SOLAR ENERGY GENERATION

- HIGH EFFICIENCY CONVERSION 99.99%
- 2100CBM/H LARGE EXHAUST WITH STRONG WIND POWER
- NO NEED TO CONNECT THE BATTERY
- NO CONNECTION TO MAINS POWER IS REQUIRED
- HIGH EFFICIENCY, ENVIRONMENTAL PROTECTION AND ENERGY SAVING
- SIMPLE AND QUICK INSTALLATION





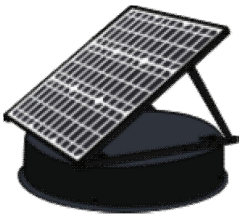


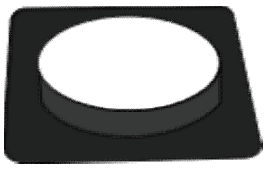
User Manual

1 package Content

Please check whether the product appears damaged or missing accessories.

1. 1× Solar Fan
2. 1× Flexible Flashing
3. 4× Tech Screws
4. 2× Rafter/Batten Straps





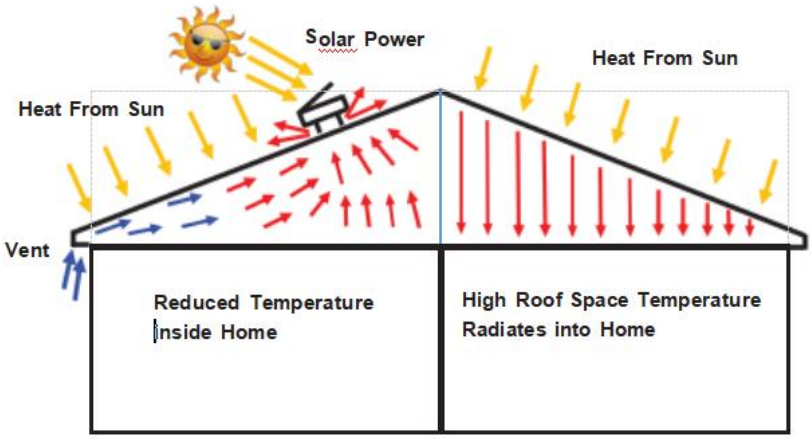
Note: Picture is for reference only.

2 Features

The XAM solar roof exhaust fan functions in several ways to keep your place cool and comfortable.

Its design includes the following features:

- It keeps your home cooler in the summer by extracting 20 times more air than a Whirly Bird
- It is solar-powered, so there is no running cost
- It reduces the need for air-conditioning, reducing energy bills
- It is easy to install and is compatible with tile, Colorbond, metal, and flat roofs
- It reduces humidity and promotes airflow, which can lower temperature by up to 30˚F
- It reduces condensation build-up in your roof
- It has a brushless DC motor for quiet operation
- High-quality material is used for each part to ensure a long service life
- In the cooler months, the thermostat control prevents heat loss and keeps the place warm
- The fan is corrosion resistant and is suitable for coastal regions



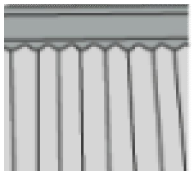
3 Technical Specification

Mode:	XAM-600 24 inch
Capacity about:	12000 ㎥/h
Motor about:	150/180W 19-36V,1350RPM Maxk,Brushless motor with double shielded ball bearings
Solar Panel Type:	Monocrystalline PV,Heavy Duty Frame,3mm Tempered Glsss
Solar Panel Output:	36V 150/180W
Fan Type:	580mm balanced 3 Blade Plastic with Low Resistance
Noise about:	<80dBA
Automatic Shut Off:	<25℃+/-1.5%
Duct diameter:	600mm
Installation hole size:	600mm
Product Dimensions:	1130*1130*380mm
Gasket Dimensions:	930*930*1mm
Product Weight:	31 Kgs
Packing Dimensions:	1160*1160*400mm
Packing Weight:	36 Kgs
Structural materials:	Aluminium Top Cover,Steel Body,Steel Brackets and Stainless Steel Fasteners
Surface treatment of color:	Black electrostatic Spraying epoxy resin
Equipped with power supply:	□ lithium Battery LiFe04 □ Power adapter
Warranty:	1 Year Warranty of fan 10 Years on Solar Panel

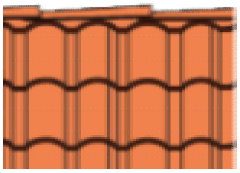
4 Installation Guide

Please read this installation guide carefully to install the solar roof exhaust fan. Depending on the roof type, you may follow installation steps for the best result. Please make sure work area is dry before installing. Do not install during or after rain.

