



# Solar Attic Fan Installation Instructions

## IMPORTANT! Before Installing...

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

## Precautions

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

## Tools Needed

- Caulking Gun
- Marking Pencil
- Measuring Tape
- Reciprocating Saw
- Safety Goggles
- Screwdriver
- Stud Finder
- String
- Utility Knife
- Ladder

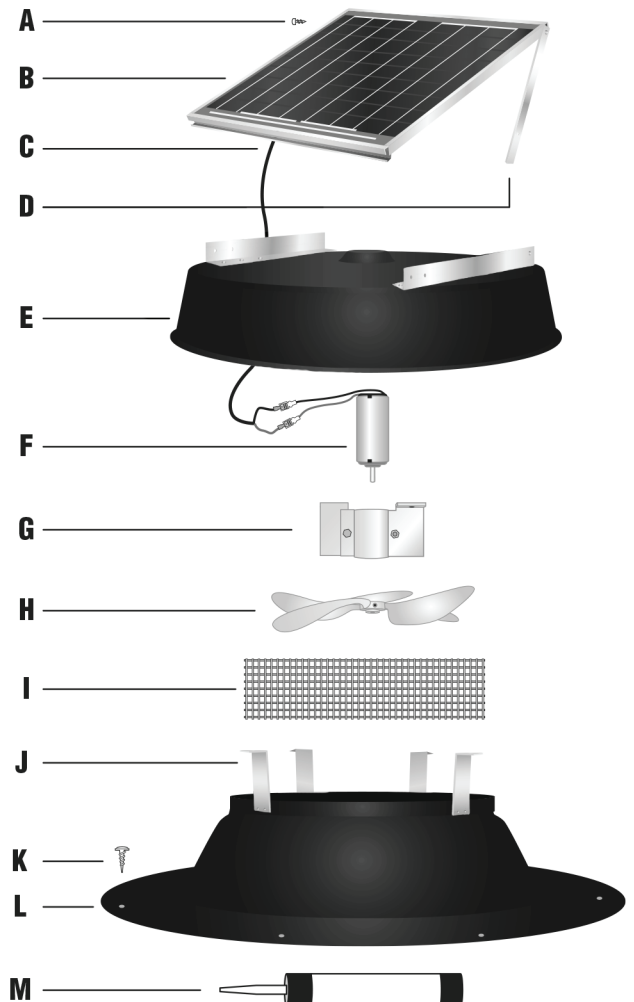
## Installation Pointers

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 be centered on the roof, and the center of the unit should be about 2 feet down from the roof ridge.

## Parts List

**Note:** Exploded view for illustrative purposes.  
Unit comes pre-assembled.

- A. (2) Self-Tapping Screws
- B. Custom Solar Panel
- C. Wire Lead
- D. Adjustable Solar Panel Bracket
- E. Aluminum Shroud
- F. Custom 36V DC Motor
- G. Motor Isolation Bracket
- H. Air Driven Precision Pitch 5 Blade Fan
- I. 4" x 48" Stainless Steel Wire Mesh
- J. (4) .09" Aluminum Shroud Support Bracket
- K. (6) #10 x 1.5" Stainless Steel Phillips Head Screws
- L. Aluminum Flashing
- M. Caulk

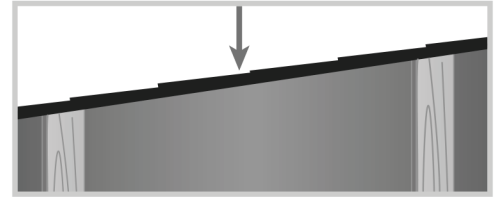


## IMPORTANT:

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

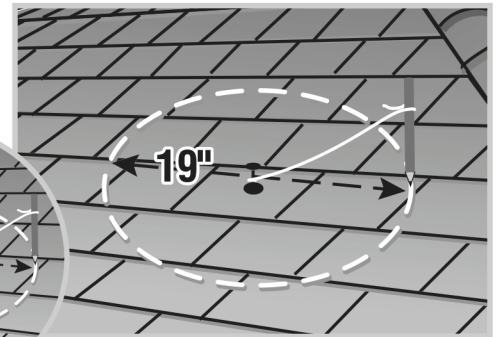
Choose a location for the solar attic fan, a southern exposure is best. If a southern exposure is not feasible for your installation, the fan can be installed on any other exposure and the solar panel adjusted to capture maximum sunlight.



