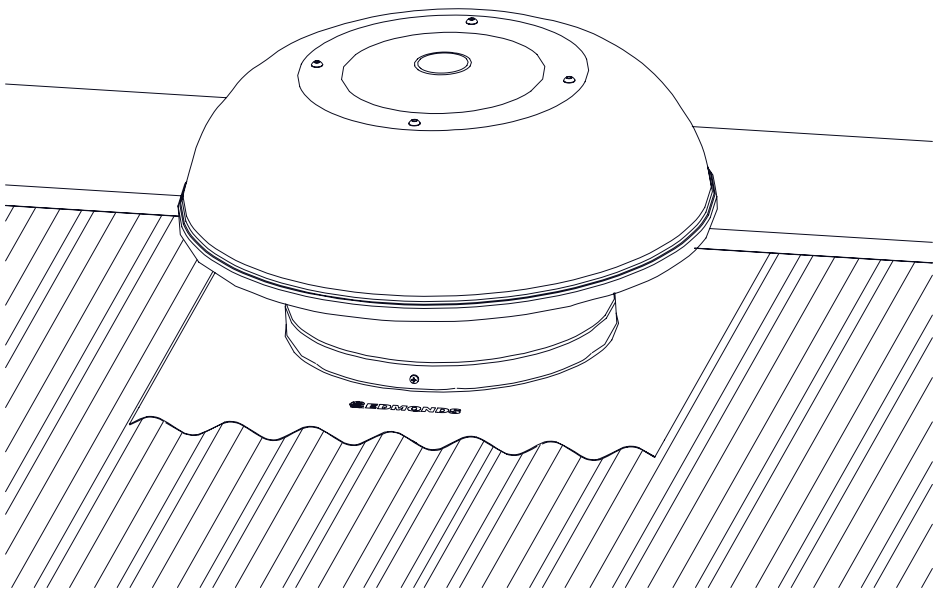


Maestro BAL

Installation Guide



Item Checklist & Additional Tools Required For Installation

Included Parts:	Qty:
1 Maestro BAL Ventilator	1
2 Speed Controller	1
3 Power Supply	1
4 Fixing Strap	1
5 Speed Controller Fixing Screws	2
6 Product Manual	1
7 Warranty Document	1

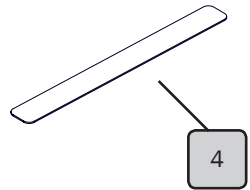
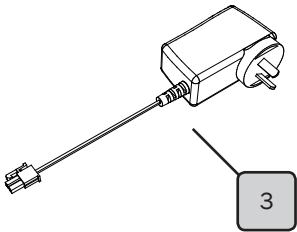
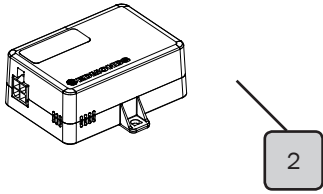
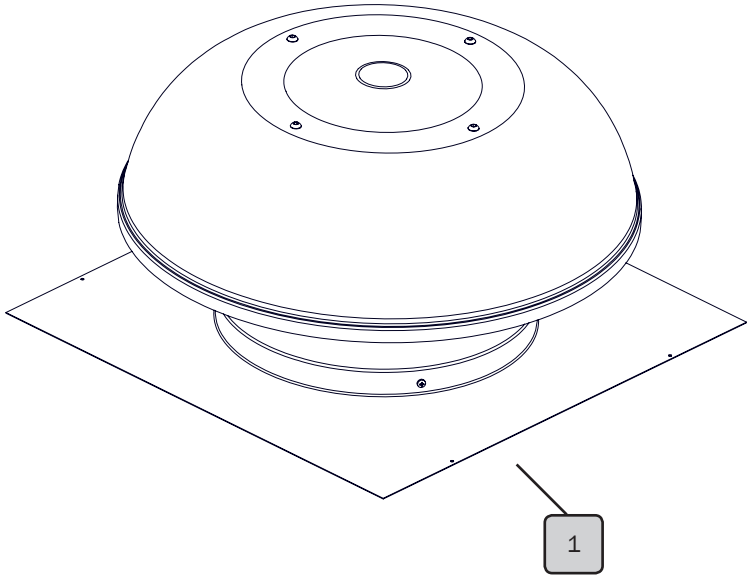
Additional Parts & Tools Required for Metal Roof (Not Supplied)