I. Metal Roof

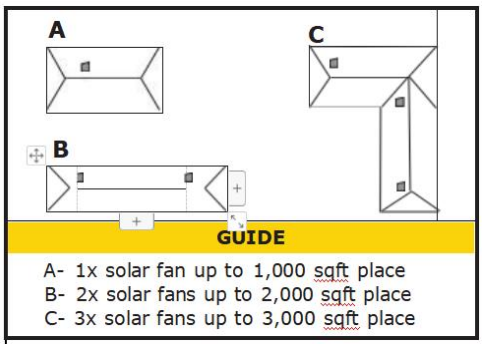


II. Tile Roof



I. METAL ROOF INSTALLATION

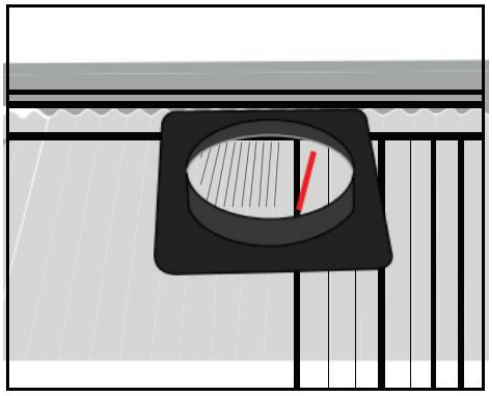
STEP 1



Study the figure to assess how many XAM fans you need and where to install them for your home or business. To work out where to position the fan, you need to take into consideration any Afternoon shade on the roof during the warmer months. A well-positioned fan should allow the solar panel to receive sun from the south(north for southern hemisphere) and west during the warmer months.

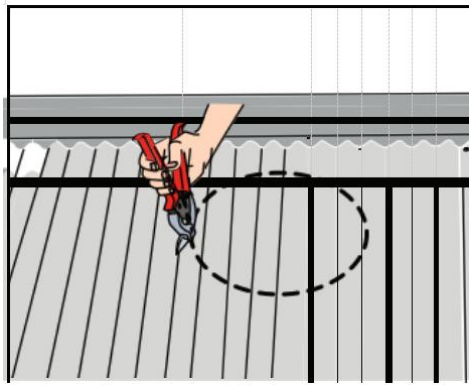
Note: Shade will affect the fan performance. Number of fans needed may vary depending on the situations.

STEP 2



Remove 2 ridge capping screws and slide the top edge of the flashing up under it as shown in the figure. It is important to position the flashing so that it does not cover any roofing screws. The roofing screws running from the top to the bottom of the roof are where the rafters are located.
Once positioned, mark a circle on the inside Edge of the flashing.

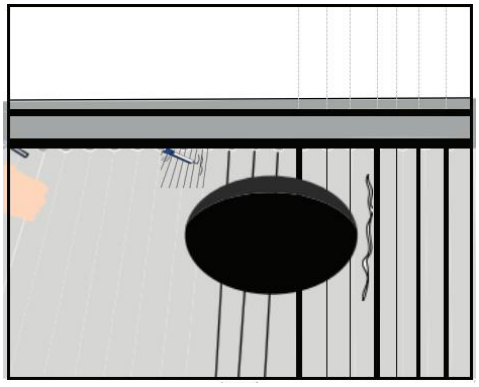
STEP 3



Following the circle marked on the roof cut an opening in the roof as shown, using a metal blade saw or tin snips. If there is any foil under the metal sheets, cut a cross in the foil and fold back the corners.

Note: Take care not to cut into any battens/rafters under the roof sheet when cutting.

