



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

## 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, ladder and walking on roofs.
3. Do not cut any structural members in the house.
4. Install only in dry weather.

## TOOLS/MATERIALS NEEDED

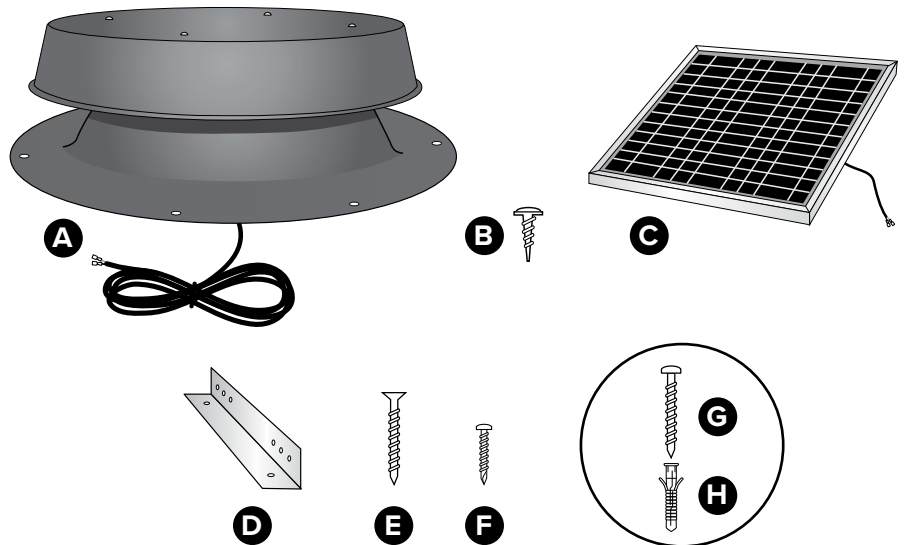
- |                       |                                     |
|-----------------------|-------------------------------------|
| ■ Caulk               | ■ Safety Goggles                    |
| ■ Caulking Gun        | ■ Soft Cloth/Towel                  |
| ■ Ladder              | ■ Stud Finder                       |
| ■ Marking Pencil      | ■ String                            |
| ■ Measuring Tape      | ■ Utility Knife                     |
| ■ Philips Screwdriver | ■ Wire Staples                      |
| ■ Power Drill         | ■ 1/4" Masonry Bit (for tile roofs) |
| ■ Reciprocating Saw   |                                     |

## IMPORTANT Choose Where to Install Unit:

When determining the location of the remote solar panel, try to install on the south side of the roof, also consider potential problems such as objects shading the panel during certain times of the day. If possible, the roof mount housing should be installed between rafters. 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.

## Remote Panel Kit Components:

- A. Roof Mount Solar Attic Fan with Cable
- B. (6) Phillips Head Stainless Steel 1 1/2" Screws
- C. Solar Panel (16, 32, 48 or 65 watt)
- D. (2) L-Brackets
- E. (14) Wood Screws
- F. (4) Self-Tapping Screws (L-bracket to panel)
- G. (4) Machine Screws (for tile roofs only)
- H. (4) Anchors (for tile roofs only)



**NOTE:** Additional Power Cable Available

## STEP 1

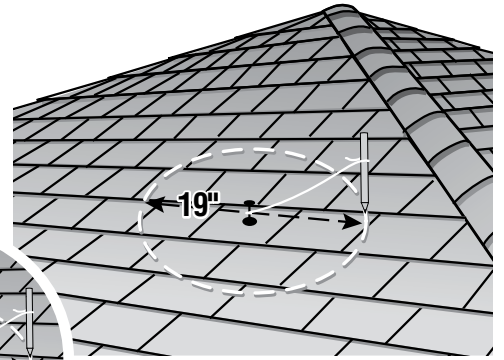
Choose location for the remote solar panel, southern exposure is best. Also choose a location for the fan housing between roof rafters.



## STEP 2

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

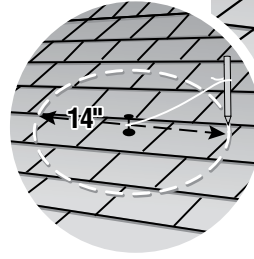
On 24" on center construction, center the fan between the rafters and cut a 19" hole. On 16" on center construction, the installer can either cut a 14" hole between the rafters or cut a 19" hole with the roof rafter running through the hole (see illustration below in Step 4).



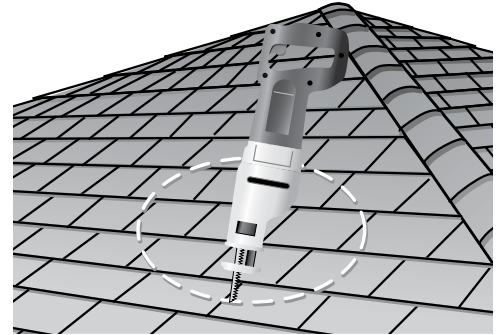
## STEP 3

Hammer a nail at the center of the location chosen for the solar attic fan between rafters. 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 inset. Scribe a 14" circle onto the roof shingles.



