

SOLARKING

Solar Roof Ventilation Fan Tile Roof Installation Instructions

STEP 1

Study figure 1 to assess how many Solar fans you require for your home or business.

Step 2

To work out where to position the fan you need to take into consideration any afternoon shade on the roof during the warmer months (Tip: Shade will effect the performance of the solar fan). The position should also allow the solar panel to receive sun from the North and West during the warmer months.

STEP 3

Now that you have worked out the position remove a tile 3 tiles down from the ridge capping (Top of the roof) as per figure 2. Remove 1 complete tile from the roof, you may also if there is any advantage push the tile directly above the removed tile slightly up to make the opening larger. (Tip: This removed tile should not be left lying on the roof)

STEP 4

If your roof has a layer of foil under the tiles, you will need to cut a cross in the foil and fold back the corners to create an opening. The opening should match the opening you have created by removing the tile.

STEP 5

As per figure 3 lift the tiles above the tile opening enough to allow the flashing to slide up into to place, then push the tiles back down, this will mold the flashing to the tiles.

STEP 6

As per figure 4 fit a minimum of 1 rafter/batten strap (2 supplied). The strap folds over the circular ridge on the flashing and either can be screwed or nailed through the rafter/ batten strap into the rafter or batten (Tip: Rafters run from the top of the roof down to the fascia, battens run across the roof directly under the tiles)

STEP 7

Once the fitting of the flashing is complete you can mold the flashing to the shape of the tiles and run a bead of clear silicon along the top of the flashing that joins with upper tiles. Also silicon under the sides of the flashing. Note, you can also silicon up the valleys at the bottom of the flashing to stop air being drawn off the roof.

Figure 1

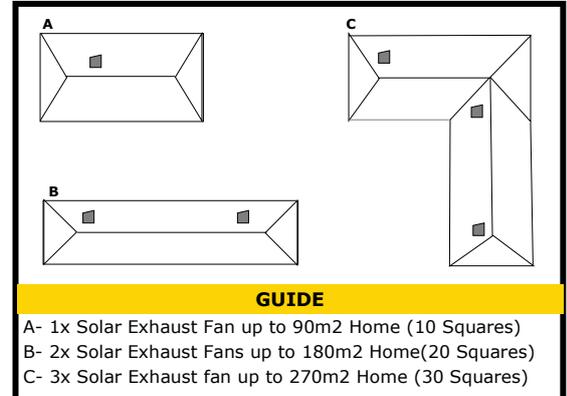


Figure 2

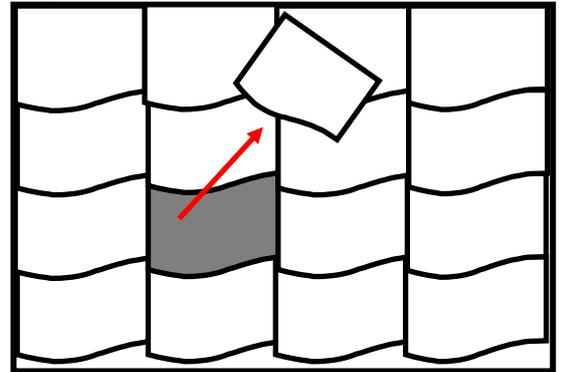


Figure 3

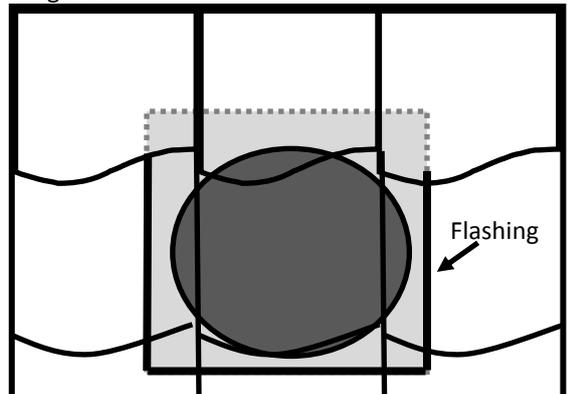
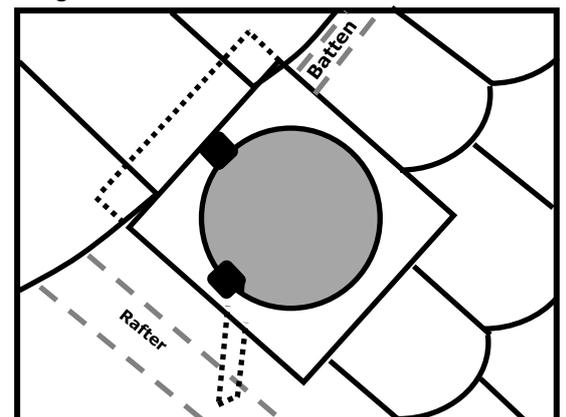


