TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective November 1, 2011
RV-65

*The following product has been evaluated for compliance with the wind loads specified in **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **May 2015**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Solar Attic Fans, manufactured by

Air Vent, Inc.
4117 Pinnacle Point Drive
Suite 400
Dallas, Texas 75211
(214) 630-7377

will be acceptable for use in designated catastrophe zones along the Texas Gulf Coast when installed in accordance to manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

Roof Mounted Solar Attic Fan with Roof Mounted Solar Panel: The roof mounted solar attic fan with roof mounted solar panel is a vent comprising a square metal mounting base flange, round metal collar and a dome covering the collar that is approximately 24" in diameter. The base, collar and dome are constructed of galvanized steel. The solar panel is constructed with a galvanized steel frame. The vent has a screen constructed of polypropylene material to guard against entry to the attic. The solar panel is attached to the roof using supplied mounting brackets and screws. The panel comes with sufficient wire length to allow positioning on the roof to maximize solar collection.

Solar Cool Roof Moutned Attic Vent: The Solar Cool roof mounted attic vent is a vent comprising a square metal mounting base flange, round metal collar and a dome covering the collar that is approximately 24" in diameter. The base, collar and dome are constructed of galvanized steel. The solar panel is constructed with an aluminum frame. The vent has a screen constructed of polypropylene material to guard against entry to the attic. The solar panel is factory attached to the top of the dome using a fully adjustable tilting/rotating bracket which can be adjusted to maximize solar collection.

LIMITATIONS

Design Wind Pressure:

Attic Vent Model	Allowable Design Pressure (psf)
Roof Mount with Solar Panel	-230.58
Solar Cool	-210.53

Roof Deck: The roof deck shall be minimum nominal ½" plywood (15/32" plywood is acceptable).

Roof Slope: The roof vent may be installed on roofs with a minimum slope of 3:12 and any slope up to a maximum slope of 8:12.

INSTALLATION INSTRUCTIONS

General Installation Requirements: All requirements specified in the International Residential Code (IRC) and the International Building Code (IBC) shall be satisfied. The manufacturer's installation instructions shall be followed unless otherwise specified by this product evaluation.

Roof Deck: The roof deck shall consist of plywood wood structural panels with a minimum nominal thickness of ½" plywood (15/32" plywood is acceptable).

General Installation Requirements (both vents): Locate the attic vent on the roof as specified by the product manufacturer. Mark a 14½" diameter circle on the roof as specified by the product manufacturer. Using the mark as a guide, you carefully cut a 14½" diameter hole in the roof. Do not cut through any roof framing members (rafters or trusses). Lift the shingles located directly around the cut hole. Slide the attic vent flange underneath the shingles and underlayment and position the attic vent so that it is centered with the attic hole. Follow the manufacturer's instructions for proper vent placement.

Roof Mount Solar Fan with Solar Panel: The flange of the roof mount solar fan is secured to the roof deck with minimum 11 gauge, (0.120" diameter), smooth shank galvanized roofing nails, ⅜" head diameter, minimum 1½" length. The nails shall be located at all the corners and the mid-point of all flange sides. The solar panel is secured to the roof deck using four (4) clips attached to the solar panel. The custom clips are secured to the roof deck with minimum #10 x 1½" screws. All fasteners shall be long enough to penetrate through the roof deck. Apply weatherproofing as specified by the product manufacturer.

Solar Cool: The flange of the solar vent is secured to the roof deck with minimum 11 gauge, (0.120" diameter), smooth shank galvanized roofing nails, ⅜" head diameter, minimum 1½" length. The nails shall be located at all the corners and the mid-point of all flange sides. All fasteners shall be long enough to penetrate through the roof deck. Apply weatherproofing as specified by the product manufacturer.

Note: The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC); the International Building Code (IBC); and the Texas Revisions.