

Product Evaluation Report

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Product Manufacturer

Solaro Energy, Inc.
1404 Enterprise Rd.
Socorro, NM 87801

Product Name, Model, Series and/or Description

Series "Solaro Aire"
Solar Powered Ventilation System (Roof Vent)

Code: Current Edition of the Florida Building Code including the 5th Edition (2014) Florida Building Code.

Compliance Method: 61G20-3.005(1)(d) – Product Evaluation Report by a Licensed Professional Engineer

Product Testing, Materials and Certification:

- National Certified Testing Laboratories Test Report No. NCTL-210-4045-01 and associated laboratory drawings, dated 10/24/16, signed and sealed by Gerard J. Ferrara, P.E. No. 11985.
 - Testing to 2014 FBC TAS 202-94, DP = +/-90 psf.
- Fenestration Testing Laboratory Test Report No. TST-1657 (LAB NO. 9178, PROJECT NO. 16-6675) and associated laboratory drawings, dated 10/27/16, signed and sealed by Idalmis Ortega, P.E. No. 76905.
 - Testing to 2014 FBC, TAS-100(A)-95, Wind Driven Rain Test - Passed
- Certification by Keystone Certification, Inc.
- Materials:
 - Low or High Profile Base: 0.080" Thick 3003-0 Aluminum
 - Fan Hood: 4.5" x 0.063" Thick 3003-0 Aluminum

Product Installation Instructions:

- Drawing No. NL_0075, dated 10/19/16, signed and sealed by Robert J. Amoruso, P.E.

Engineering Analysis: The following engineering and/or rational analysis/calculations have been performed.

- Anchorage has been verified by calculation prepared by Robert J. Amoruso, P.E. in accordance with the current edition of the Florida Building Code.

Performance Testing and Code Conformance:

- Performance Testing to ASTM E330-02 per TAS 202-94
 - Uniform Load Structural Test Pressure = +/-180 psf.
- Code Conformance:
 - Testing in accordance with Section 1709.2 of the 5th Edition (2014) FBC and the MD Approval Checklist No. 0155 for Roof Ventilators, Turbines and Ridge Vents.
 - In accordance with Section 1504.9 of the 5th Edition (2014) FBC, a Safety Factor of 2 is applied to arrive at a Design Pressures of +/- 90 psf.

Limitations & Conditions of Use:

- This product has been evaluated for use inside the HVHZ (High Velocity Hurricane Zone).
- Refer to Product Installation Instructions noted above for:
 - Maximum allowable wind loads at related maximum allowable size(s).
 - Overall dimensions and material/grade of main product components, accessories, etc.
 - Illustrated diagrams of the attachment of the product to the structure.
 - Anchor type(s), size(s), substrate(s), embedment, edge distance, and spacing/locations.

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- Site wind pressures shall be determined by a licensed professional engineer in accordance with the current edition of the Florida Building Code and/or ASCE 7-10 for components and cladding based on allowable stress design.
- Site conditions not covered in this product evaluation document are subject to additional engineering analysis by a licensed professional engineer or registered architect as required by the authority having jurisdiction.
- Adequacy of the existing structural substrates as a main wind force resisting system capable of withstanding and transferring applied product loads to the foundation is the responsibility of the licensed professional engineer or registered architect acting as the design professional of record for the project of installation.

Certificate of Independence per Product Approval Rule
61G20-3.009

Robert J. Amoruso, P.E. does not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report. Robert J. Amoruso, P.E. does not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by this Product Evaluation Report.

Evaluated by:
Robert J. Amoruso, P.E.
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