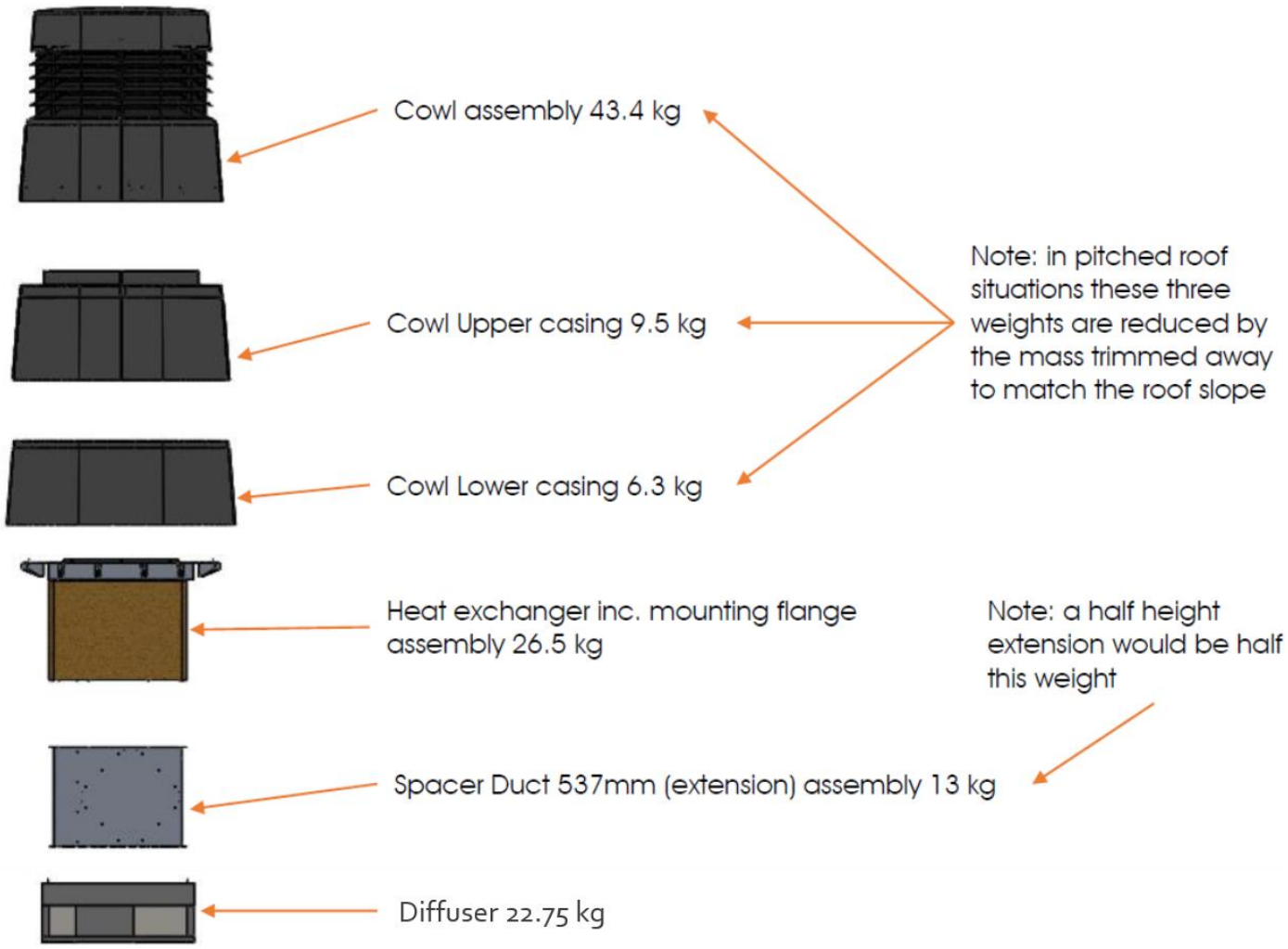
ventive
naturally intelligent ventilation

Installation Manual

Ventive Windhive

In the image below you can see an exploded assembly of the Ventive windhive. It shows all of the separate components of the windhive system.



Health and Safety Information

Installation of Ventive Windhive involves working at height and installers must comply with the *Work at Height Regulations, 2005*. As part of the Regulations it must be ensured that:

All work at height is properly planned and organised;

Those involved in work at height are competent and authorised;

The risks from work at height are assessed and correct work equipment is selected and used;

The risks from fragile surfaces are properly controlled; and

Equipment for work at height is properly inspected and maintained.

For detailed guidance please refer to *"Health and safety in roof work", 2012, HSE.*

Ventive Ltd accepts no liability resulting from injury, loss or damage caused by inappropriate workmanship on site.