Soft Rubber Hammer
Caulking Gun
Fire Rated Sealant
Marker Pen
Nibbler or Similar Cutting Tool (Metal roof only)
10G Tek Screws or Sealed Rivets (Metal roof only)

Additional Parts & Tools Required for Tile Roof (Not Supplied)

Soft Rubber Hammer
Caulking Gun
Selleys 435g Grey Flame Flex Fire And Acoustic 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

Note : This product requires a general power outlet (GPO) for operation.



Warnings and Important Notices

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

INSTALL AT YOUR OWN RISK

The installation of this product may involve working at heights which could be dangerous and lead to the potential risk of death, personal injury or property damage. Please be aware of the following before installing this product.

- Follow the state or territory regulator OH&S guidelines for working at heights (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 working at heights. Use caution to minimise risks by:
 - Clearing the area around the workspace.
 - Not walking on surfaces that are slippery, wet or dusty.
 - Using appropriate equipment: harness, ladders with handrail, enclosed shoes, etc.
- Wear personal protective equipment when handling and installing products.
- Warning: Product fan will rotate immediately when connected to power - Do Not connect to mains power until the installation is complete and it is safe to do so.
- Warning: Check for electrical hazards before entering roof space and installing this product. Be aware of electrical cabling in the roof during installation and consult an electrician for further advice if required.
- DO NOT attempt to put anything into the running fan blades as this may cause personal injury and/or damage to the unit.

Warnings and Important Notices

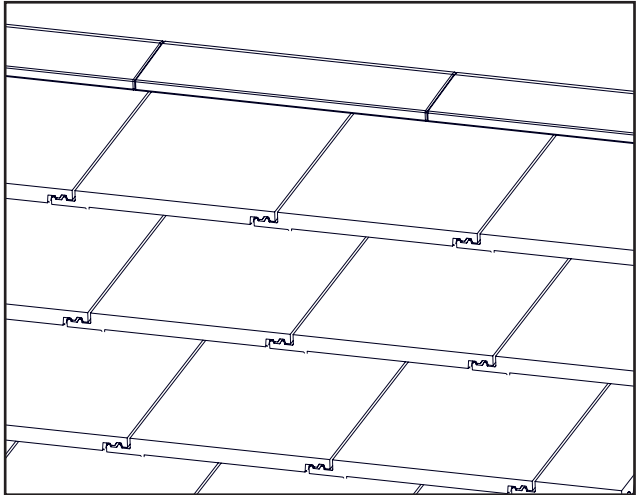
- When installing eave vents be careful to determine that the eave cladding material does not contain Asbestos.
- This product is not suitable for use in cyclonic regions..
- Always use the provided power supply and speed controller to power the fan.
- If mains electrical connections are required (e.g. wiring a power point), then they must be carried out by a licensed electrician in accordance with local wiring codes and regulations.
- Power supply and speed controller are for dry indoor use only. Ensure that the power supply and speed controller are not left on damp surfaces, fasten to the structure with screws or cable ties as required.
- Only use one Maestro BAL per speed controller and power supply.

Installation - Tiled Roof

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.

