

Evaluation Report

Curb Mount Profile Base Solar Powered Roof Ventilation

Appendix A

To Evaluation Reports: FL13339 .1 To .3

Manufacturer

Attic Breeze, LLC.

1370 FM 116

Gatesville, Texas 76528

(877) 288-4234

for

Florida Product Approval

FL 13339.4

Florida Building Code 8th Edition (2023)

Per Rule 61G20-3

Method: 2 - B

Category: Roofing

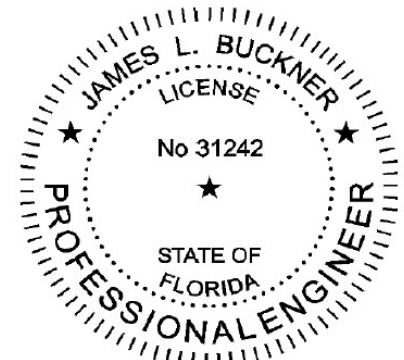
Sub - Category: Roofing Accessories that are an Integral
Part of the Roofing System

Product Name: Curb Mount
Product Description: Curb Mount Series
with Hood/Dome Mounted Solar Panel
& Remote Mount Solar Panel

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.

Prepared by:

James L. Buckner, P.E., SECB
Florida Professional Engineer # 31242
Florida Evaluation ANE ID: 1916
Report No. 23-546.04.2-C-SPA-CM-ER
(Revises 21-416.04-C-SPA-CM-ER, FL13339.4 R9)
Date: 10/17/2023



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James L. Buckner, P.E.
FL31242

Manufacturer: Attic Breeze, LLC.
Product Name: Curb Mount Vent and Fan Base Models
Product Category: Roofing
Product Sub-Category Roofing Accessories that are an Integral part of the Roofing System
Compliance Method: State Product Approval Rule 61G20-3.005 (2) (b)
Product Description: Curb profile vent fan base for attachment to roof curbs. Curb material is the same as the self flashing base in FL13339 Evaluation reports .1 to .4.
Product Assembly as Evaluated: Curb profile base attached to roof curb designed by others.

Appendix A Scope:

This **Appendix A** is linked to FL13339 Reports .1 through .3
 The vent units model numbers in this report are the same product specification in Reports .1 to .3 , including the same minimum base specifications.
 This report .4 includes additional model numbers. The envelope structural components are the same as previous reports. The differences are internal mechanical and/or electrical.
 This report addresses options for attaching the Curb Profile to roof curbs.

Model Numbers
Included in This Report:

| <u>GEN2</u> | <u>GEN3</u> | <u>Passive Vent</u> |
|-------------|-------------|---------------------|
| AB-2042A | AB-2543A | AB-1020 |
| AB-3042A | AB-3543A | |
| AB-4042A | AB-4543A | |
| AB-2042D | AB-2543D | |
| AB-3042D | AB-3543D | |
| AB-4042D | AB-4543D | |
| AB-6042D | AB-6543D | |

Vent Unit Curb Base Support: **Type & Minimum Strength Specification :**
Design of curbs is outside the scope of this evaluation

(1) Wood

Description:

15/32" or greater Plywood, or

Wood (based on minimum density/specific gravity of 0.42)

(2) Steel

22 gauge minimum thickness, 33 ksi minimum yield strength

(3) Aluminum

1/8 inch minimum thickness, alloy 6063-T52 or 6063-T6

Roof Slope: Slope shall be in compliance with FBC, Chapter 15 based on the type of roof covering.

Performance: Allowable Wind Resistance:
* Positive Design Pressure: **+ 115 PSF**
* Negative Design Pressure: **- 115 PSF**

** Allowable design pressures for allowable stress design (ASD).*

Performance Standards: The following test protocol was performed to demonstrate compliance with the intent of the code as this product is not specifically addressed in the performance standards listed in the code.

- ASTM E330-14 – *Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors and by Uniform Static Air Pressure Difference*

Code Compliance: The product described herein has demonstrated compliance with the Florida Building Code 8th Edition (2023), Section 1708.2.

Evaluation Report Scope: This product evaluation demonstrates compliance of this product with the structural wind load requirements of the Florida Building Code 8th Edition (2023), as related to Florida Product Approval Rule 61G20-3.001.

Limits 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".
- 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.

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)

Quality Assurance:

The manufacturer has demonstrated compliance of roof vent 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 Certification, Inc.** (FBC Organization #: QUA 1824)

Component(s)**Material Standards:****Vent Base**

| | |
|-----------------------|--|
| Material | Steel |
| Thickness: | 22 ga. |
| Yield Strength: | 33 ksi Minimum |
| Corrosion Resistance: | Galvalume or Zinalume per ASTM A792 AZ 50 or in compliance with the FBC, Section 1507.4.3. |

Fastener for Wood Curb

| | |
|-----------------------|--------------------------------|
| Type: | Pancake or Hex Head Wood Screw |
| Size: | #10 × 1 in. Minimum |
| Standard: | Per ANSI/ASME B18.6.1 |
| Corrosion Resistance: | Per FBC Section 1506.6 |

Fastener for Steel & Aluminum Curb

| | |
|-----------------------|--|
| Type: | Self Tapping or Self Drilling Screw |
| Size: | #12 × 1 in. Minimum |
| Standard: | Per FBC Section 1507.4.4 and/or SAE J78-1979 |
| Corrosion Resistance: | Per FBC Section 1506.6 |

Evaluated Referenced Data:

1. ASTM E330-02 – Uniform Static Air Pressure Difference Test

By Certified Testing Laboratories, Inc. (FBC Organization ID# TST 1577)
Project #: CTLA 2002W, Dated: 11 / 20 / 09
2. Quality Assurance

By Keystone Certification, Inc. (FBC Organization ID# QUA 1824)
Attic Breeze, LLC. Licensee #740
3. Certification of Independence

By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)
4. Engineering Analysis

By CBUCK Engineering
Report #17-144-EA, Dated: 6 / 11 / 17

Installation Methods

Attic Breeze, LLC.

Solar Powered Roof Vent Attachment To Curbs

Attach to Wood Curb:

Option to attach vertical leg or horizontal flange.

Screw: pancake head or hex head minimum #10 x 1 inch
3 screw on each side for a minimum total of 12.
Maximum spacing of 12 inches on center
and within 6 inches of corners
minimum distance to base edge 1 inch

Attach to Steel (22 gauge min.) or Aluminum (1/8 in min.) Curb:

Option to attach vertical leg or horizontal flange.

Screw: pancake head or hex head minimum #10 x 1 inch
3 screws on each side for a minimum total of 12.
Maximum spacing of 12 inches on center
and within 6 inches of corners
minimum distance to base edge 1 inch

Refer to manufacturer's installation instructions as a supplemental guide for attachment.