Consideration of technical risk

Installation of Ventive Windhive should be completed in accordance with this manual. Any changes to the installation process should be approved by Ventive Technical Support (see contact details on the last page).

Installation works are to be conducted by competent individuals, preferably trained by Ventive and only with originally supplied parts, or products recommended by Ventive Technical Support. Installation should not interfere with other construction elements or services within the building.

Non-compliant installation voids the warranty and Ventive Ltd takes no responsibility for any loss or damage caused by incorrect installation and use of the system.

Roof opening

1. Minimum opening dimensions of 830mm x 830mm
2. Make sure that the penetration does not interfere with any structural elements
3. For all components of Ventive windhive ensure vertical clearance of the required width (830mm x 830mm)
4. When working with a timber roof construction ensure you use structural opening details or engineer's drawings (joints and trimmers details)

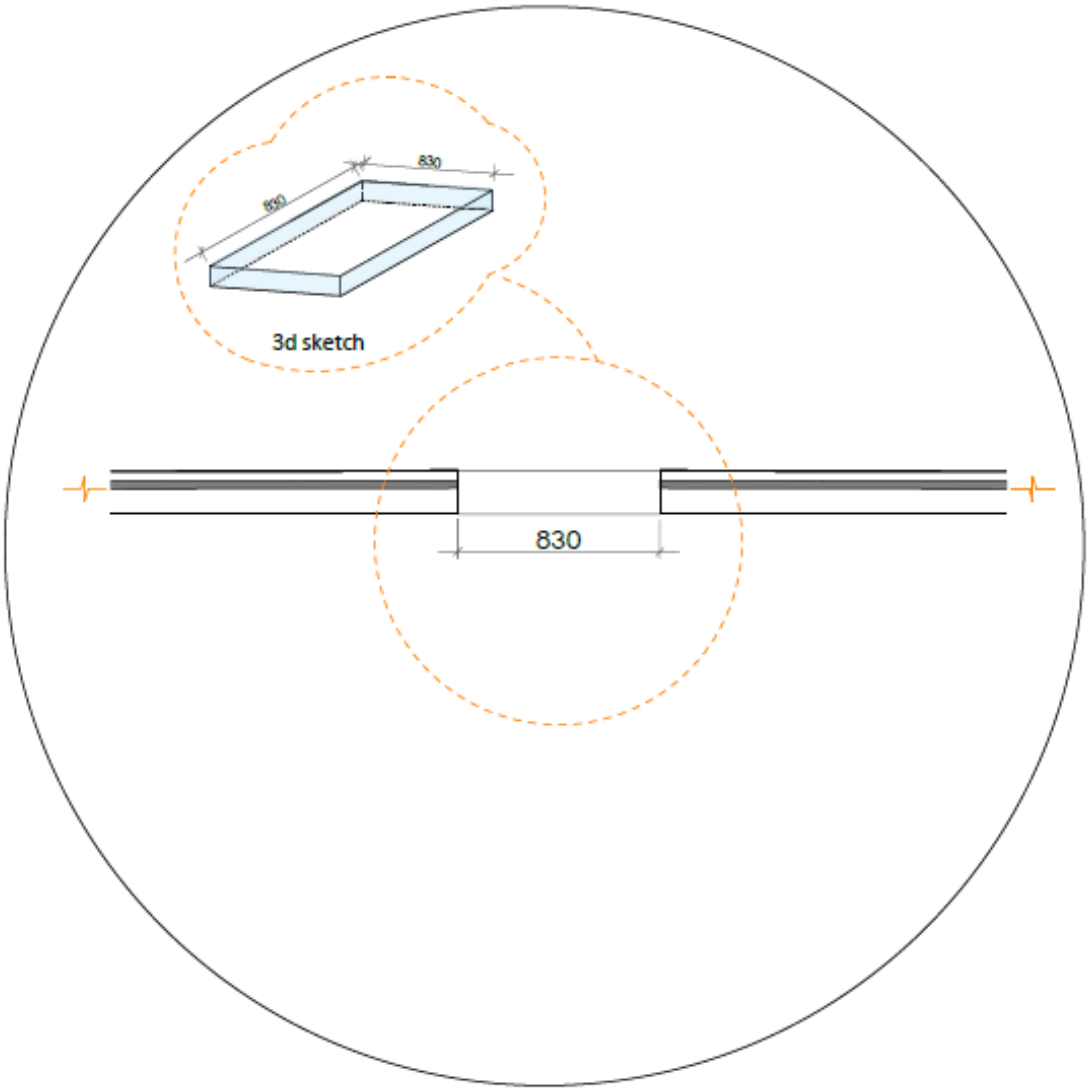


Fig. 1

Prepare upstand and ensure water tightness

Flat roof applications

1. Please note roofing experience is required
2. Put in place marine plywood upstand boxing of 18mm (shown in blue in Fig. 3 below) around the perimeter, with a minimum height of 160mm from the hole. This will create an opening dimension of 794mm x 794mm *(as per Fig. 2)*
3. Ensure upstand has full weatherproofing before installation of Heat exchanger.
4. Fix roof overlay ensuring is secured
5. Ensure the upstand is plumb and level