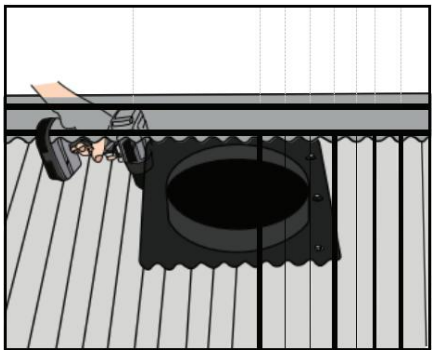
STEP 4



Slide the flashing back up under the Roof Capping and refit the 2 ridge capping screws through the flashing and bend the edges of the flashing down on the left and right sides of the flashing to create a tight fit with the roof. Use tin snips to cut Notches In the flashing's bottom to suit the corrugations of the roof and bend the notches down. Apply a silicone bonder to the underside and the outside of the edges. After this, apply a silicone bonder to the underside and outside of the bottom section of the flashing.

Note: Don't apply silicone to the valleys at the bottom of the flashing.

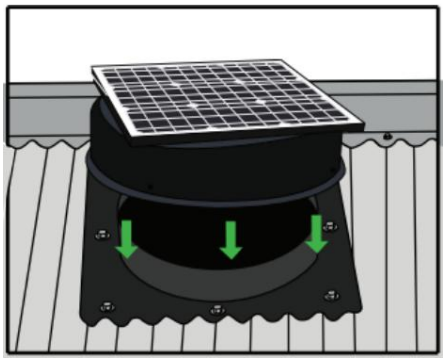
STEP 5



As shown in the figure here,use a minimum
Of 8 and maximum of 12 tech or roof screws with rubber seals along the left,right,and bottom of the flashing to secure the roof.

Note: Tech screws and roofing screws are not included.

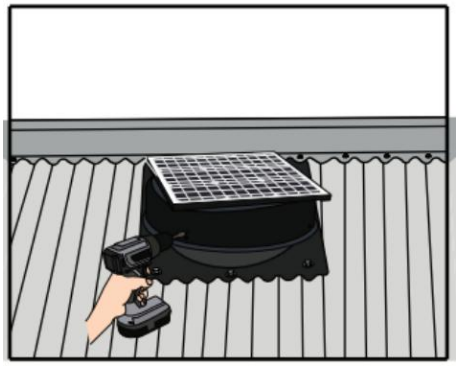
STEP 6



Place the main body of the fan over the flashing as shown below. Turn the main body of the fan left or right to suit the direction required for the solar panel.

Tip: Position the solar panel between south (north for southern hemisphere) and west to best suit thesun in warmer months.

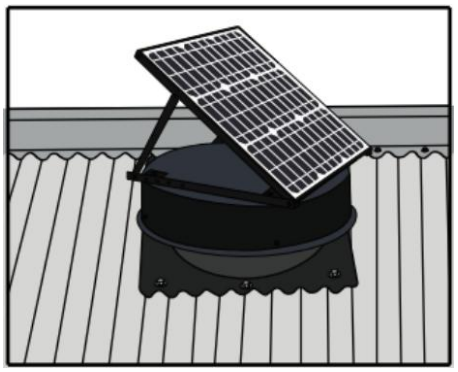
STEP 7



Using a powered screwdriver, screw at least 4 small tech screws through the pre-drilled holes in the fan main body through into the flashing as Shown below.

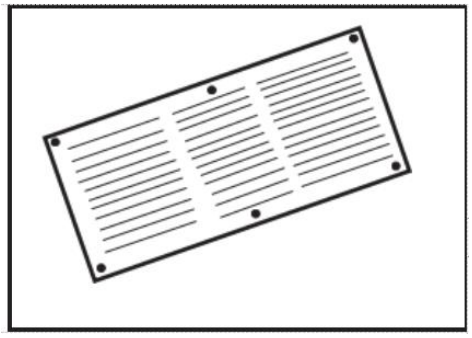
Tip: You may not get the top tech screw in place as the angle of the roof may prevent this, in this case,you can simply screw the tech screw into another section where the main body is over the flashing.

