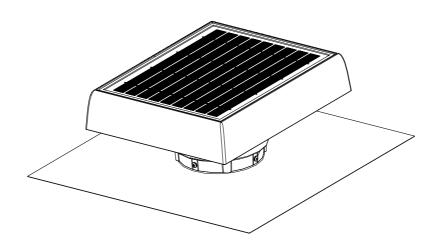


# **SolarXVENT**<sup>™</sup>

**Product Manual** 





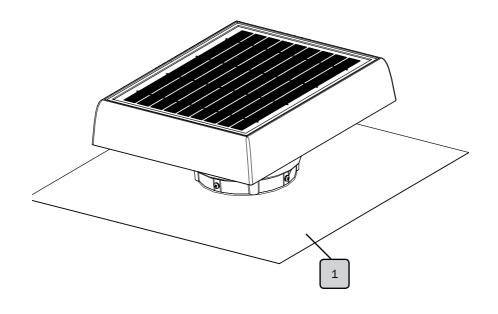


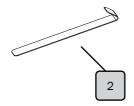
# Item Checklist & Additional Tools Required For Installation

# Included Parts: Qty: 1 SolarXVENT 1 2 Fixing Strap 1

# **Additional Parts & Tools Required (Not Supplied)**

Soft Rubber Hammer
Caulking Gun
Silicone Sealant
Angle grinder with cutting disc (Tile roof only)
Screw/Nail for fastening Fixing Strap (Tile roof only)
Knife (Sarked roof only)
Foil Tape (Sarked roof only)
Marker Pen
Nibbler or Similar Cutting Tool (Metal roof only)
10 x 10G Tek Screws or Sealed Rivets (Metal roof only)





### **Warnings and Important Notices**

WARNING: Do not proceed with the installation until you have read the entire instructions, including these warnings.

#### **INSTALL AT YOUR OWN RISK**

The installation of this product may be dangerous and includes the potential of death, personal injury or property damage. Please be aware of the following before installing this product.

- Follow any state or territory regulator OH&S guidelines for working at height (e.g. Roof work), electrical, working in elevated temperatures (e.g. roof space in summer).
  - For more information on your state's OH&S guidelines for working at heights, please refer to: https://www.safeworkaustralia.gov.au/heights
- Installation requires climbing and working at heights.
   Use caution to minimise risks by:
  - Clearing the area below the workspace
  - Not walking on surfaces that are slippery, wet or dusty
  - Using appropriate equipment: harness, tie off ladders, enclosed shoes, etc
- DO NOT attempt to install if you are uncomfortable with working at heights or on sloping roof surfaces
- There are sharp edges on the flashing, cut tiles, roof sheeting etc.
   Take care and wear personal protective equipment when handling and installing products
- Be aware that the SolarXVENT may start at any time when in sunlight.
  - Do not hold unit by the inlet or fan blades.
- DO NOT attempt to put anything into the running fan blades as this many cause personal injury and/or damage to the unit.
- Be aware of electrical cabling in the roof. If there is any sign of risk, isolate the power before entering the roof space. Be aware that there can be non-isolated electrical cables such as mains supply and solar supply. Note if these are in the roof space and avoid these items.

# **Warnings and Important Notices**

 When installing eave vents be careful to determine that the eave cladding material does not contain Asbestos. If it does or you cannot determine the make up, then the eave vent can only be installed using correct asbestos handling procedures by a person trained and/or licensed to handle asbestos.

#### **IMPORTANT NOTES**

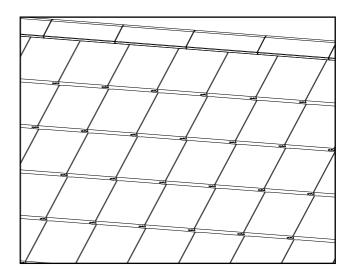
- The SolarXVENT is designed for general household ventilation only.
   DO NOT use to exhaust hazardous or explosive materials and
  - DO NOT use to exhaust hazardous or explosive materials and vapours.
- DO NOT use in areas contaminated with oil vapour from cooking or other oils. Oil vapour may cause product housing damage, electrical failure or fire.
- SolarXVENT has an unguarded fan blade assembly when accessed from below. DO NOT use in locations readily accessible to people or animals.

#### STEP 1

Select a suitable position for the ventilator on the roof no higher than the third row of tiles down from the ridge.

Take care to check that there are no obstructions below the tile such as a rafter.

The location should not be frequently shaded and should be north facing.