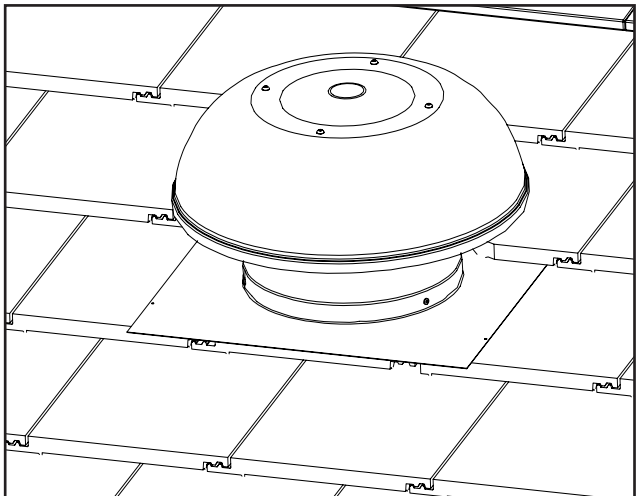


The removal of a tile higher than the third row down from the ridge may damage the ridge tile pointing and is NOT recommended.

STEP 2

Position the ventilator in the desired location to determine which tiles need to be removed or cut.

Mark out position and determine tiles to be removed or cut - note that a section roughly the size of the round section of the ventilator throat needs to be removed.

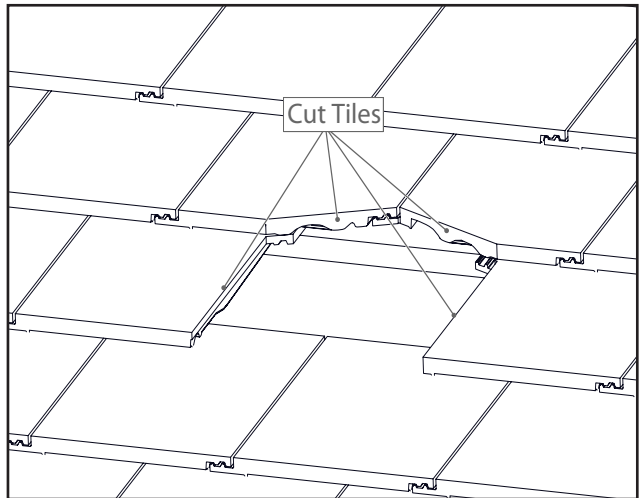


Installation - Tiled Roof

STEP 3

Remove a single complete tile as required.

Cut other tiles as required to fit the the opening of the ventilator throat.



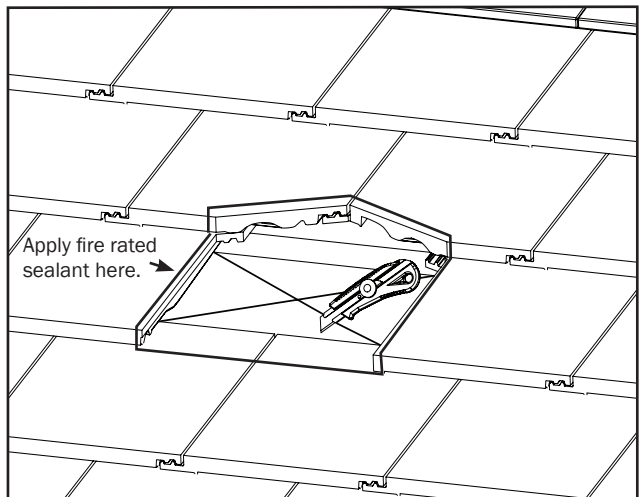
Depending on roof construction a tile batten may be obstructing a clear access to the throat. This batten can be left in place with the Maestro BAL sitting above it.

STEP 4

If the roof is sarked, cut sarking in a cross and fold back onto itself to give a 300mm opening.

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

Apply a 4mm bead of fire rated sealant along the tile cut-out.

