

## Evaluation Report

*Of*

**Attic Breeze, LLC.**

**Solar Attic Fan  
Self-Flashing Series  
w/ Solar Panel Attached to Fan**

*for*

**Florida Product Approval**

**# FL 13339.1**

**Florida Building Code 2007**

**Per Rule 9B-72**

**Method: 2 – B**

**Category: Roofing**

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

**Product Name: Solar Attic Fan**

**Model Series: Self-Flashing**

**Prepared for:**

**Attic Breeze, LLC.**

4582 Kingwood Drive, Suite E-154  
Kingwood, TX 77345

**Prepared by:**

**James L. Buckner, P.E.**

Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

Project Manager: Youry Demosthenes

Report No. 09-194-SAF-Dir-S4W-ER

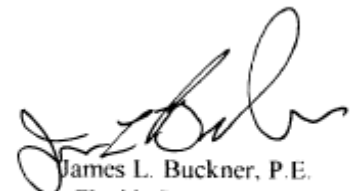
Date: 12 / 1 / 09

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**CBUCK, Inc.**

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Florida P.E. # 31242  
1/3/10

# CBUCK Engineering

Specialty Structural Engineering

CBUCK, Inc. Florida Certificate of Authorization # 8064

|                                       |  |
|---------------------------------------|--|
| <b>Manufacturer:</b>                  | <b>Attic Breeze, LLC.</b>  |
| <b>Product Name(s):</b>               | <b>Solar Attic Fan<br/>Self-Flashing Series</b>  |
| <b>Product Category:</b>              | Roofing  |
| <b>Product Sub-Category</b>           | Roofing Accessories that are an Integral part of the Roofing System  |
| <b>Compliance Method:</b>             | State Product Approval Rule 9B-72.070 (2) (b)  |
| <b>Product Description:</b>           | <p>The Solar Attic Fan is a roof mounted system with a 14 inch diameter fan, enclosed in a self-flashing Fan House Base vent, with corrosion resistant Zinalume alloy steel housing, including a thermal switch, and a rodent guard. The solar panel is attached directly to the Fan unit.</p> <p>Models: AB-201A, AB-202A, AB-251A, &amp; AB-252A</p> |
| <b>Product Assembly as Evaluated:</b> | Self-Flashing Solar Attic Fan with attached solar panel<br>Fan House Base Component Mechanically Attached to Deck with screws  |
| <b>Fan Unit Support:</b>              |  |
| <b>Type:</b>                          | Wood Deck  |
| <b>Description:</b>                   | <ul style="list-style-type: none"><li>• 15/32" or greater plywood deck, or</li><li>• Wood plank deck (Based on Minimum Density/Specific Gravity of 0.42)</li></ul> <p>(Design of supports are outside the scope of this evaluation)</p>  |
| <b>Roof Slope:</b>                    | Slope shall be in compliance with FBC 2007, Chapter 15 based on the type of roof covering.   |
| <b>Performance:</b>                   | Roof Wind Resistance: <ul style="list-style-type: none"><li>• Positive Design Pressure: + 115 PSF</li><li>• Negative Design Pressure: - 115 PSF</li></ul>  |

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- Performance Standards:** This product is not addressed specifically in the code. The test protocol, **ASTM E330-02** – *Standard Test Method for Structural Performance by Uniform Static Air Pressure Difference* was performed to demonstrate compliance with the intent of the code.
- Code Compliance:** The product described herein has demonstrated compliance with the Florida Building Code 2007, Section 1713.2.
- Evaluation Report Scope:** This product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code, as related to Rule 9B-72.
- Limits of Use:**
- Scope of “Limitations and Conditions of Use” for this evaluation:  
This evaluation report for “State Approval” contains technical documentation, specifications and installation method(s) which include “Limitations and Conditions of Use” throughout the report in accordance with Rule 9B-72.070. Per Rule 9B-72.060, the Florida Building Commission is the authority to approve products under “State Approval”.
  - Option for application outside “Limitations and Conditions of Use”  
Rule 9B-72.070(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.
  - Fire Classification is outside the scope of Rule 9B-72, and is therefore not included in this evaluation.
  - This 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 panel products in accordance with the Florida Building Code and Rule 9B-72.070 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Keystone Certification, Inc.** (FBC Organization #: QUA 1824)

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

**Self-Flashing Solar Attic Fan**

Dimensions

Fan House Base: 28 in. Long × 28 in. Wide  
Fan House Shroud: 21-1/2 in. Long × 21-1/2 in. Wide  
Solar Panel: 19-1/4 in. Long × 16-1/4 in. Wide  
Overall Height: 12 in.

Base & Shroud

Material: Steel  
Thickness: 24 Ga.  
Yield Strength: 33 ksi Minimum  
Corrosion Resistance: Aluminum-Zinc Alloy Coated  
Material shall comply with the Florida Building Code (FBC), 2007 Section 1507.4.3.

**Fastener**

Type: Pancake Head Wood Screw  
Size: #10 × 1 in. Minimum  
Standard: Per ANSIASME B18.6.1  
Corrosion Resistance: Per FBC Section 1506.6 AND 1507.4.4

**Installation:**

**Installation Method:**

(Refer to Page 5 and 6 of this evaluation report.)

