



# Installation Instructions

Distributed by Best Materials LLC  
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## IMPORTANT:

Please take the time to read through the ENTIRE instructions prior to starting any work.

## Precautions

1. The solar 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.
2. Ensure normal safety precautions are taken when using tools and walking on roofs.
3. Do not cut any structural members in the house.
4. Measure twice and cut once.

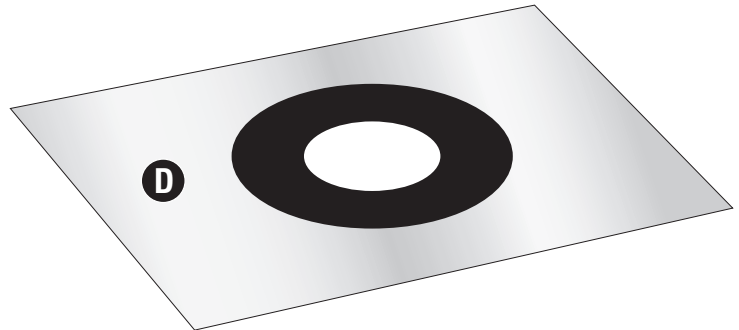
## Tools Needed

- |                             |                    |
|-----------------------------|--------------------|
| ■ Caulking Gun              | ■ Soft Cloth/Towel |
| ■ Marking Pencil            | ■ Stud Finder      |
| ■ Measuring Tape            | ■ String           |
| ■ Phillips Head Screwdriver | ■ Utility Knife    |
| ■ Reciprocating Saw         | ■ Ladder           |
| ■ Safety Goggles            |                    |

## Parts List



- A. Solar Attic Fan Unit
- B. (6) #10 Phillips Head Stainless Steel 1 1/2" Screws
- C. Sealant
- D. Flashing Skirt with Rubber Membrane



**IMPORTANT!** Prior to begin installation determine the following...

## Choose Where to Install Unit

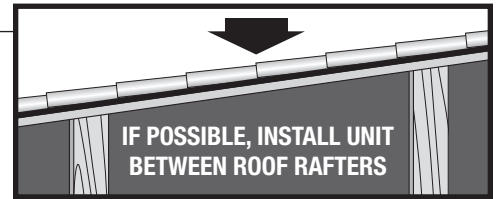
When determining location of the unit, try to place the solar attic fan on the south side of the roof, also consider potential problems such as objects shading the unit during certain times of the day. The unit should also be centered on the roof and the center of the unit should be about 2 feet down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

## Determine if Home is Built on 16" or 24" on Center

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. Once the location is determined, carefully remove the surrounding tiles. Remove enough tiles to accommodate the flashing skirt (D).



## Step 2

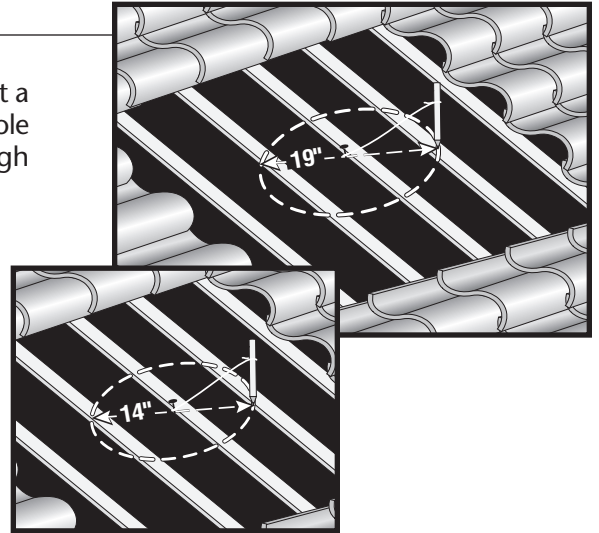
### DETERMINE SIZE OF HOLE NEEDED FOR YOUR INSTALLATION:

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 "Option" illustration in 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 the 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 the roof shingles.