### 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 below in step 4).

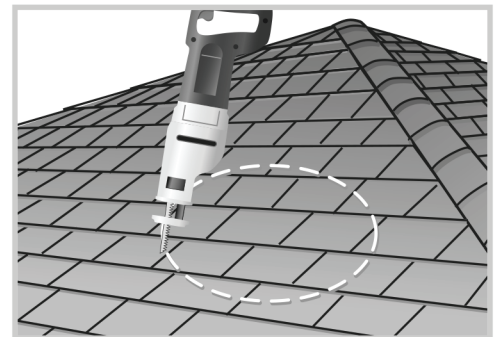
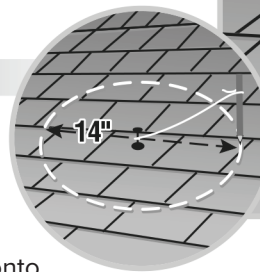


### STEP 3

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 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.



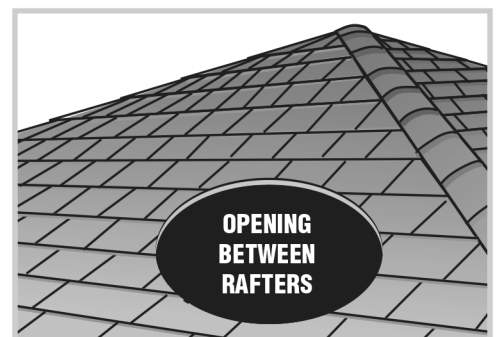
### STEP 4

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



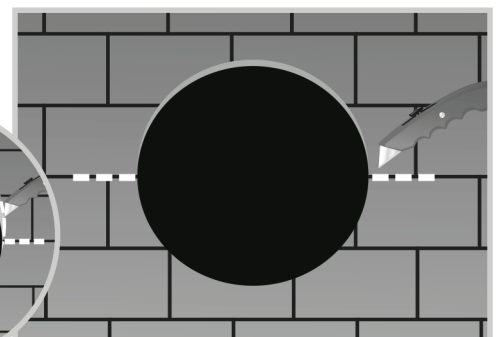
OPTION:  
16" ON CENTER  
WITH 19" HOLE

### STEP 5

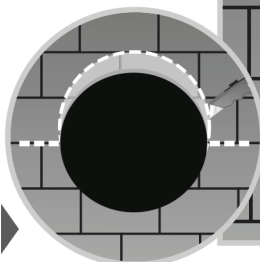
**19" HOLE:** With a razor knife, cut a four inch slit through the shingles and tar paper at the three and nine o'clock positions of the flashing. This allows for the foot print of the flashing to be inserted under the shingles.

