

## **POWER-SAVE SOLAR ATTIC FAN SPECS & INSTALLATION**

- Removes Hot Attic Air
- Solar Powered
- 10 watt 850 CFM Air Flow
- \* 20 watt 1200 CFM Air Flow
- Same Day installation
- \* No electricity required
- 10/5/25 Year Warranty
  - 10 - housing, 5 - motor, 25 - solar
- \* 10 watt venting capacity 1000-1500 square feet
- \* 20 watt venting capacity 1500-2000 square feet
- \* Thermal Snap Switch turns motor fan off at 70°F turns motor fan on at 80°F

### **Solar Panel**

Rating: 10 watts nominal; .69 amps/16.8 volts under maximum sun exposure  
20 watts nominal; 1.19 amps/16.8 volts under maximum sun exposure

Dimensions: 10 watt 16.25" L x 10.5" W x 1" H  
20 watt 22.4" L x 14.2" W x 1" H

Material of Construction: aluminum frame; monocrystalline solar cells

Notes: Remote mounted solar panel with low profile mounting brackets

### **Fan Motor**

Rating: 12-24 volt DC; variable speed

Dimensions: 1.5" D x 4.0" H

Material of Construction: stainless steel motor body w/sealed ball bearings

### **Fan Blades**

Rating: 1200 CFM airflow @ 0.0 inches of water discharge head

Dimensions: 12" D x 4 blades; high-efficiency blades

Material of Construction: aluminum

### **Vent Housing**

Rating: designed to withstand 110 mph windstorm conditions; corrosion resistant

Dimensions (housing): 23.0" L x 4.0" H

Dimensions (flashing / base): 27.25" L x 13.375" W x 6.25" H (self-flashing)

Material of Construction: aircraft grade aluminum

## **INSTALLATION**

Tools Required: Razor Knife, Flat Bar, Caulking Gun, Screw Gun, Reciprocating Saw, Ladders.

### **Steps**

- 1 In attic, mark location of solar-powered vent between two roof rafters.
- 2 Drive nail through center of vent location.
- 3 Install roof brackets and fall-arrest system to roof.
- 4 Scribe outline of vent's flashing on roof using homemade dowel compass.
- 5 Cut shingles along circular outline with a utility knife.
- 6 Pull nails and remove shingles from within the circle.
- 7 Use compass to scribe hole for vent onto roof sheathing.
- 8 Cut hole in roof with a reciprocating saw.
- 9 Remove shingles from around the vent opening.
- 10 Apply continuous bead of tri-polymer roofing cement around hole.
- 11 Set roof vent over hole, then screw the fan's flashing to roof.
- 12 Apply more caulking around flashing.
- 13 Replace all the roof shingles around the vent fan with 1 ½-inch roofing nails.

1. With a razor knife, cut a 4 inch slit through the shingles and the tar paper at the 3 and 9 o'clock position of the flashing. This allows for the sides of the flashing to be inserted under the shingles.

2. Insert the reciprocating saw blade sideways at the 3 o'clock position and commence cutting roofing nails up and around to the 9 o'clock position. This process removes the nails that will prevent the flashing from sliding up underneath the shingles.

3. Caulk underside of flashing with the provided caulking material. Two concentric rings of caulking material is sufficient.

4. Taking care not to smear caulk on the exposed shingles, slide flashing under tar paper and shingles and force flashing up until the shingles come in contact with the raised portion of the flashing. The bottom side of the flashing will be on the top of the shingles. Secure flashing with 4 hex head screws at the 3:00, 6:00, 9:00, and 12:00 positions, making sure that at the 3:00, 9:00 and 12:00 positions, the screws are placed under the shingles. At the 6:00 position, caulk over the screw head since it will be exposed to the weather. Use remaining caulk to seal the areas where the 4" slits were made and around the area where the shingles meet with the raised area of the flashing.

video

<http://www.thisoldhouse.com/toh/video/0,,20047003,00.html>