“The Self-Flashing Solar Attic Fan” shall be installed in compliance with the installation method listed in this report and applicable code sections of FBC 2007. 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.

**Referenced Data:**

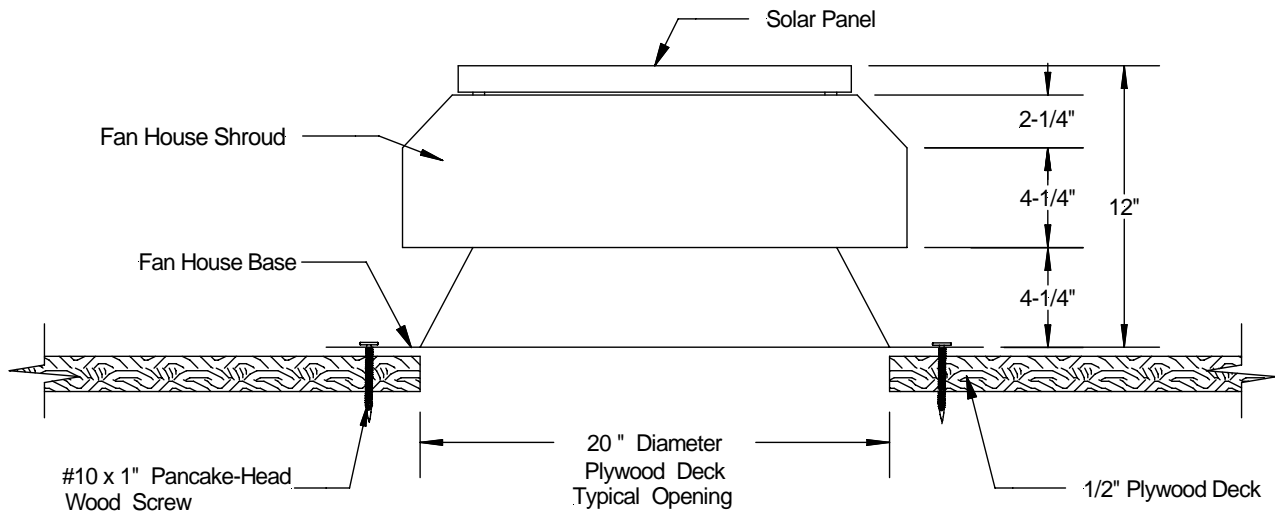
1. ASTM E330-02 Uniform Static Air Pressure Difference Test  
By Certified Testing Laboratories, Inc. (FBC Organization ID# TST 1577)  
Project #: CTLA 2002W, Dated: 11 / 20 / 09
2. Quality Assurance  
By Keystone Certification, Inc. (FBC Organization ID# QUA 1824)  
Attic Breeze Licensee # 740
3. Certification of Independence  
By James L. Buckner, P.E. @ CBUCK Engineering  
(FBC Organization # ANE 1916)
4. Engineering Analysis  
By CBUCK Engineering  
Report #C09-194, Dated: 12 / 1 / 09

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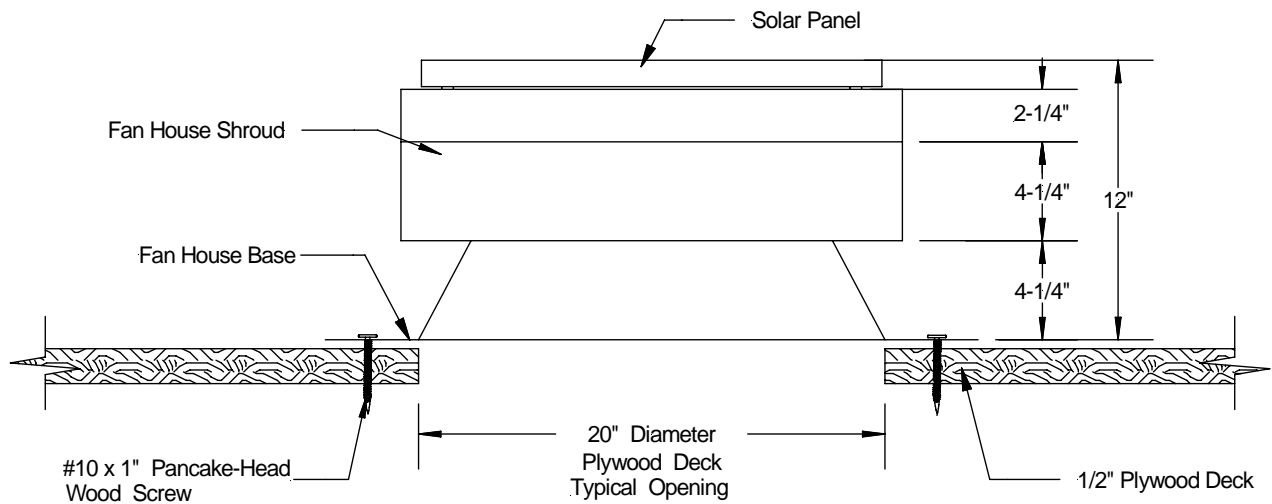
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## Installation Method Attic Breeze, LLC. Self-Flashing Solar Powered Attic Fan Attachment Assembly



Assembly Front Section View



Assembly Side Section View

