

PO Box 12030 | Austin, TX 78711 | 800-578-4677 | tdi.texas.gov

# **Product Evaluation**

RV77 | 0422

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

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.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** RV-77 **Effective Date:** April 1. 2022

**Re-evaluation Date:** April 2026

**Product Name:** SR1800 Solar Ventilation Fans

Manufacturer: Solar Royal

3530 Bee Cave Rd

Suite 104

Austin, TX 78746 (512) 547-3269

# **General Description:**

The Solar Royal SR1800 is a solar ventilation fan. The ventilation fan has a two-piece design where the flashing is installed first and then the hood is secured without the use of tools. The ventilation fan includes a built-in monocrystalline adjustable solar panel allowing for versatility in mounting positions. The solar panel is 30-watts and is expandable via an external power connector to 40-/50-/60-Watts. Refer to Figure 1 for a top and side view of the assembly.

**Flashing Base:** A square, powder-coated metal, flashing base, with measurements of 26" x 26".

**Hood:** A square, automotive grade ABS, high impact composite material with a UV stabilizer and fire retardant, hood, with measurements of 24" x 24".

**Solar Panel:** The fan is powered by an 18" x 18", 30-Watt, 19.5-volt, 1.53-amp monocrystalline solar panel.

# **Limitations:**

**Design Wind Pressure:** -340 psf

**Roof Deck:** The roof deck must be minimum nominal 7/16" thick OSB (minimum nominal 15/32" thick plywood is acceptable).

**Roof Slope:** The attic fan must be installed on roofs with a minimum slope of 3:12 and a maximum slope of 16:12.

#### Installation:

# **General Installation Instructions:**

All requirements specified in the IRC and the IBC must be satisfied and the manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

**Roof Deck:** The roof deck must consist of wood structural panels. Use either minimum nominal 7/16" OSB or minimum nominal 15/32" plywood.

### Attachment of Roof Vent to Roof Deck:

The solar ventilation (attic) fan must be installed in accordance with the Solar Royal SR1800 Installation manual and this product evaluation report. The base flange is secured to the roof deck with minimum No.  $10 \times 1-1/2$ " long wood screws with neoprene washers. Two (2) screws are required on each side of the base flange. The fasteners are located approximately 6" from each end and 2" in from the edge of the flange.

**Note:** Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.

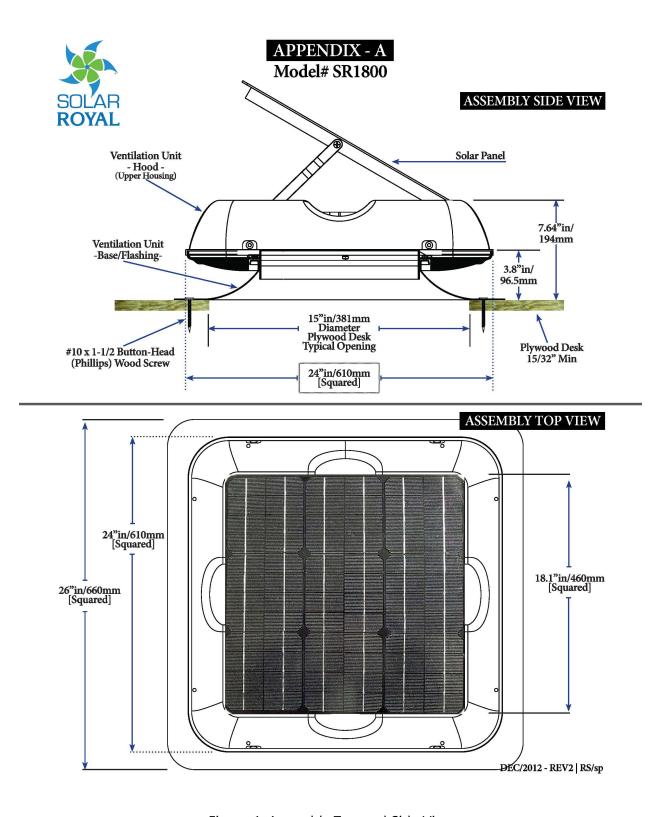


Figure 1. Assembly Top and Side View