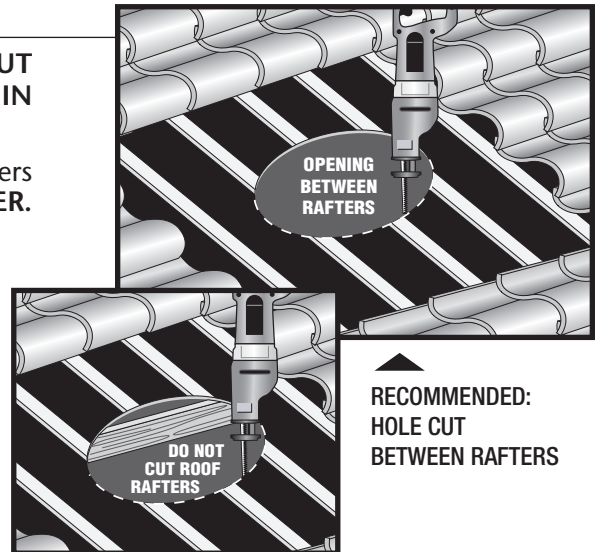


## Step 3

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

**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.

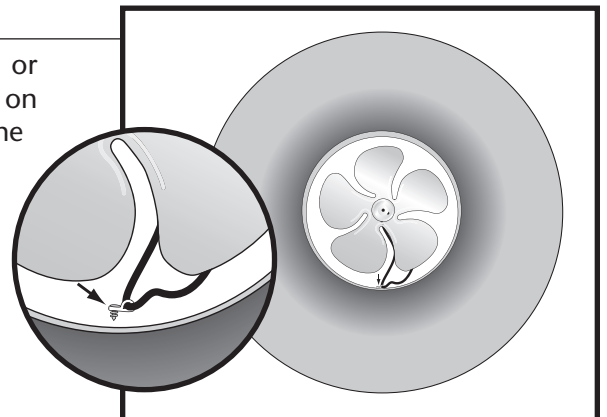
OPTION: 16" ON CENTER WITH 19" HOLE



## Step 4

Turn solar attic fan unit (A) upside down and place it on a soft cloth or towel to prevent damaging the solar panel. Locate the plastic wire clip on the inside wall of the flashing. Remove the screw on the clip to remove the it from the flashing (the wire will stay connected to the clip - see closeup).

**NOTE:** Take care not to damage the solar panel or the fan blades.

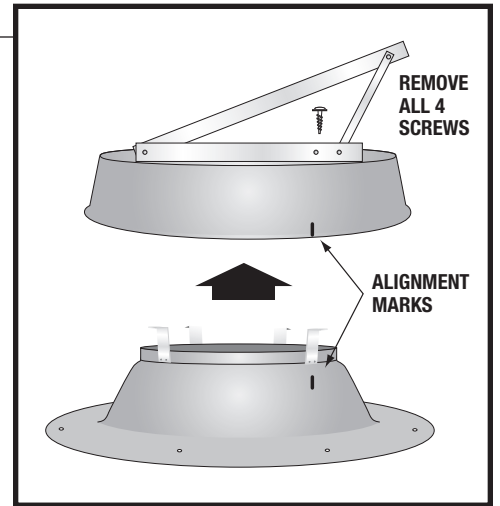


## Step 5

Carefully turn the unit back upright. Remove the two screws on the aluminum brackets on top of the housing holding the solar panel. Pull up the solar panel to allow access to the four screws that secure the housing to the flashing "L" brackets.

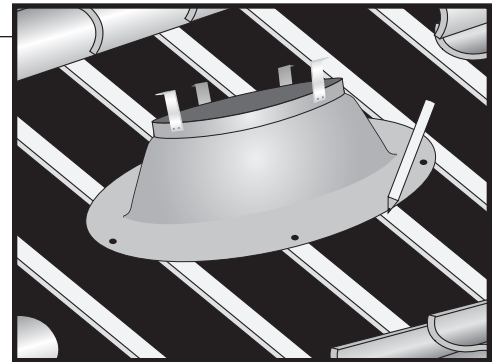
It's important that position of the housing and flashing are the same when the housing is reattached. With a marking pen, make two marks on the unit: one on the housing and another that lines up with it on the flashing. Remove all four screws. Pull up on the housing to remove it from the flashing. Temporarily place the housing and removed screws to the side.