STEP 8



You can now adjust the angle of the solar panel to receive maximum sun especially during the midday of the warmer months as shown in the figure. As the pitch of many roofs is already at a good angle for the summer sun, you may just be able to leave the panel in the down position as it is supplied from the factory, without doing anything.

To adjust the angle of the solar panels up, just adjust the 2 arms to the correct angle and tighten the screws.

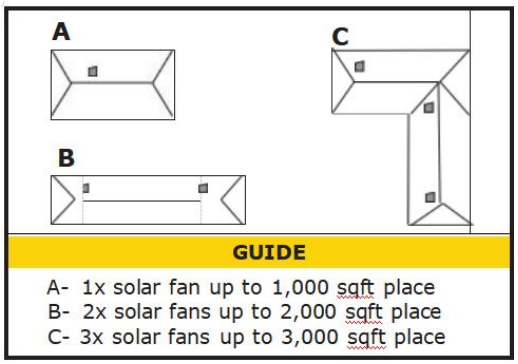


Note:

An installation option is to fit the fan under the eave vents to the side of the house that is cool in the afternoon. This will allow the cooler outside air to be drawn into the roof space. These are especially required when the roof has foil under the tiles, but regardless eave vents will improve airflow.

II. TILE ROOF INSTALLATION

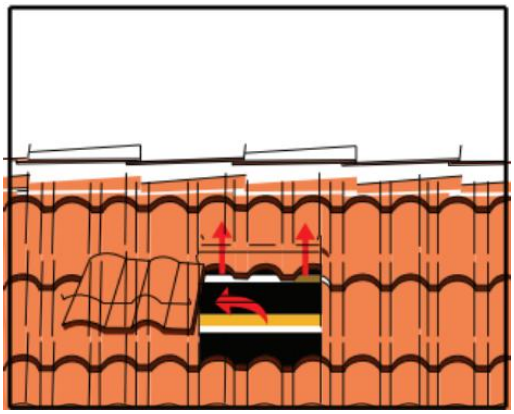
STEP 1



Study the figure to assess how many XAM fans you need and where to install them for your home or business. To work out where to position the fan,you need to take into consideration any afternoon shade on the roof during the warmer months. A well-positioned fan should allow the solar panel to receive sun from the south (north for southern hemisphere) and west during the warmer months.

Note: Shade will affect the fan performance. Number of fans needed may vary depending on the situations.

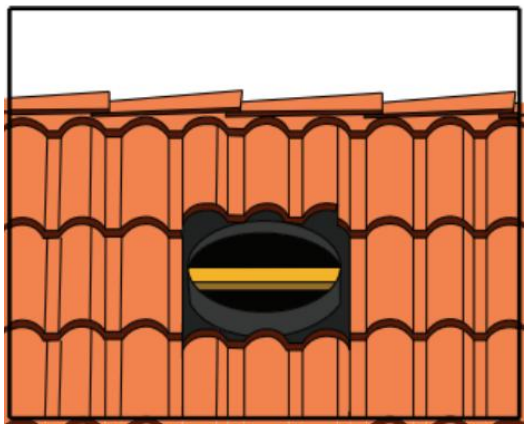
STEP 2



Remove the third tile counting down from the ridge capping (top of the roof) as shown in the figure. Remove one complete tile from the roof. You may also push the tile directly above the removed tile slightly up to make the opening larger if necessary.

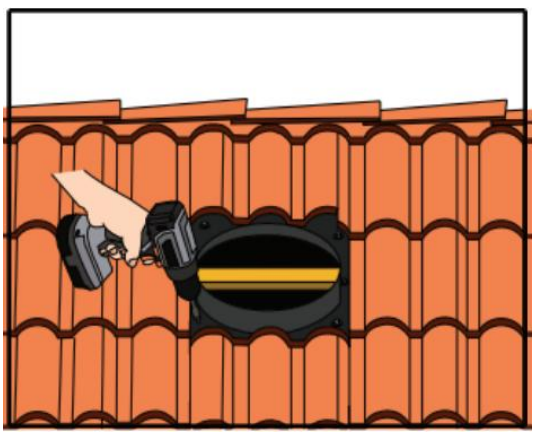
Ensure you discard this removed tile. Do not leave it on the roof.

