

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

### Evaluation Report ROOFIVENT LLC. iVENT ECO Shingle Base Roof Vent Assembly

#### Manufacturer:

#### **ROOFIVENT LLC.**

8330 S Madison St, Suite 70 Burr Ridge, IL 60527 *for* 

#### Florida Product Approval

#### # FL 47016.1

Florida Building Code 8th Edition (2023)

Method: Category: Sub - Category:

2 - B Roofing Roofing Accessories that are an Integral Part of the Roofing System

Product Model Name: Product Base: Product Description: Support: iVENT ECO Shingle Roof Vent Assembly OSB or Plywood Deck

#### Prepared by:

James L. Buckner, P.E., SECB Florida Professional Engineer # 31242 Florida Evaluation ANE ID: 1916 Project Manager: Diana Galloway Report No. 24-663-ECO -S-RV-ER (*New*) Date: 8/28/2024

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This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

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Manufacturer:	ROOFIVENT LLC.
	8330 S Madison St, Suite 70
	Burr Ridge, IL 60527
	(708) 618 9525
	http://www.roofivent.com/

Product Category: Roofing

Category

**Product Sub-** Roofing Accessories that are an Integral part of the Roofing System

**Product Description:** IVENT ECO Shingle is a static roof vent assembly that is used for air ventilation. IVENT ECO Shingle is made of two components: an IVENT ECO vent body and a shingle base body. The vents are made from polypropylene and are available in several colors.

Product Assembly asRoof Vent, FastenersEvaluated:Refer to Page 4 of this report for product assembly components/materials &<br/>standards:

PRODUCTS:							
Model	Vent Type	Vent Body	Vent Base	Material	Vent Height	Vent Inlet	
iVENT ECO Shingle	Static Roof Vent	iVENT ECO	Shingle	Polypropylene	20"	6"	

Support:	<b>Types:</b> Oriented Strand Board (OSB) Deck or Plywood Deck (Design of support system is outside the scope of this evaluation.)	
	<ul> <li>Description:</li> <li>OSB Deck, Min. Thickness: 7/16"</li> <li>15/32" or greater Plywood</li> </ul>	
Roof Slope:	Minimum slope shall be in compliance with FBC Chapter 15 based on the type of roof covering, applicable code sections and in accordance with manufacturer's recommendations.	
Performance:	<ul> <li>Wind Uplift Resistance:</li> <li>Design Uplift Pressure: -250 psf Note: Allowable uplift design pressure(s) for allowable stress design (ASD) with a margin of safety of 2 to 1.</li> </ul>	
Performance Standards:	The following test protocol was performed to demonstrate compliance with the intent of the code: <b>ASTM E330</b> – <i>Standard Test Method for Structural by Uniform Static Air Pressure Difference (Modified)</i>	

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Code Compliance:	The product(s) described herein have demonstrated compliance with the performance standards listed above as referenced in: Florida Building Code 8th Edition (2023), Section 1708.2			
Evaluation Report Scope:	This building envelope product is evaluated for compliance with the intent of the structural requirements of the Florida Building Code, per the scope sections of Florida Product Approval Rule 61G20-3.001.			
Product Limitations and Conditions of Use:	<ul> <li>The roof vents shall be installed in accordance with applicable Building Codes and in compliance with manufacturer's installation instructions.</li> <li>Refer to applicable building code section for ventilation requirements.</li> <li>This product shall not be installed on roof slopes less than 1 : 12.</li> <li>Structural loads shall comply with the design provisions of the FBC 8th Edition (2023), Chapter 16, Section 1609.</li> </ul>			
General Limitations and Conditions of Use:	<ul> <li>Scope of "Limitations and Conditions of Use" for this evaluation: This evaluation report for "Optional Statewide Approval" contains technical documentation, specifications and installation method(s) which include "Limitations and Conditions of Use" throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under "Optional Statewide Approval".</li> <li>This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUCK Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.</li> <li>All metal components and fasteners shall be corrosion resistant in accordance with applicable sections of FBC, including but limited to Sections 1504.3.2, 1506.6 and 1507.4.4.</li> <li>Design of support system is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.</li> <li>This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade &amp; Broward Counties)</li> <li>Option for application outside "Limitations and Conditions of Use"</li> <li>Rule 61G20-3.005(1)(e) allows engineering analysis for "project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code". Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation in accordance with the alternate methods and materials authorized in the Code". Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope</li></ul>			
Quality Assurance:	The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through <b>Keystone Certifications, Inc.</b> (FBC			

Organization #: QUA 1824).

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Components/ Material Standards:	Roof Vent Body: Material: Material Specification: Nominal Thickness: Vent Body Dimensions: Vent Inlet: Roof Vent Base: Material: Material Specification: Nominal Thickness: Vent Body Dimensions: Vent Inlet:	iVENT ECO Polypropylene Tipplen K 597 0.110" 20-3/16" x 7-3/16" 6" Shingle Polypropylene Tipplen K 597 0.188" 10" x 8" 6"	
	Fastener (Option 1): Use: Type: Size: Corrosion Resistance: Standard:	Attaches Roof Vent Base to Deck Steel Roofing Nail, Ring Shank .0120" Shank Dia x 0.365" Head Dia. X 1-1/4" long or 3/16" min. penetration thru deck Per FBC Section 1506.5 ASTM F 1667	
	Alternate Fastener (Option 2): Use: Type: Size: Dimensions: Standard:	Attaches Roof Vent Base to Deck Hex-Washer-Head, self-tapping screw #10 with 0.038" WSW Per FBC Section 1506.6 and 1507.4.4 Per FBC 1507.4.4 and ANSI/ASME B18.6.1	
Installation:	Standard:Per FBC 1507.4.4 and ANSI/ASME B18.6.1 <b>iVENT ECO Shingle Roof Vent:</b> The vent shall be attached to the deck with roofing fasteners per this report.Fourteen (14) fasteners located on shingle base flange sides as shown oninstallation photo. Fastener attachment nominal 3" o.c and 2" min. distance fromouter edge. and long enough to penetrate through the roof deck a minimum of3/16". <b>"iVENT ECO Shingle Roof Vent</b> " shall be installed in compliance with theinstallation method listed in this report. The installation method described hereinis in accordance with the scope of this evaluation report. Refer to manufacturer'sinstallation instructions as a supplemental guide for attachment.		
Evaluated Referenced Data:	<ol> <li>ASTM E330 Uniform Static Air Pressure Difference Test By American Test Lab of South Florida (FBC Organization #TST ID: 3782) Report #: 0826.02-24, Dated: 08/28/24</li> <li>Quality Assurance By Keystone Certifications, Inc. (QUA ID: 1824)</li> <li>Certification of Independence By James L. Buckner, P.E. @ CBUCK Engineering (FBC Organization # ANE 1916)</li> <li>Engineering Analysis By James L. Buckner, P.E. @ CBUCK Engineering (FBC Organization # ANE 1916)</li> </ol>		