**NOTE:** The fan will continue to run once the housing is removed from the flashing. To prevent the fan from running, cover the solar panel with a piece of cardboard or soft cloth taking care not to damage the solar panel.



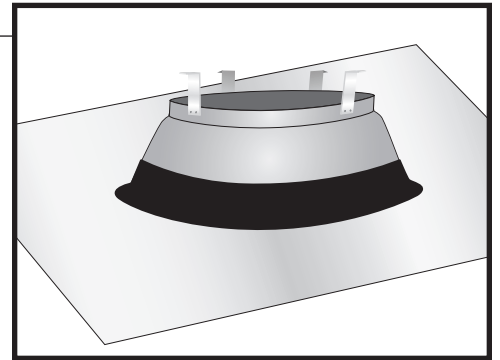
## Step 6

Center the solar attic fan flashing over hole cut in Step 3 and mark around the flashing footprint onto the furring strips. Remove the portion of the furring strips where the flashing will be installed (allowing the flashing to sit directly on the roof sheathing). Leave all other furring strips in place.



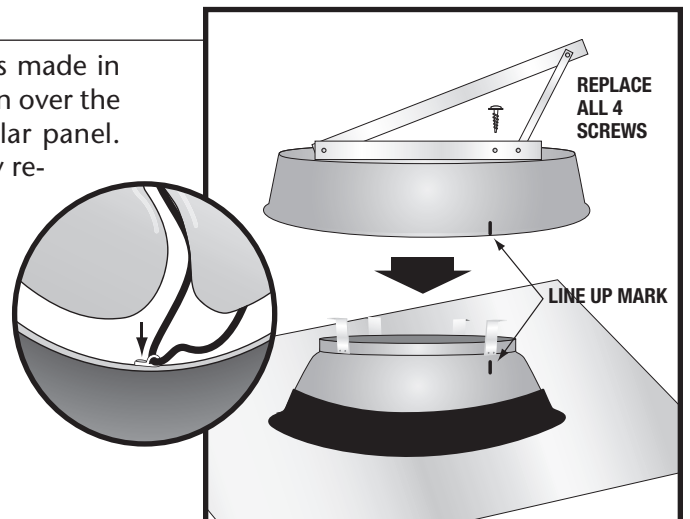
## Step 7

Place the flashing skirt (D) over the "L" brackets and the flashing. Press down the rubber ring all around the flashing.



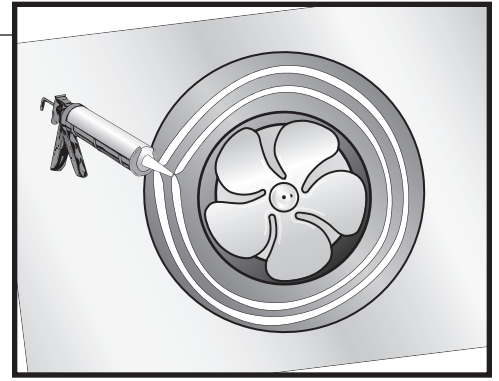
## Step 8

Place the housing on top of the flashing and line-up the marks made in Step 5. Replace the four screws that were removed. Carefully turn over the unit and place it on a soft cloth to prevent damaging the solar panel. Locate the plastic wire clip and reattach it to the flashing wall by replacing the clip screw (see closeup).



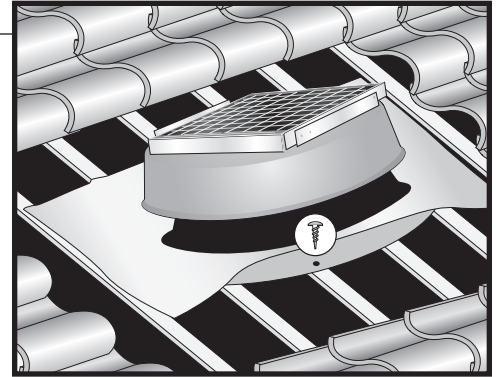
## Step 9

Carefully turn over the solar attic fan flashing and skirt and place it on a soft cloth to prevent damaging the solar panel. Caulk the **underside** of flashing with the provided sealant (C). Two concentric rings of caulking material is sufficient.