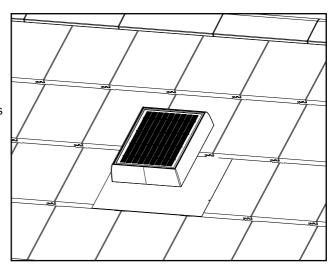




The removal of a tile higher than the third row down from the ridge may damage the ridge tile pointing and is NOT recommended.

# STEP 2

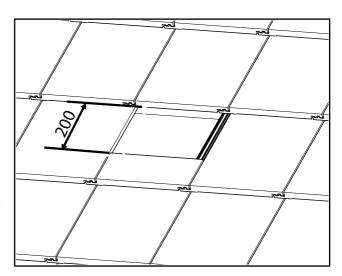
Position the ventilator in the desired location to determine which tile needs to be removed and cut.



#### STEP 3

Remove a single complete tile as required.

Cut this tile and return the lower portion to the roof. Allow an opening of approximately 200mm. This replaced tile portion will allow for an easier weather proof installation



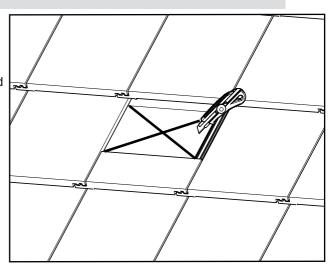


If a complete tile is removed, then care must be taken to dress the flashing to ensure a weather tight installation.

# STEP 4

If the roof is sarked, cut sarking in a cross and fold back onto itself to give a 180mm opening.

Tape the corners to the surrounding sarking with foil tape to prevent them fouling the ventilator.



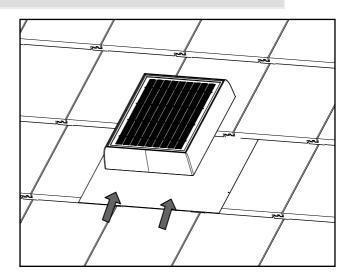


Folding the cut sarking flaps back on themselves results in a gutter arangement that helps to prevent any water running down the sarking from entering through the opening

#### STEP 5

Fit the ventilator into place and ensure surrounding tiles are fitted securely.

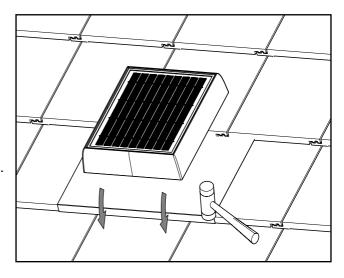
Ensure fan is positioned over the opening in the tiles.



# STEP 6

Fold and form the front edge of the flashing to seal against the tiles below.

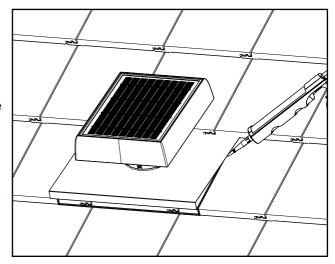
Using a soft hammer, carefully dress the front and sides of the flashing into the shape of the tiles.



#### STEP 7

To assist with weatherproofing a bead of silicone sealant can be applied between the tiles and the side and front edges of the flashing.

To apply, lift the formed flashing and run a bead 3-4mm in from the edge of the flashing edge on the roof sheeting. Then fit the flashing.

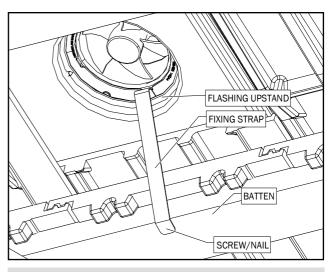


#### STEP 8

Form the fixing strap so that one end can hook over the flashing upstand

From within the roof space, hook the fixing strap over the edge of the flashing upstand at the lowest point of the roof. Screw/nail (not supplied) the fixing strap to the bottom batten to securely hold the ventilator down.

For additional weather proofing turn the rear edge of the flashing up so that it seals against the tiles above.





Turning the rear of the flashing upwards allows it to act as a gutter to prevent any wind driven water from entering the roof space.

#### Installation - Metal Roof

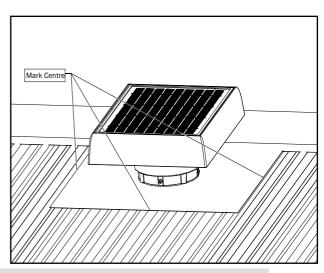
**Note:** Ridge capping screws may need to be removed whilst performing installation. Upon completion, return the fixing screws to the previous positions

#### STEP 9

Select a suitable position for the ventilator.

Slip the top edge of the flashing under the ridge cap and mark position.

To Install the vent lower down the roof, appropriate backflashing must be installed, extending back to the ridge capping.



