



# SR1800 INSTALLATION GUIDE

## **⚠ IMPORTANT NOTE ⚠**

Installing an attic fan is fairly easy but Solar Royal, LLC recommends that if you have not worked on a roof, installed something on your roof before, or are not familiar with working on a roof that you should hire an insured and bonded professional to install anything on your roof, including a solar attic fan.

This guide applies and assumes the product is being installed on a composite shingle roof.

## **PRECAUTIONS**

1. Work with extreme caution on the roof, when using tools and waking on roofs.
2. Be careful not to cut any rafters, framing, etc.
3. Meaure four times and cut once.

## **-TOOLS NEEDED -**

- Safety goggles
- Measuring tape
- Marking Pencil
- Utility knife
- Screws (Provided)
- Caulk (ie.. MP1 or similar)
- Stud finder
- Drill w/ phillips bit
- Flat pry bar
- Caulk Gun
- Reciprocating Saw



Thank you for purchasing the Solar Royal, LLC (SR1800). Before installing the unit be sure you make yourself familiar with the different components. Carefully unpacking the unit and review above items suggested to install the unit. The SR1800 is the easiest solar attic fan to install because the separate flashing (metal base) is made to be installed before the rest of the unit so the attic fan is easier to mount. Once the flashing is installed, the hood unit of the SR1800 can be easily placed and then securely snapped into place.

## **NOTE:**

- For best operation, install solar fan where it will receive direct sunlight. South or West facing roof slopes will work best. if a southern exposure is not feasible, the fan can be installed on any other exposure as the solar panel can be adjusted to accommodate the maximum sunlight capture.
- For your protection the SR1800 is delivered with a safety film that covers the solar panel. The safety film serves to protect the installer from the blade rotating on the roof which could damage the unit and also injure the installer. Also, if the client wishes to have the unit in another color, the SR1800 can be painted to match the home and/or roof color. Once the fan is installed, the white film should be removed so that the SR1800 will work properly.

**WARNING:** *Do not cut through any roof substrates, rafters or framed portions of the roof. Also prior to cutting, make sure that you do not have any electrical, plumbing or possible gas lines in the area. If you do, then either make sure you stay clear of these hazards or possibly consider installing the unit in another location.*

1.) ***Remember the golden rule, measure four times and cut once.*** On either 24"/16" center construction, we recommend cutting a 15" (fifteen inches) round hole between the rafters. We recommend installing the SR1800 between the rafters but if not possible it is OK to install the SR1800 over a rafter.

2.) Once the hole as been made, trim away shingles as needed to accommodate the metal base flashing so that you have a clean and tight fit. Normally if you cut a clean 15" hole, we recommend trimming away from the top rows of shingles an additional 1" (one inch) to allow the base flashing to slip under the top row(s) of shingles and over the bottom row(s).

3.) Slip the flat metal base under the top rows of shingles and center the unit over the opening. If the unit is not properly centered this will jeopardize the integrity of the installation. The SR1800 has been designed to accommodate all angles so it does not mater which side is installed first. Do not force the flashing into place, if the flashing does not slide in smoothly then most likely you have a nail, washer or something obstructing it's path. Carefully find out what is causing the issue and adjust as needed. It is also important to avoid deep scratches in the flashings powder-coating.

4.) Once metal flashing is in place, gently lift the lower exposed metal base flashing and apply sealant (caulk) generously under the side and lower edges but not so much that it oozes out. If sealant starts to ooze, just wipe off excess before it hardens. The bottom part of the flashing will be exposed and sit on top of the shingles.

5.) Drill 4 to 6 (four to six) mounting holes (along bottom and exposed sides). Use the provided screws to mount the unit but making sure before screwing in the second screw, the unit is properly squared with the roof edge or side.

6.) After properly mounting the SR1800 to the roof, utilize the exterior grade, high-heat, waterproof sealant (caulk) - apply generously over the screws and verifying again the status of the oozing or lack of sealant on the exposed metal flashing underside. *Now is the time to do it right and make sure the installation is water tight.*

7.) The SR1800 comes with a 36" (inch) thermoball /thermostat/ attachment. This is designed to hang down into your attic. You can adjust the length of the thermostat with a cable tie or tape. The Thermoball is designed for two purposes:

- a. To give the cable and thermostat weight so it will hang straight down.
- b. To allow the fan to run once the temperature is above 80° F ( +/- 5° )

If you do not want to utilize the thermostat, the unit is delivered with a bridge adapter in the same pouch as the screws, that allows you to remove the thermostat from the circuitry which allows the fan to run regardless of the temperature when there is available sun. NOTE: if the white film is removed prior to installing the solar attic fan on the roof, the thermoball and cable can get caught up quickly within the fan. Be sure to verify that they fan/motor is clear and the cable is clear of the blade and handing down properly.

8.) Then, carefully set the SR1800 down (centered) on the metal base (flashing) making sure the thermoball / cable is not being pinched and is handing down within the attic space. Also if you are wanting to have your solar panel at an angle - remember to take into consideration where and how the panel is set to angle to make sure you click into place correctly. The SR1800 when placed on the base is slightly off and not exactly squared with the metal base unit, once the unit is (turned to the left) clicked into place, you will hear a very distinct secure metal clip that locks the solar attic fan into place. If you have found that you have placed it incorrectly, you will then need to remove the four screws from the sides, lifting the top portion of the solar attic fan off. Being careful you do not pinch or beak the wiring. You will then find two metal thumb-spring plates which you will need to slightly lift so that you can turn the lower portion of the solar attic fan to the right so it can be removed and reattached to the top part of the unit.