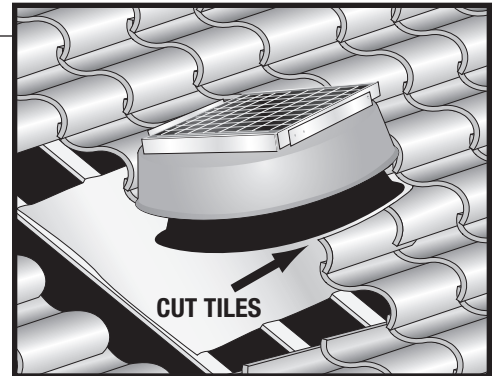
## Step 10

Turn the flashing back over. Place unit on the roof centered over the hole cut in Step 3. Secure to the roof with the (6) Phillips head screws (B) provided through the pre-drilled holes. Bend or roll up the flashing skirt so that it is out of the way as needed until all (6) screws are secured.



## Step 11

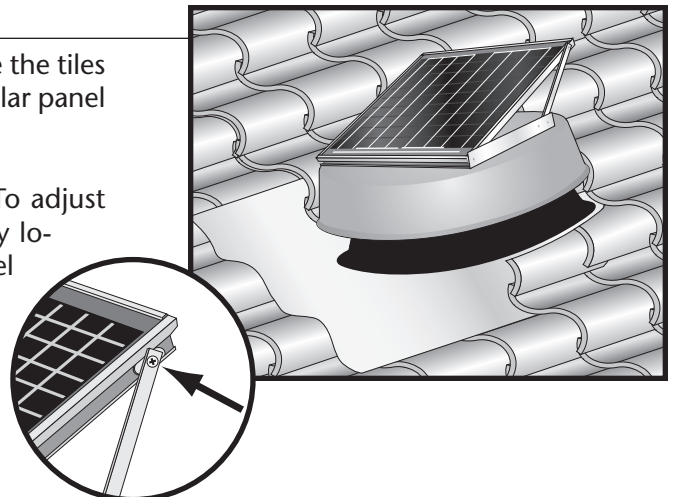
At the **HIGH** side of the roof towards the ridge, replace the tiles over the skirt. Cut tiles to fit around flashing. Some furring strips may need to be replaced on top of flashing footprint to support tiles.



## Step 12

Replace the tiles on the **LOW** side of the roof, but keep skirt above the tiles and reshape the skirt aluminum to form around the tiles. Adjust solar panel to the position it will collect the most sunlight.

**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).





**W A R R A N T Y**

*This Natural Light Solar Attic Fan has a 25 year warranty on the housing, the solar panel and the motor.*

**IMPORTANT: PLEASE COMPLETE AND MAIL THE CARD BELOW AS SOON AS YOUR SOLAR ATTIC FAN IS INSTALLED.** This card will serve as proof of your purchase, should you misplace your original invoice.

The manufacturer warrants this product to be free from defects in material and manufacturer's workmanship for a period of 25 years on the motor, the solar panel and the housing, from the date of installation. This warranty is subject to proper installation of the unit in accordance with the manufacturer's written installation instructions. The manufacturer will not be liable for any special, incidental or consequential damages in any way related to, or arising out of, defects in, or damage to, the solar attic fan.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state concerning exclusion or limitation of incidental or consequential damages.

*Please fill out the form below and mail it to:*

**Natural Light Energy Systems • 10821 North 23rd Avenue • Phoenix, AZ 85029**

**REGISTRATION**

Natural Light Solar Attic Fan Installer: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Customer Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**Customer Survey**

Are you satisfied with the performance?    Y    N

What made you choose our product?

\_\_\_\_\_  
Were you satisfied with the installation job?

Comments:

\_\_\_\_\_