STEP 3



Lift the tiles above the tile opening enough and slide the flashing into place as shown here, and then push the tiles back down. This will mold the flashing to the tiles.

STEP 4

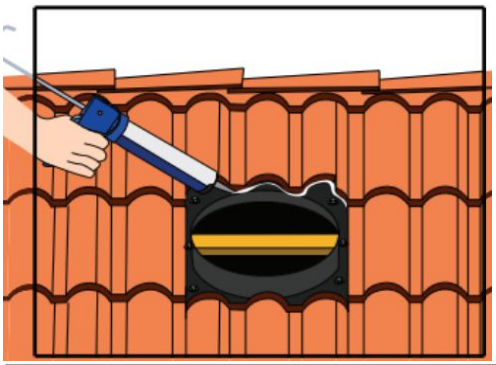


Fit a minimum of one rafter/batten strap (2 are supplied) as shown. The strap folds over the circular ridge on the flashing and it can either be screwed or nailed through the rafter/batten strap into the rafter or batten.

Note: Rafters run from the top of the roof down to the facial and battens run across the roof directly under the tiles.

STEP 5

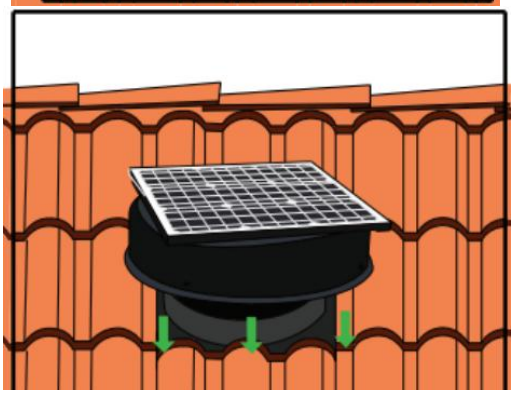
Once the fitting of the flashing is complete, run a bead of clear silicone along the top of the flashing that joins with the upper tiles.



STEP 6

Place the main body of the fan over the flash- ing as shown below. Turn the main body of the fan left or right to suit the direction required for the solar panel.

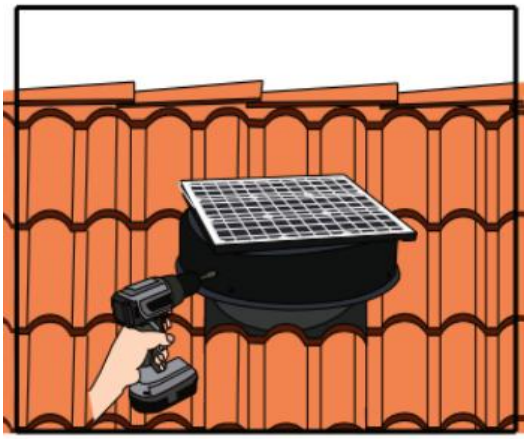
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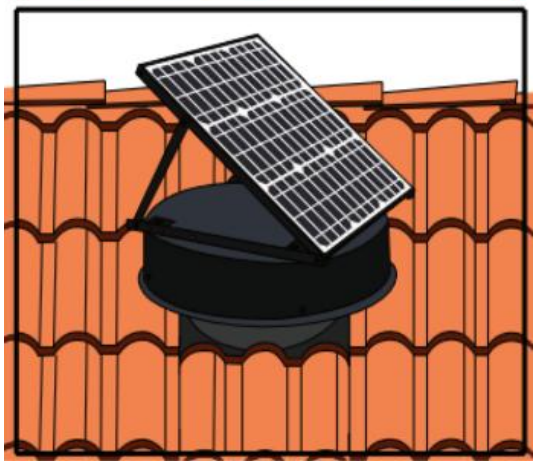
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To adjust the angle of the solar panels up, just adjust the 2 arms to the correct angle and tighten the screws.



STEP 9

Now that the primary installation is complete, you can mold the flexible flashing to suit your tiles and bend the bottom section of the flashing down to allow water to run off onto the tiles below. Then run a bead of silicone along the left and right sides of the flashing and your job is complete.

