Solar Attic Fan - Roof Mount Installation Instructions



WARNING: Please take the time to read through the ENTIRE instructions prior to starting any work. Not following the instructions will invalidate the warranty.

Installation should only be completed by individuals skilled with the necessary tools for installation. If you doubt your skills, please consult a qualified installer.

Tools Needed:

- Caulk & Caulking Gun

- Flat Bar
- Hammer
- Marking Pencil Measuring Tape
- Reciprocating Saw
- · Safety Goggles
- Screwdriver Stud Finder
- String
- Utility Knife

Important Precautions:

- The attic fan is fully functional out of the box. THE FAN WILL OPERATE AS SOON AS THE SOLAR PANEL IS EXPOSED TO THE SUN. PLEASE USE CAUTION AND AVOID THE FAN **BLADES DURING INSTALLATION.**
- Ensure normal safety precautions are taken when using tools and walking on roofs.
- Do not cut any structural members in the house.
- Measure twice and cut once.

Helpful Hints...

- When determining location of the unit, try to place the flashing unit on the south side of the roof. Also consider potential problems such as objects shading the unit during certain times of the day.
- Installation of the unit should be centered on the roof.
- The center of the unit should be about 2 feet down from the roof ridge.





A. Solar Attic Fan

B. (6) 1 1/2" Philips Head Screws

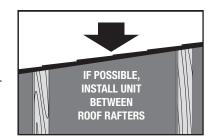
Install Solar Attic Fan

IMPORTANT NOTE:

Roof rafters are generally 16" or 24" on center. On 16" on center construction, the installer can either cut a 14" hole between the rafters or cut a 19" hole with the roof rafter running through the cut hole. On 24" on center construction, cut a 19" hole between the roof rafters. Follow the steps for the opening size needed for your specific application.

Step 1

Choose location for the solar attic fan, south exposure is best. If a southern exposure IS not feasible for your installation, the fan can be installed on any other exposure and the solar panel adjusted to capture maximum sunlight.



Step 2

DETERMINE SIZE OF HOLE NEEDED FOR YOUR INSTALLATION:

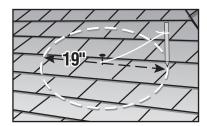
On 24" on center construction, center the fan between the rafters and cut a 19" hole. On 16" on center construction, the installer can either cut a 14" hole between the rafters or cut a 19" hole with the roof rafter running through the hole (see illustration in step 4).

Step 3

Hammer a nail at the center of the location chosen between rafters for the solar attic fan. The center of the unit should be about 2 feet down from the ridge.

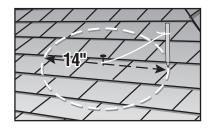
19" HOLE

Attach a string to the nail. Measure 9.5" of string and attach a marking pen to the string, see diagram. Scribe a 19" circle onto roof shingles.



14" HOLE:

Attach a string to the nail. Measure 7" of string and attach a marking pen to the string, see diagram. Scribe a 14" circle onto roof shingles.

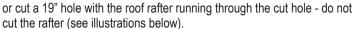


Step 4

With a reciprocating saw, cut the diameter of the hole. NEVER CUT THROUGH ANY ROOF RAFTERS. LEAVE ALL FRAMING MEMBERS IN PLACE.

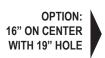
19" Hole: On 24" on center construction, center the fan between the rafters.

14" Hole: On 16" on center construction, the installer can either cut a 14" hole between the rafters



IMPORTANT: The solar attic fan must be installed between the roof rafters OR over a roof rafter. **DO NOT CUT THROUGH ANY FRAMING MEMBER.** Only remove roof sheathing.



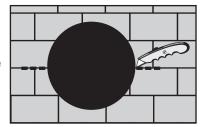


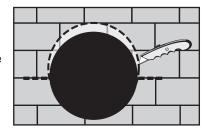


Step 5

19" Hole: With a razor knife, cut a four inch slit through the shingles and tar paper at the three and nine o'clock position of the flashing. This allows for the foot print of the flashing to be inserted under the shingles.

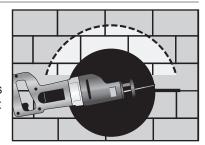
14" Hole: Additional shingles may also need to be removed on the high side towards the ridge to allow the flashing to slide over the hole.





Step 6

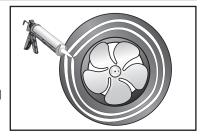
Insert the reciprocating saw blade sideways at the three o'clock position and start cutting the roofing nails up and around to the nine o'clock position. This process removes the nails that will prevent the flashing footprint from sliding up underneath the shingles.



Step 7

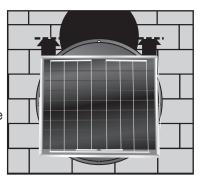
Caulk underside of flashing with the provided caulking material (C). Two concentric rings of caulking material is sufficient.

NOTE: Installation on tile roofs will require the use of a skirt.



Step 8

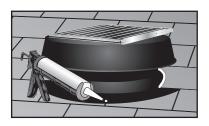
Taking care not to smear caulk on the exposed shingles, slide flashing under tar paper and shingles and force flashing up until the shingles come in contact with the raised portion of the flashing. The bottom side of the flashing will be on top of the shingles. Secure flashing with provided (6) Phillips head screws through the pre-drilled holes on the flashing footprint.



NOTE: Local Building Code requirements may specify anchoring that requires additional screws installed in the flashing.

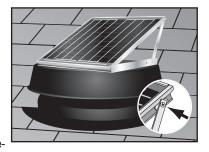
Step 9

Caulk over the screw heads that are exposed to the weather. Use remaining caulk seal the areas where the 4" slits were made and around the area where the shingles meet with the raised area of the flashing.



Step 10

Adjust the solar panel to the position it will collect the most sunlight throughout the day (the panel can be left in the down position). To adjust the solar panel, remove the (2) self-tapping screws on either side of the bracket. Lift up the solar panel and line up the pre-



drilled hole on the bracket arm to one of the two pre-drilled holes on the "L" bracket attached to the housing. Re-attach the (2) self tapping screws on both sides.

NOTE: Some 10 watt panels may have a clip/screw assembly. To adjust panel on these units, loosen, but do not remove, the assembly located on each side of the solar panel bracket. Adjust the solar panel to desired position and tighten screws (see inset).

IMPORTANT: Prior to an anticipated hurricane or high wind event, the solar panel must be secured with screws in the flat position.

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