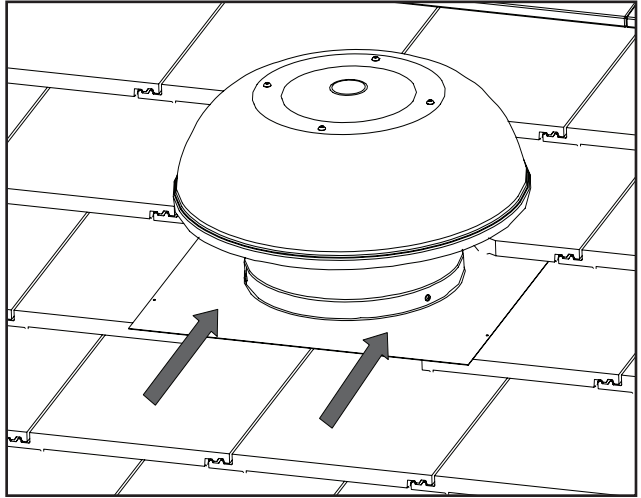


A continuous 4mm bead of fire rated sealant here to achieve BAL compliance.

Installation - Tiled Roof

STEP 5

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



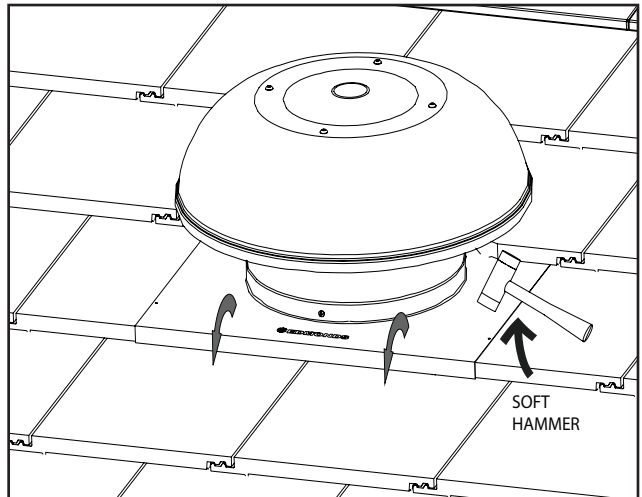
For BAL compliance, no gaps greater than 2mm may be present. A water tight install can be achieved by carefully forming the flashing to the tile profiles, without the use of sealant.

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.

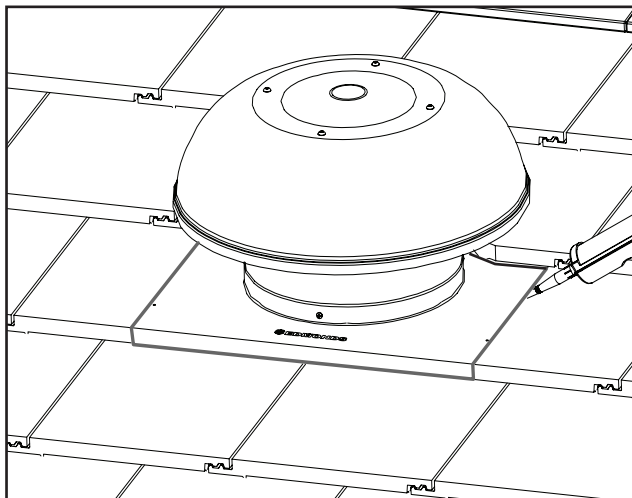
For BAL installs this must be done with care to ensure that no gaps greater than 2mm are present.



Installation - Tiled Roof

STEP 7

Apply a bead of fire rated sealant along the flashing perimeter.



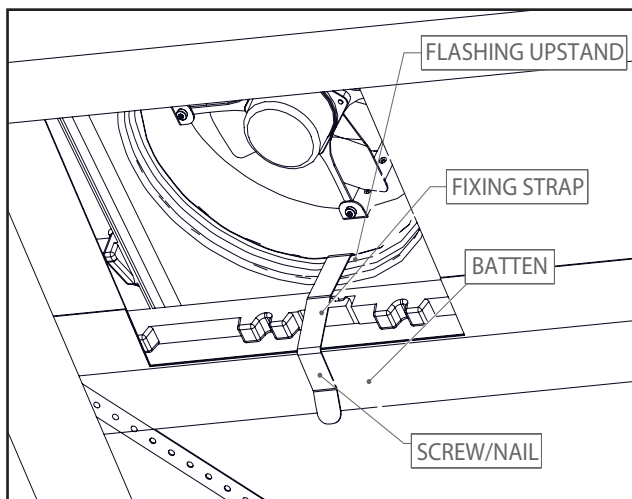
STEP 8

From the inside of the roof.