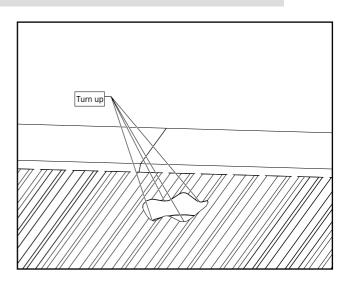


Ensure that the flashing covers the roof corrugations or ribs equally and that it is located between roof rafters.

#### **STEP 10**

Remove the ventilator and cut a 150mm square or round opening around the centre of the position marks.

Turn up the corrugations or pans on both the low and high sides. This will help to prevent water ingress.

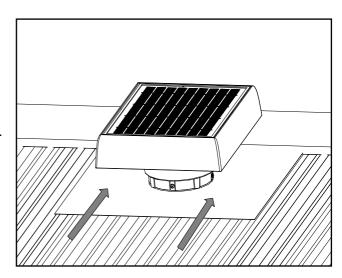


#### Installation - Metal Roof

#### **STEP 11**

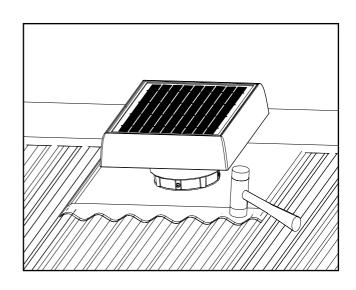
Return the SolarXVENT to the roof, positioning it over the cutout. Ensure that the top of the flashing is slipped under the ridge capping.

Turn up the top edge of the flashing before slipping under ridge capping. This will help prevent water ingress.



#### **STEP 12**

Using a soft rubber hammer, carefully work around the sides and lower edge of the flashing to form it into the corrugations of the metal sheeting profile.

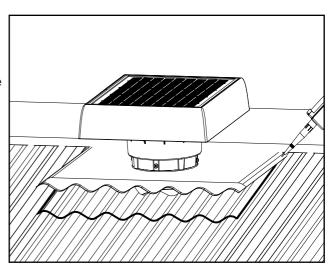


#### Installation - Metal Roof

#### **STEP 13**

To assist with weatherproofing a bead of silicone sealant can be applied between the sheeting and the side and front edges of the flashing.

To apply, lift the formed flashing and run a bead 3-4mm in from the edge of the flashing edge on the roof sheeting. Then fit the flashing.

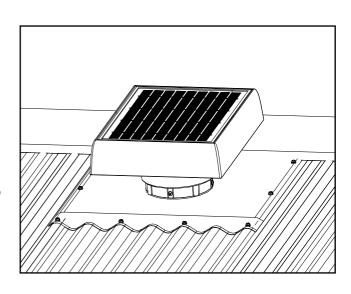


#### **STEP 14**

Secure the flashing to the metal sheeting with Tek screws or sealed rivets along the 3 exposed edges of the flashing.

Fix into the top of the metal sheeting profile to ensure a weatherproof installation

Approximately 8 required (not supplied)



# **Technical Data**

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Ventilator Housing: ASA

Flashing: Aluminium

Weight:

Ventilator: 2.5 kg

Electrical:

Solar Panel: Polycrystaline Solar Cell

Output 18VDC 10W. (Max 21.6V)

Fan Motor: DC Motor Input Voltage 12-24VDC

Other:

Inlet Throat Diameter 150mm

Flow Rate (@  $\Delta p=0$ ) Full Solar 195m<sup>3</sup>/hr

# **FAQ & Troubleshooting**

#### Q: Do I need an electrician to install SolarXVENT?

**A:** No, the product generates all the power it need through the inbuilt solar panel.

#### Q: Is the roof orientation important for the SolarXVENT?

**A:** Yes, to maximise the amount of solar energy that the SolarXVENT can collect and use, the SolarXVENT should be installed on a northern facing roof which is not shaded by trees. Installation in other directions or onto a roof that is frequently in shade will reduce the operating time of the product.

#### Q: Can I duct the SolarXVENT?

**A:** Yes, with a suitable collar the SolarXVENT can be ducted. Accessories for ducting SolarXVENT can be purchased from Bradford. Call for further details.

Problem	Possible Causes/Actions		
	Cause		
System not running	- Solar panel is in shade.		
	Action		
	- Wait until the next day		
Water leaks when raining	- Check seal where the flashing has been installed against the roof		

# **Contact Details**

# General Enquiries and Support

PH: 1300 858 674

Email: sales@edmonds.com.au

Website: bradfordventilation.com.au

**Technical Ventilation Enquiries** 

PH: +61 2 8824 0444

Notes	

Notes



# bradfordventilation.com.au



