

Evaluation Report ROOFIVENT LLC. iVENT ROTO Shingle Base Roof Vent Assembly

Manufacturer:

ROOFIVENT LLC.

8330 S Madison St, Suite 70

Burr Ridge, IL 60527

for

Florida Product Approval

FL 47016.2

Florida Building Code 8th Edition (2023)

Method: 2 - B

Category: Roofing

**Sub - Category: Roofing Accessories that are an Integral
Part of the Roofing System**

Product Model Name: iVENT ROTO

Product Base: Shingle

Product Description: Roof Vent Assembly

Support: 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-ROTO -S-RV-ER

(New)

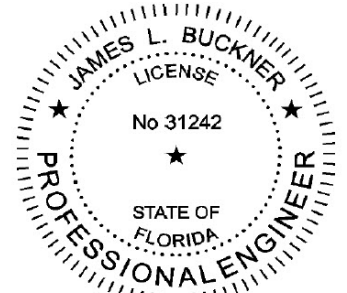
Date: 8/28/2024

Contents:

Evaluation Report

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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.



James L. Buckner, P.E.
FL31242

A handwritten signature in black ink, appearing to read "James L. Buckner".

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Product Category: Roofing

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

Product Description: IVENT ROTO Shingle is An active roof vent assembly that is used for air ventilation. IVENT ROTO Shingle is made of two components: an IVENT ROTO vent body and a shingle base body. The vents are made from polypropylene and are available in several colors. IVENT ROTO Shingle is designed for use shingle, slate and shake roof applications.

Product Assembly as Evaluated: Roof Vent, Fasteners
Refer to Page 4 of this report for product assembly components/materials & standards:

PRODUCTS:						
Model	Vent Type	Vent Body	Vent Base	Material	Vent Height	Vent Inlet
iVENT ROTO Shingle	Active Roof Vent	iVENT ROTO	Shingle	Polypropylene	20-3/4"	6"

Support: **Types:**
Oriented Strand Board (OSB) Deck or Plywood Deck
(Design of support system is outside the scope of this evaluation.)

- Description:**
- OSB Deck, Min. Thickness: 7/16"
 - 15/32" or greater Plywood

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: Wind Uplift Resistance:

- 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.

Performance Standards: The following test protocol was performed to demonstrate compliance with the intent of the code: **ASTM E330 – Standard Test Method for Structural by Uniform Static Air Pressure Difference (Modified)**

- 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:**
- The roof vents shall be installed in accordance with applicable Building Codes and in compliance with manufacturer’s installation instructions.
 - Refer to applicable building code section for ventilation requirements.
 - This product shall not be installed on roof slopes less than 1 : 12.
 - Structural loads shall comply with the design provisions of the FBC 8th Edition (2023), Chapter 16, Section 1609.
- General Limitations and Conditions of Use:**
- 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”.
 - 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.
 - 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.
 - Design of support system is outside the scope of this report.
 - Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.
 - This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)
 - Option for application outside “Limitations and Conditions of Use”
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 and will be the responsibility of others.
- 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 **Keystone Certifications, Inc.** (FBC Organization #: QUA 1824).

**Components/
Material Standards:**

Roof Vent Body:
Material: Polypropylene
Material Specification: Tipplén K 597
Nominal Thickness: 0.110"
Vent Body Dimensions: 20-3/16" x 7-3/16"
Vent Inlet: 6"

iVENT ROTO

Polypropylene
Tipplén K 597
0.110"
20-3/16" x 7-3/16"
6"

Roof Vent Base:
Material: Polypropylene
Material Specification: Tipplén K 597
Nominal Thickness: 0.110"
Vent Body Dimensions: 10" x 8"
Vent Inlet: 6"

Shingle

Polypropylene
Tipplén K 597
0.110"
10" x 8"
6"

Fastener (Option 1):

Use: Attaches Roof Vent Base to Deck
Type: Steel Roofing Nail, Ring Shank
Size: .0120" Shank Dia x 0.365" Head Dia. X 1-1/4" long
or 3/16" min. penetration thru deck
Corrosion Resistance: Per FBC Section 1506.5
Standard: ASTM F 1667

Alternate Fastener (Option 2):

Use: Attaches Roof Vent Base to Deck
Type: Hex-Washer-Head, self-tapping screw
Size: #10-14 x 1-3/8" w/ 0.554" x 0.038" WSW
Dimensions: Per FBC Section 1506.6 and 1507.4.4
Standard: Per FBC 1507.4.4 and ANSI/ASME B18.6.1

Installation:

iVENT ROTO Shingle Roof Vent:

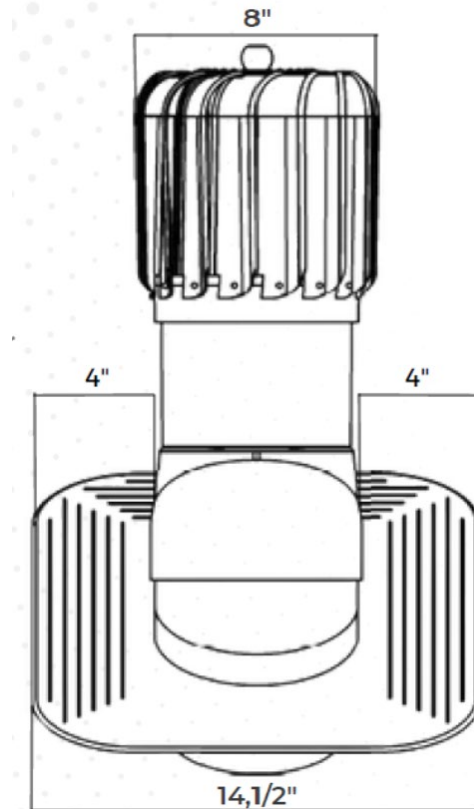
The vent shall be attached to the deck with roofing fasteners per this report. Fourteen (14) fasteners located on shingle base flange sides as shown on installation photo. Fastener attachment nominal 3" o.c and 2" min. distance from outer edge. and long enough to penetrate through the roof deck a minimum of 3/16".

"iVENT ROTO Shingle Roof Vent" shall be installed in compliance with the installation method listed in this report. The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

**Evaluated Referenced
Data:**

1. 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
2. Quality Assurance
By Keystone Certifications, Inc. (QUA ID: 1824)
3. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)
4. Engineering Analysis
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)

**ROOFIVENT LLC.
"iVENT ROTO Shingle"
Roof Vent Drawings**



**"iVENT ROTO"
attached to Vent Base - Shingle
Assembly Drawing**