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

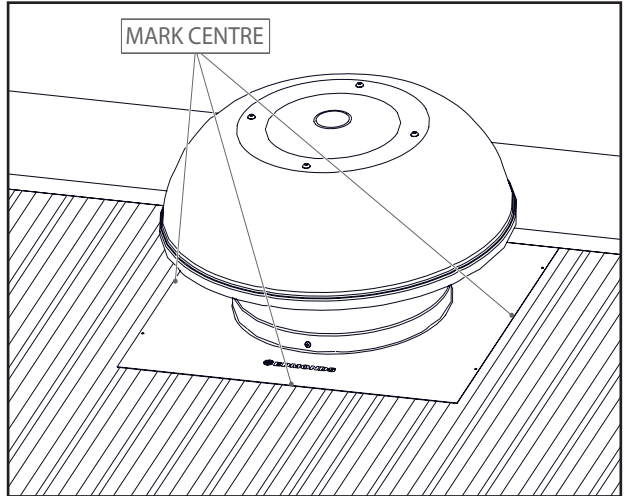
Note: Ridge capping screws may need to be removed whilst performing installation. Upon completion, return the fixing screws to the previous positions

STEP 1

Select a suitable position for the ventilator.

Slip the top edge of the flashing under the ridge cap by at least 50mm and mark position.

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

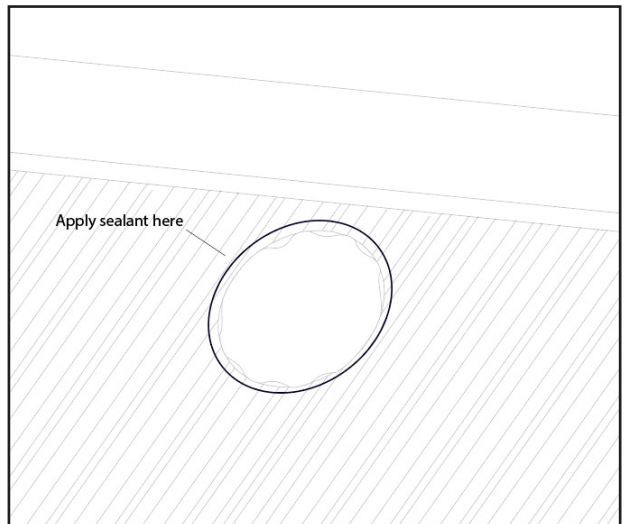


Ensure that the flashing covers the roof corrugations or ribs equally and that it is located between roof rafters.

STEP 2

Remove the ventilator and cut a 300mm round opening around the centre of the position marks.

Apply a 4mm bead of fire rated sealant around the 300mm opening.

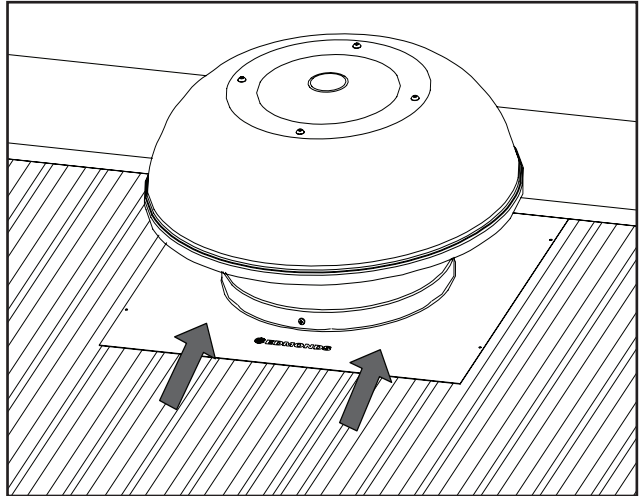


Installation - Metal Roof

STEP 3

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

For lower pitched roofs, turn up the top edge of the flashing before slipping under ridge capping. This will help prevent water ingress.

