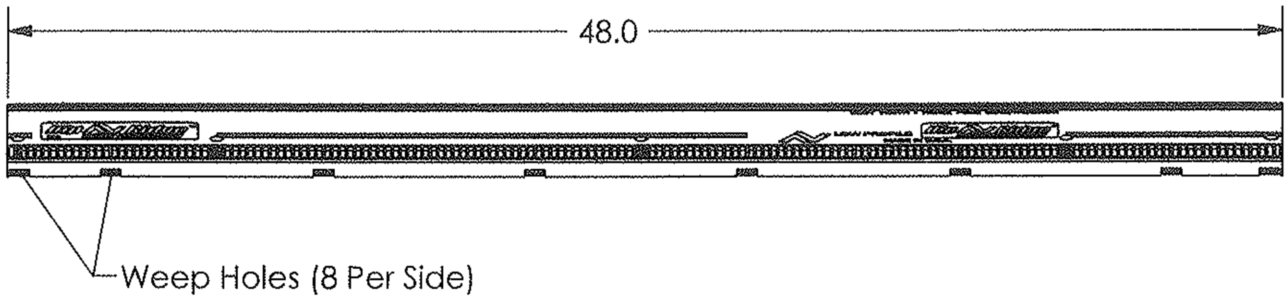
Photo No. 3: Water collection system under test deck at the conclusion of testing

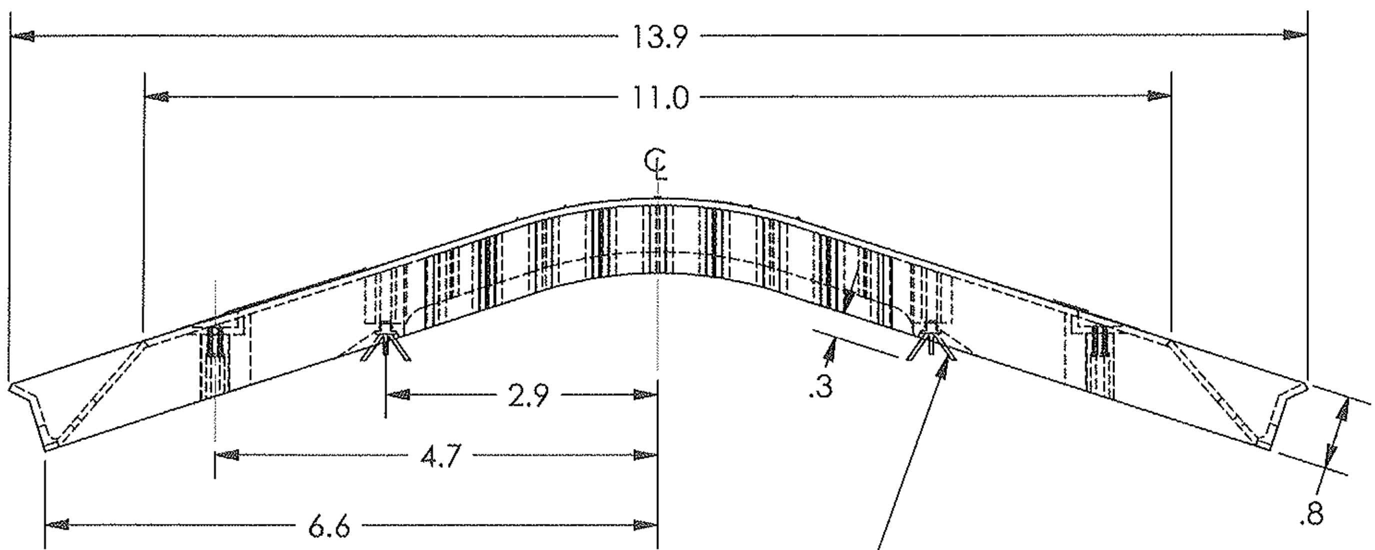
Photo No. 4: Specimen #2 - Prior to testing

Photo No. 5: Wind generator and wind stream plenum (Specimen #1 in background)

Appendix C

Drawings





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Test sample complies with these details. Deviations as noted.