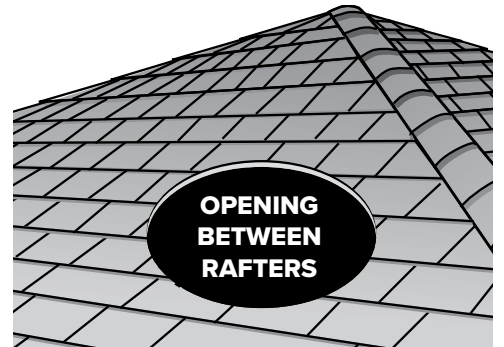
## STEP 4

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

**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.



**RECOMMENDED:**  
HOLE CUT  
BETWEEN RAFTERS



**OPTION:**  
16" ON CENTER  
WITH 19" HOLE

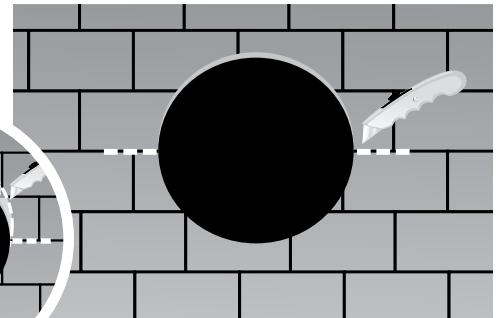
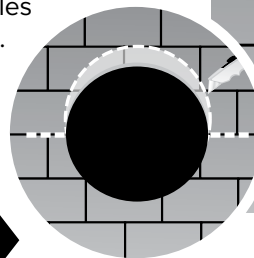
## STEP 5

**19" HOLE:** With a razor knife, cut a four inch slit through the shingles and tar paper at the three and nine o'clock positions 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 (see inset).

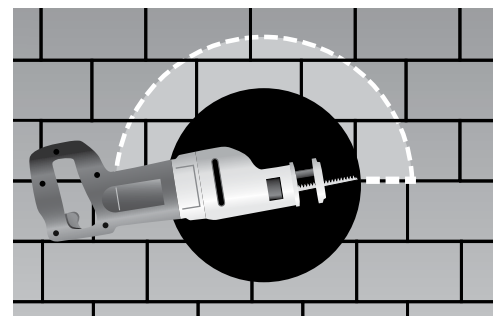
19" HOLE



14" HOLE

## STEP 6

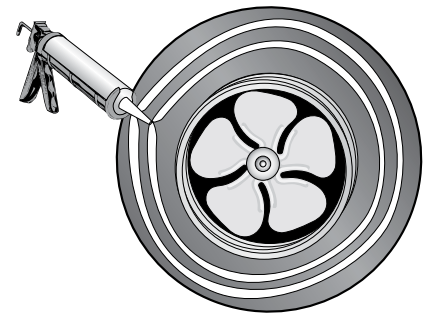
Insert the reciprocating saw blade sideways at the three o'clock position and commence cutting the roofing nails up and around to the nine o'clock position. This process removes the nails that will prevent the flashing footprint from sliding up underneath the shingles.



### STEP 7

Carefully turn the solar attic fan unit upside down and place it on a soft cloth or towel to prevent damaging the solar panel. Caulk the **underside** of the flashing. Two concentric rings of caulking material is sufficient.

**NOTE:** Installation on tile roofs will require the use of a tile 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 (**B**) through the pre-drilled holes on the flashing footprint.

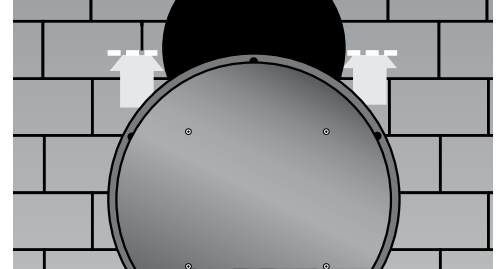
**NOTE:** Local Building Code requirements may specify anchoring that requires additional screws installed in the flashing.

**Florida Dept. of Community Affairs:**

[http://www.floridabuilding.org/pr/pr\\_app\\_srch.aspx](http://www.floridabuilding.org/pr/pr_app_srch.aspx)

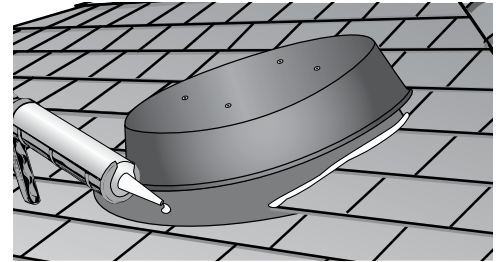
**Texas Dept. of Insurance:**

<http://www.tdi.state.tx.us/wind/prod/indexrv.html>



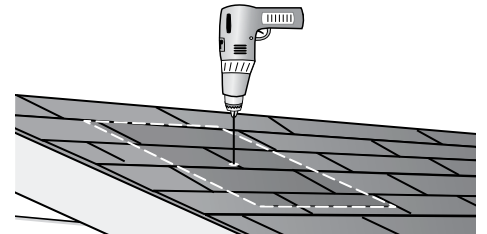
### STEP 9

Caulk over the screw heads that are exposed to the weather. Use remaining caulk to seal the areas where the 4" slits were made in Step 5 and around the area where the shingles meet with the raised area of the flashing.