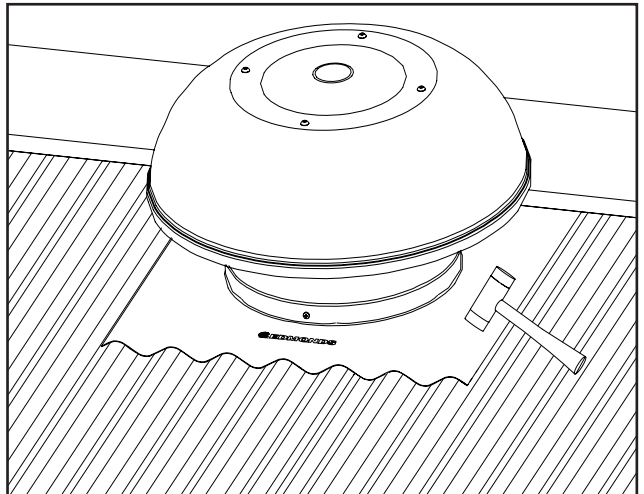


For BAL compliance, no gaps greater than 2mm may be present. A water tight install can be achieved by carefully forming the flashing to the roof sheeting profile, without the use of sealant.

STEP 4

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.

For BAL installs this must be done with care to ensure that no gaps greater than 2mm are present.

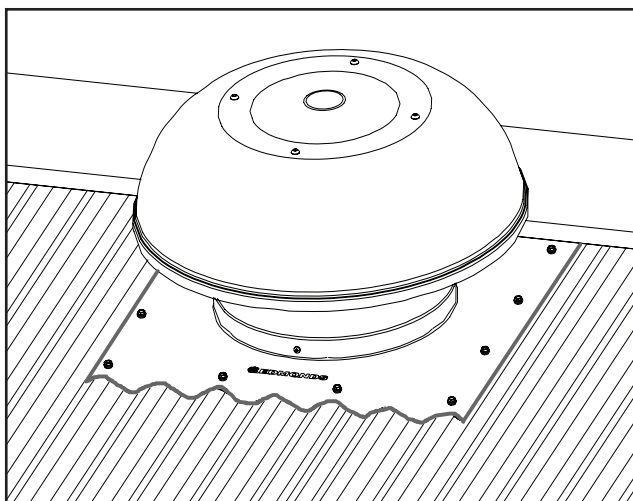


Installation - *Metal Roof*

STEP 5

Apply a bead of fire rated sealant around the flashing perimeter.

Secure the flashing to the metal sheeting with Tek screws or sealed rivets along the 3 exposed edges of the flashing. Approximately 10 required (not supplied).



A continuous bead of fire rated sealant must form a bond between the ventilator flashing & roof sheet for BAL compliance.

Maintenance - Ember Screen

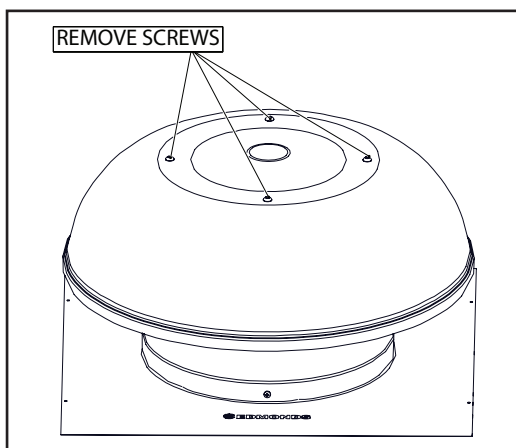
The only maintenance required for the Maestro BAL is the occasional cleaning of the stainless steel ember screen. Time between cleaning depends on operating conditions, however yearly cleaning should be performed to maintain optimal performance of the product's airflow. To clean the ember screen follow the instructions below.