Report: A3223.01-801-44

Date: 3/25/11 Tech: AL

NOTES:

1.) Material for vent is polypropylene

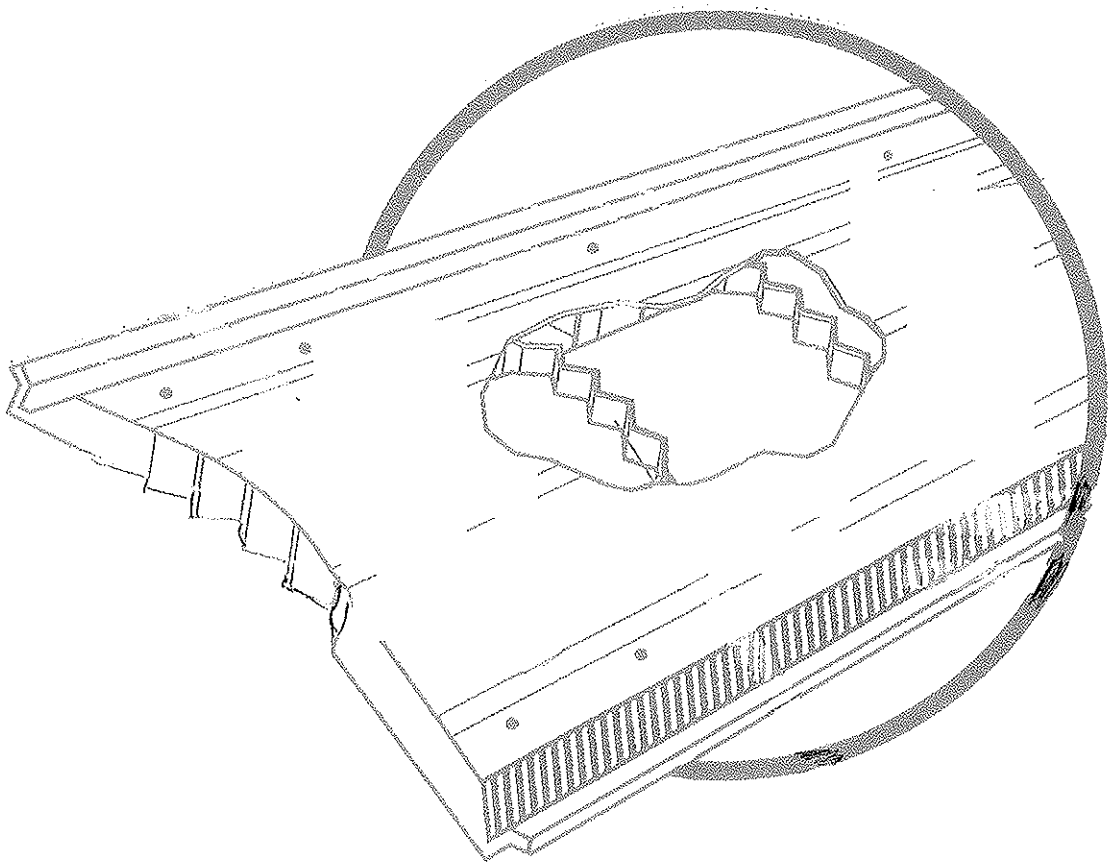
2.) Material for gasket is PVC

3.) Color of vent and gasket materials is black

4.) Vent provides 12 sq. in. net free area per foot

5.) Vent has integrated end plugs and a non-woven blue tinted fiberglass filter

AIR VENT INC. DALLAS, TEXAS	
DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE DRAWING	DESCRIPTION: Hip Ridge Vent Specification Drawing
DRAWING NUMBER: C-84742	
PREP: A. Lindahl DATE: 5-7-2010	
THIRD ANGLE PROJECTION	MODEL NUMBER: HIPVBL



Architectural Testing

Test sample complies with these tests.
Deviations are noted.

Report# A3223.01-801-36 44

Date 3/25/11 Tech