### STEP 10

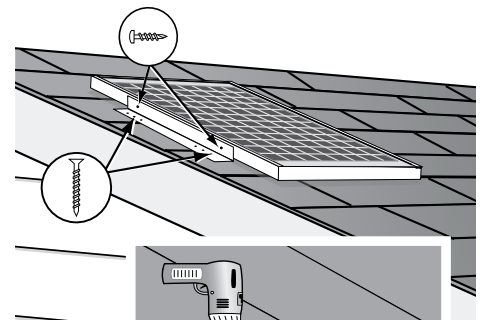
Locate area to install the solar panel on the roof where it will gather the most amount of sunlight (southern exposure is recommended). Drill a small hole on the roof under where the solar panel will be installed. Push the solar panels power cable through the hole into the attic space. Caulk around the hole to prevent leaking.



### STEP 11

Attach the L-brackets (**D**) to the long sides of the solar panel with the self-tapping screws (**F**) into the pre-drilled holes on the panel frame. Attach solar panel to the roof using the provided wood screws (**E**). Caulk around the wood screws to prevent leaks.

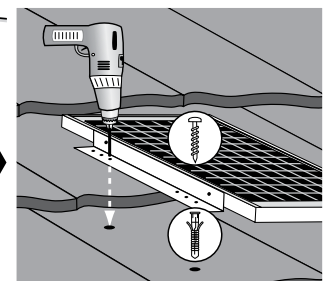
**TILE ROOFS:** Pre-drill holes in tile to accommodate the anchors provided (**H**). Tap anchors into holes and secure the L-bracket using provided machine screws (**G**) - see inset.



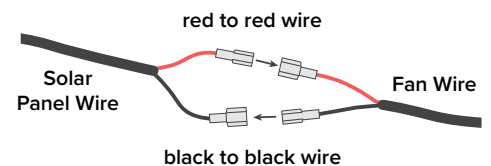
### STEP 12

From inside the attic, locate the attic fan power cable and connect it to the power cable from the solar panel. Connect the black wire to the black wire and the red wire to the red wire. For additional protection, wrap the connections with electrical tape. Secure any loose wires inside the attic using wire staples (not provided).

**TILE ROOF INSTALL** →



**IMPORTANT** - Please make sure the male connector is centered before joining the connectors. Male connector must be inserted into female connector correctly.





## Solar Attic Fan Limited Lifetime Warranty

Natural Light Energy System (hereinafter NLES) warrants any solar attic fan manufactured by NLES to be free from defects in materials and workmanship to the original residential purchaser (hereinafter CONSUMER) from the date of purchase. All aspects of the Warranty are subject to the following limitations, terms and conditions.

### 1. DURATION OF WARRANTY

If a NLES solar attic fan (hereinafter "Equipment") is determined to have a defect in material or workmanship, NLES will, at its sole discretion, repair or replace the defective part at NO CHARGE to the CONSUMER, (excluding labor, and applicable shipping and handling costs) for the duration of the CONSUMER'S ownership of the original equipment (hereinafter "LIFETIME").

### 2. LIMITATIONS OF COVERAGE

This Warranty extends only to the CONSUMER for damage resulting from defects in materials and workmanship, it does not extend to damage caused by the CONSUMER'S neglect or abuse, or by accident, to damage caused by wind, hail or abnormal weather conditions, or to damage caused by acts of God, civil insurrection or extraordinary circumstances which are beyond the control of NLES.

NLES shall not be liable for any direct or indirect damage resulting from the use of the Equipment, and in no event shall the extent of the Warranty coverage exceed the purchase price of the Equipment.

NLES assumes no liability for the determination of the proper equipment necessary to meet a CONSUMER'S requirements, nor does it authorize others to assume such obligations on its behalf.

### 3. MISCELLANEOUS

In order to be considered for validation, all claims for Warranty coverage must be accompanied by a copy of the purchase agreement indicating the date of initial installation, NLES reserves the right to inspect the solar attic fan prior to honoring any Warranty claim.

This Warranty gives you specific legal rights, and you may have other rights which may vary from state to state. Any and all inquiries or claims under this Warranty must be submitted in writing to **Natural Light Energy Systems, Attn: Warranty Department, 10821 N. 23rd Avenue, Phoenix, AZ 85029** or by e-mail to [info@nltubular.com](mailto:info@nltubular.com).



To register your Solar Attic Fan, please visit  
[www.solaratticfan.com/customer-service/warranty-registration/](http://www.solaratticfan.com/customer-service/warranty-registration/)



**REGISTER NOW**