Turn off the power to the Maestro BAL before conducting any maintenance. Follow the safety instructions in the front of this manual.

STEP 1

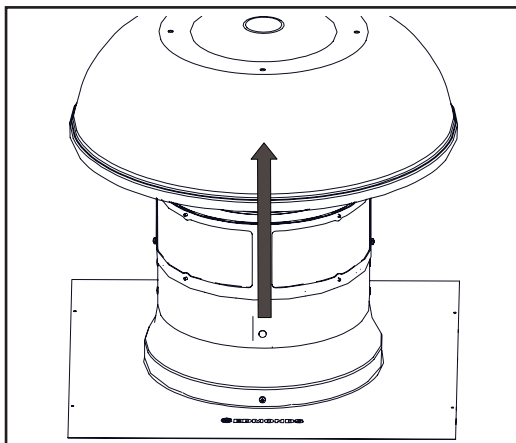
Remove the 4 screws securing the dome



STEP 2

Lift the dome to remove it and place on a safe surface to prevent scratching or damage.

Use brush or vacuum cleaner to remove the dust/debris on the ember screen.

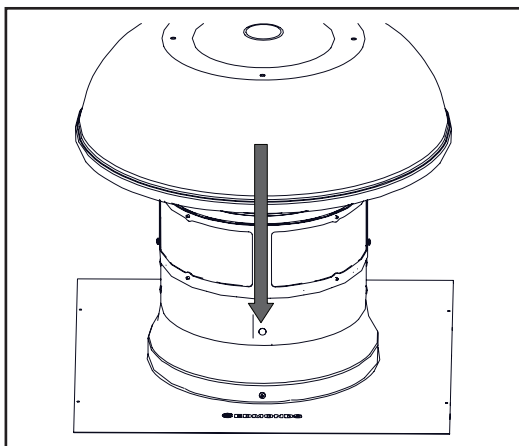


Maintenance - Sparkguard

STEP 3

Place the dome onto the unit.

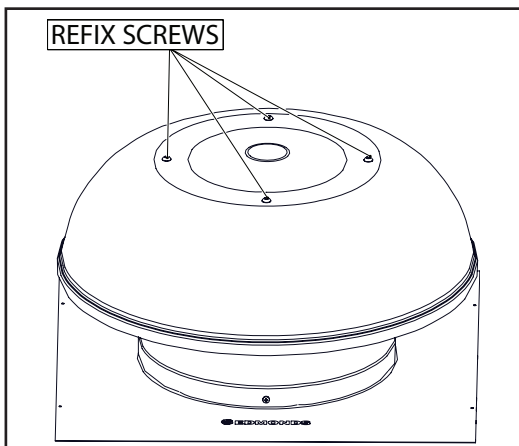
Line up the holes in the dome with the mounting points on the top of the fan housing.



STEP 4

Refix the dome to the Maestro BAL housing with the 4 screws removed in step 1.

Tighten until snug.



FAQ & Troubleshooting

Q: Do I need an electrician to install the Maestro BAL?

A: If you have an available power point that can be reached then no electrician is required. If a power point is unavailable then an electrician will be required to install one.

Q: Is the Maestro BAL, BAL Compliant?

A: If installed as per the instructions then the Maestro BAL is compliant for all BAL levels up to BAL-40. The Maestro BAL is not suitable or compliant for BAL-FZ.

Q: Can I duct the Maestro BAL?

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

Q: How do I connect when my only power point is more than 1.5 away from unit?

A: If the power source is too far away, one can purchase from Bradford Ventilation an extension lead 10m long to allow more distant placement of the unit.

Problem	Possible Actions
System not running	<ul style="list-style-type: none"> - Controller may be in AUTO mode (it will not run at a temperature less than 30°C or when moisture levels are below 65%R.H when in AUTO). Change to LO to confirm the controller is functioning. Return setting to AUTO. - Check power is on and all electrical connections are secure.
Water leaks when raining	<ul style="list-style-type: none"> - Check installation integrity of ventilator on roof