Figure 4



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STEP 8

Place the main body of the fan over the flashing as per figure 5. Turn the main body of the fan left or right to suit the direction required for the solar panel (Tip: Aim between North and West to best suit the sun in warmer months)

STEP 9

As per figure 6 using a powered screw driver, screw at least 4 small tech screws through the pre-drilled holes in the fan main body through into the flashing. (Tip: You may not be able to 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 10

As per figure 7 you can now adjust the angle of the solar panel to receive maximum sun during the mid afternoon in the warmer months. As the pitch of many roofs in parts of Australia are already at a good angle for the summer time sun you may just be able to leave the panel in the down position as it is supplied from the factory, no need to do anything. To adjust the angle of the solar panel up adjust the 2 arms to the correct angle and tighten the bolts.

Step 11

Make sure the red power plugs are connected for the solar operation to start. Note the temp must be above 25°

Options

Fitting under the eave vents as per figure 8 to the shaded side of the house in the afternoon will allow the cooler outside air to be drawn into the roof space and increase the airflow. Connect the optional 15VDC/240VAC power supply to the DC cable hanging unused to allow the unit to run when solar output is too low, temp still needs to be above 25°

Parts Included in this kit:

1x Solar Fan, 1x Flexible Flashing, 5x Tech Screws, 2x Rafter/batten Straps

Figure 5

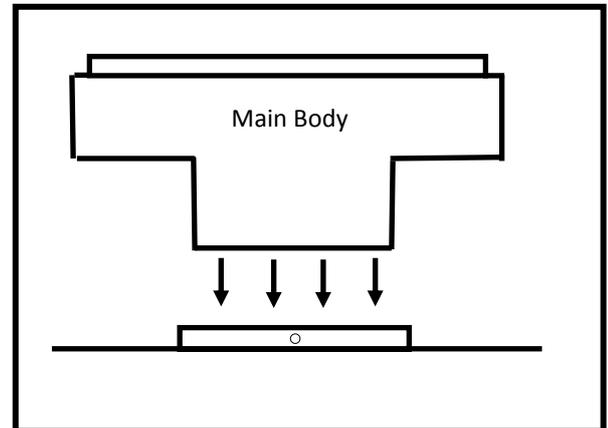


Figure 6

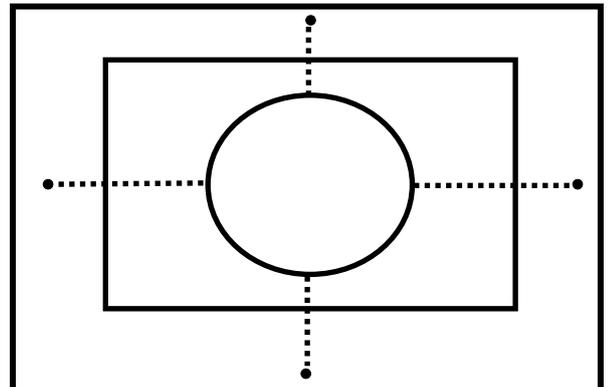


Figure 7

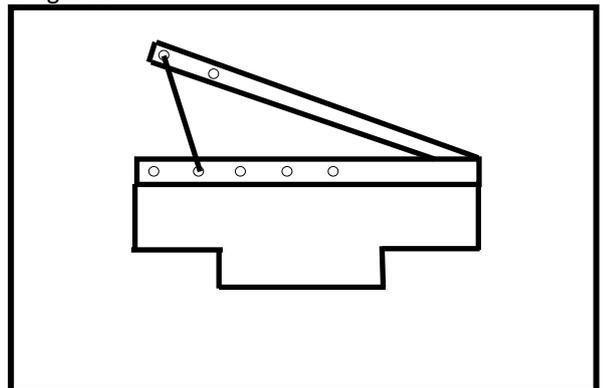


Figure 8

