SOLARKING

Commercial Solar Roof Exhaust Fan Installation Instructions

Installation Advice

The SolarKing commercial fan comes in 3 sections, the head unit, flashing and the solar panel. The solar panel is to be mounted beside the fan.

First assess how many commercial roof fans you will require for the factory where the fans are being fitted. Factories generally have very high roof's, this needs to be taken into consideration. Our recommendations are based on a 6M high roof. We recommend 1x 600mm commercial for every 200m2, if the roof is higher than 6M you will need to consider more fans.

Placement of the fans should normally be at the peak of the roof, some factory roofs only have a very slight pitch in these installations again the units should be placed at the highest point. Placement should also consider avoiding shade on the solar panel in the afternoon. The solar panel should be placed on the north side of the solar fan so no shadow is cast onto the solar panel.

The solar panel mounting will depend on your roof and position in Australia. Mounting flat on the roof using the right angle brackets and hinges in northern Australia or if you have a pitch of 20% or more. Mount on an angle using the adjustable stay bars to get the angle to the sun correct. If you are in southern Australia or if you roof only has a slight pitch.

STEP 1
Slide the top edge of the flashing up under the ridge capping of the roof (remove ridge capping screws to do this) as per Figure 1. It is important to position the flashing is not covering any roofing screws, the roofing screws running from the top to the bottom of the roof are where the rafters/beams are located. Once positioned mark a circle on the inside edge of the flashing.

STEP 2
Following the circle marked on the roof cut the roof as per figure 2 using a metal bladed saw or tin snips. If there is any foil under the metal sheets cut a cross in the foil and fold back the corners. Tip: Take care not to cut into any battens/rafters/beams under the roof sheet when cutting.
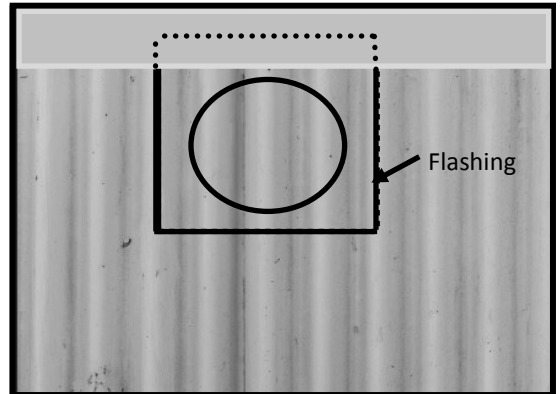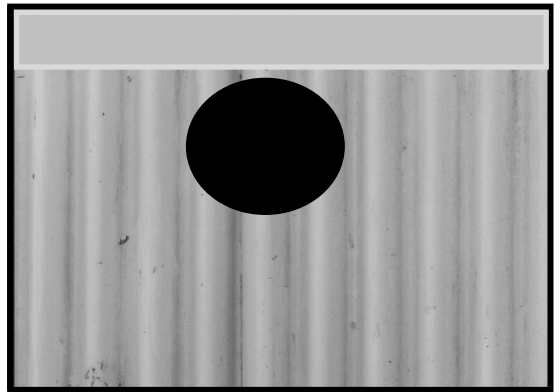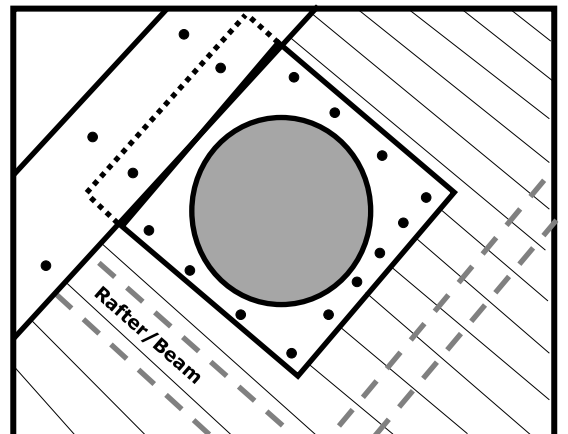
Figure 1

Flashing

Figure 2

Figure 3

Rafter/Beam

STEP 3

Slide the flashing back up under the roof capping Figure 3 and refit the 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. Then using tin snips to cut notches in the bottom of the flashing to suit the corrugations of the roof and bend the notches down. Then silicon the underside of the edges and the outside of the   edges and the underside and outside of the bottom section of the flashing. Use up a minimum of 18 tech or roof screws with rubber seals along the left, right and bottom of the flashing to secure to the roof. Note: Tech screws and roofing screws are not included.