**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

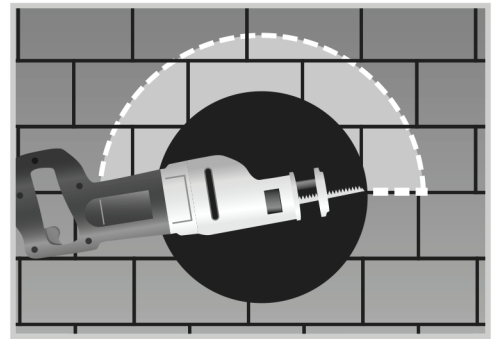


14" HOLE



## STEP 6

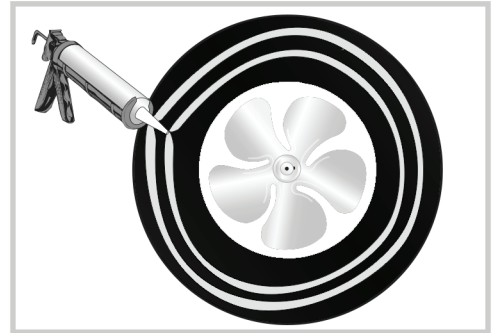
Insert the reciprocating saw blade sideways at the three o'clock position and commence cutting the roofing nails up and around to the nine o'clock position. This process removes the nails that will prevent the flashing footprint from sliding up underneath the shingles.



## STEP 7

Caulk the **underside** of the flashing with the provided caulking material (**M**). 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 (**K**) through the pre-drilled holes on the flashing footprint.

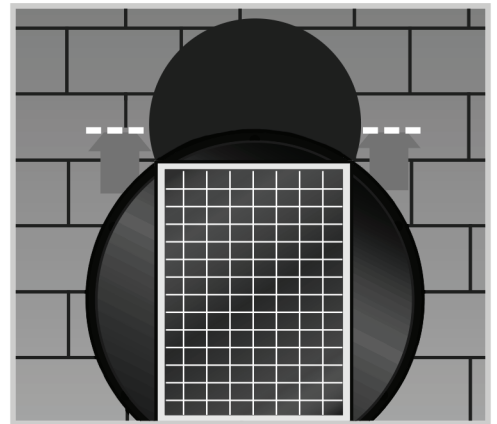
**NOTE:** Local Building Code requirements may specify anchoring that requires additional screws installed in the flashing. For Florida and Texas installations in High Velocity Hurricane Zones, please refer to:

**Florida Dept. of Community Affairs:**

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

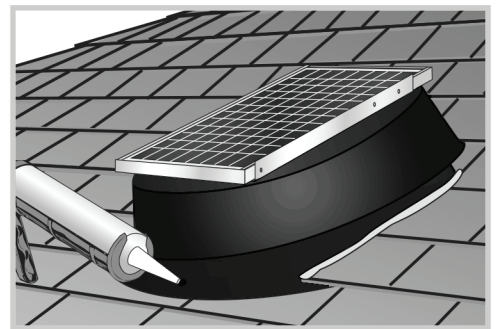
**Texas Dept. of Insurance:**

<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 and around the area where the shingles meet with the raised area of the flashing.

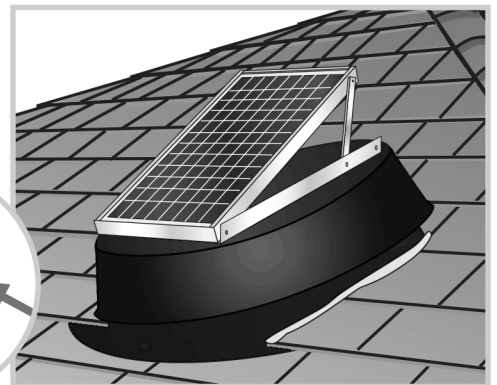
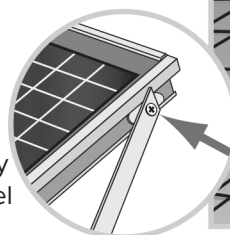


## STEP 10

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.

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

**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 Tru-Lite 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.*

To register your product please fill out the form below and mail it to:  
**Tru-Lite • 10821 North 23rd Avenue • Phoenix, AZ 85029**  
or visit [www.tru-lite.com](http://www.tru-lite.com)

## REGISTRATION

Solar Attic Fan Installer: \_\_\_\_\_

Customer Name: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_

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

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

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

### **Customer Survey**

Are you satisfied with the performance?    Y    N

What made you choose our product?

\_\_\_\_\_

Were you satisfied with the installation job?    Y    N

\_\_\_\_\_

Comments:

\_\_\_\_\_