STEP 4

Place the main body of the fan over the flashing as per figure 4.

STEP 5

As per figure 5 using a powered screw driver, screw at least 6 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)
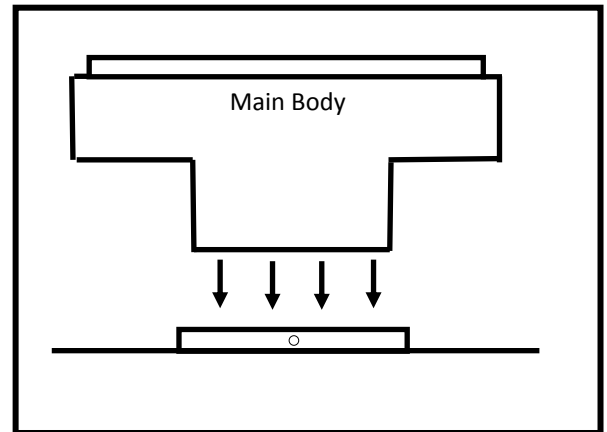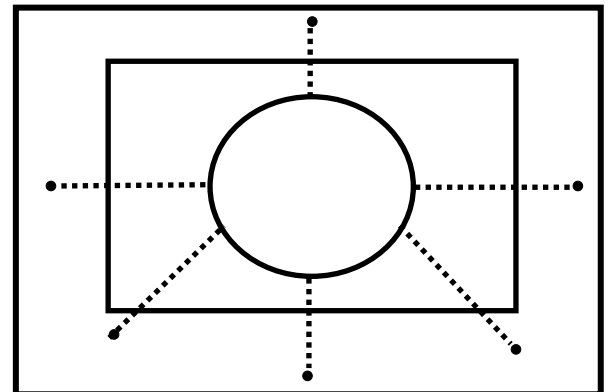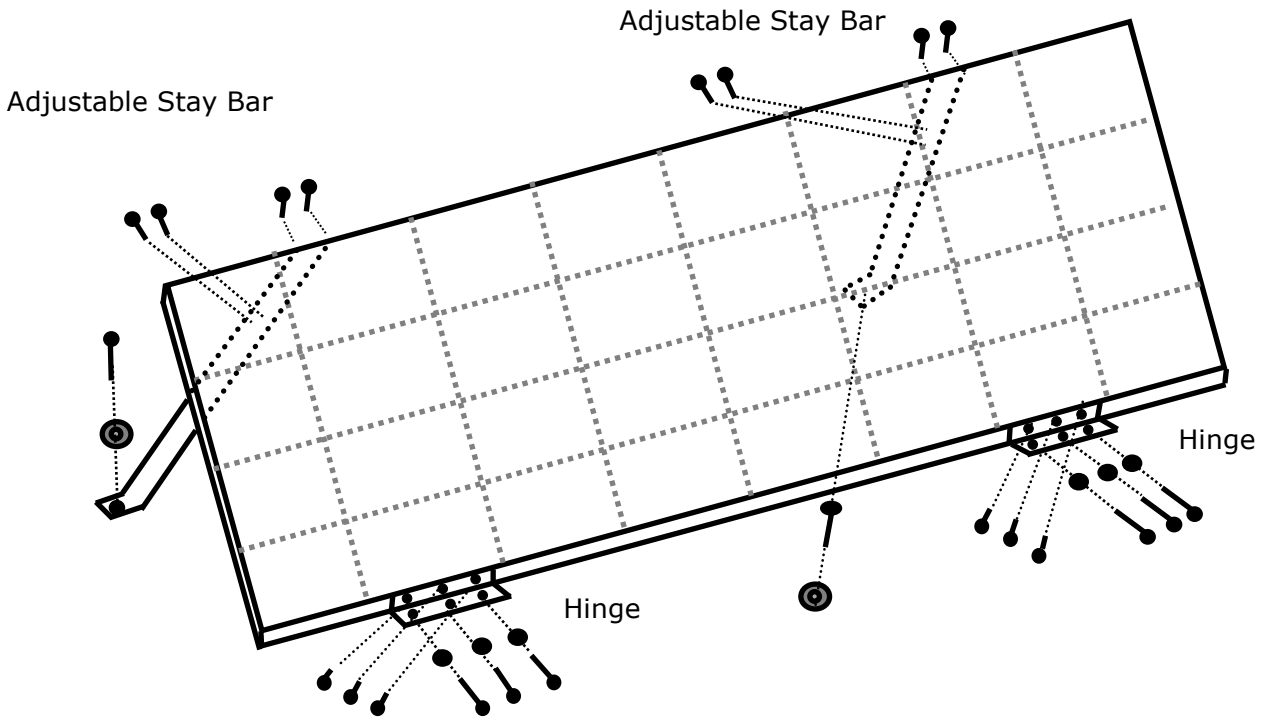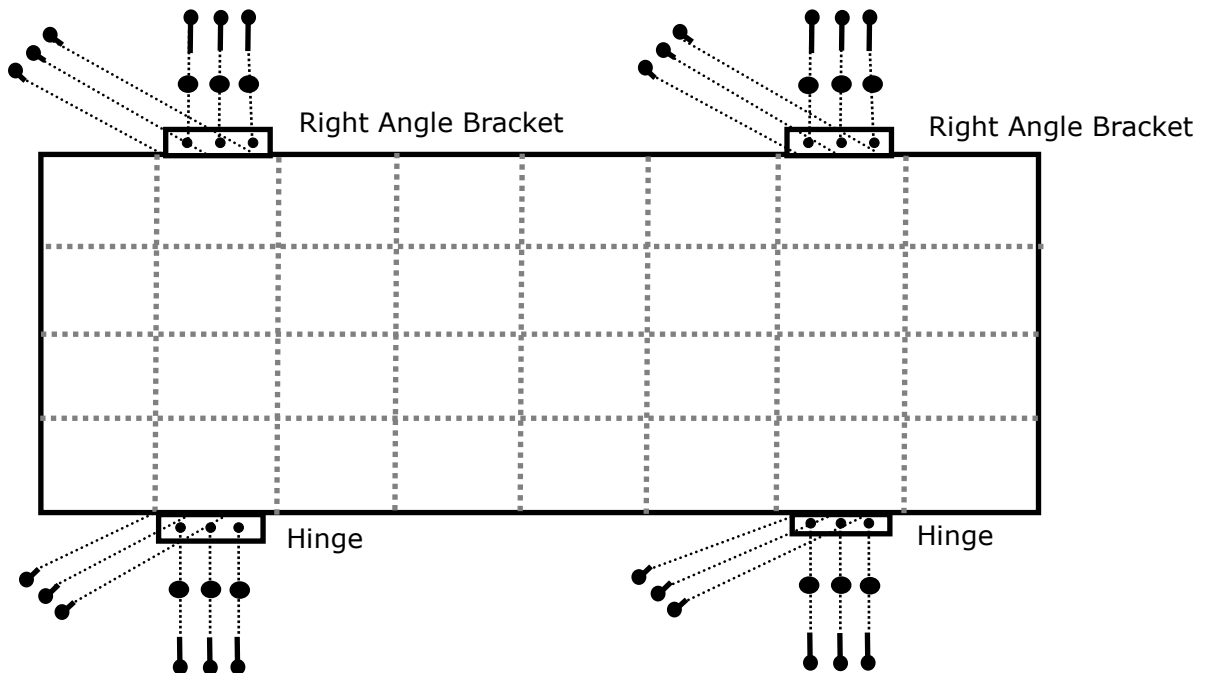
Figure 4

Main Body

Figure 5

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Angled Installation

Adjustable Stay Bar

Adjustable Stay Bar
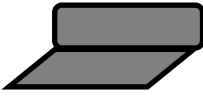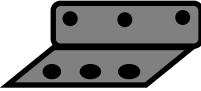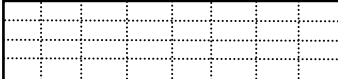
Hinge

Hinge

Flat Installation

Right Angle Bracket

Right Angle Bracket

Hinge

Hinge

SolarKing

Item List:

2pcs	Right Angle Bracket	
12pcs	Coach Bolts	
2pcs	Large Waterproof Washers	
2pcs	Adjustable Stay Bars	
16pcs	Tech Screws	
2pcs	Hinges	
12pcs	Small Waterproof Washers	
1pc	120 Watt Solar Panel	
1pc	600MM Solar Roof Fan	
1pc	Roof Flashing	