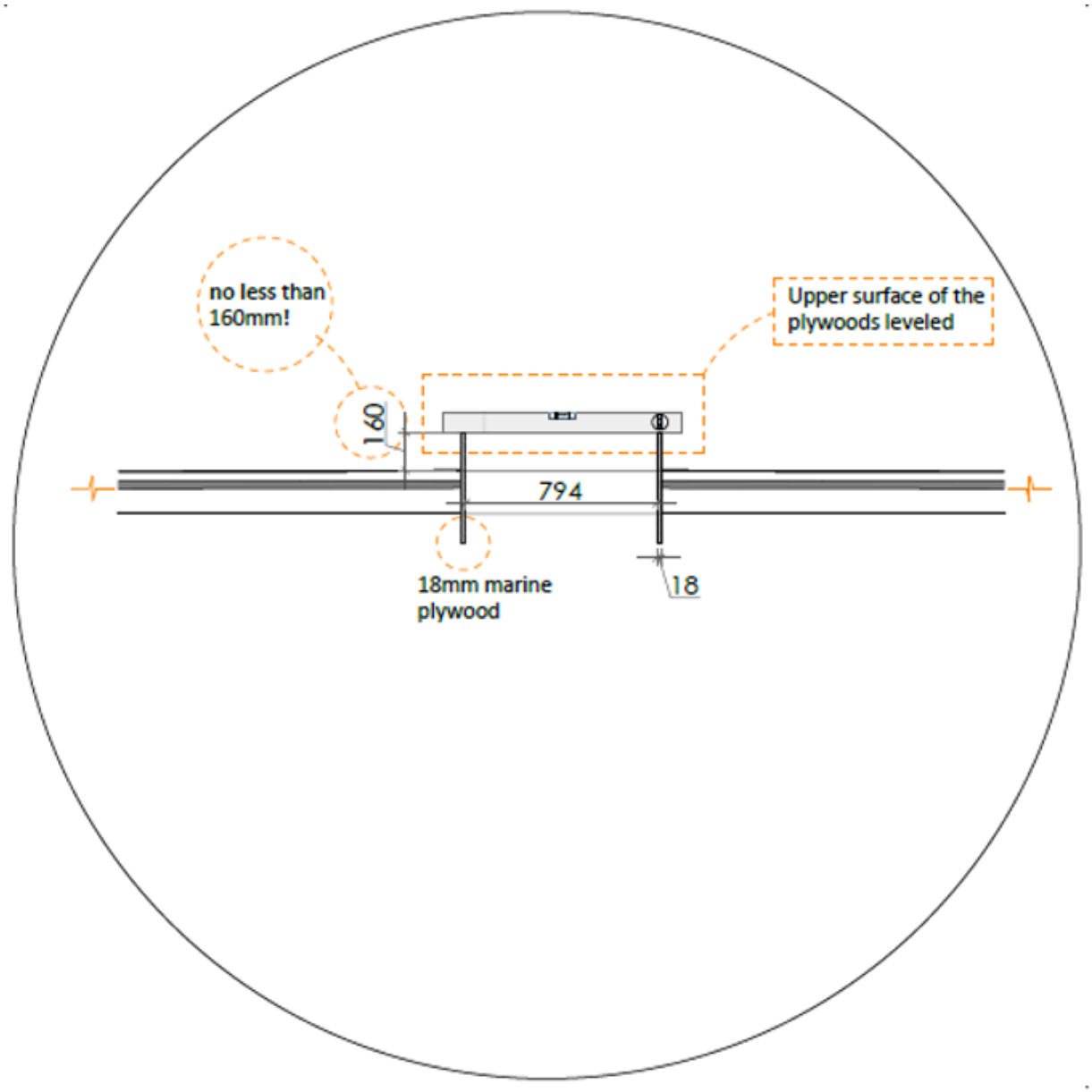


Fig. 2

Pitched roof versions

1. Please note roofing experience is required
2. Put in place marine plywood upstand boxing of 18mm (shown in Fig. 3 below) around the perimeter, with a min height of 160mm height from the hole. This will create an opening dimension of 794mm x 794mm *(as per Fig. 3)*
3. Ensure upstand has completed a full weatherproofing process before installation of heat exchanger.
4. Fix roof overlay ensuring is secured
5. Ensure the upstand is plumb and level

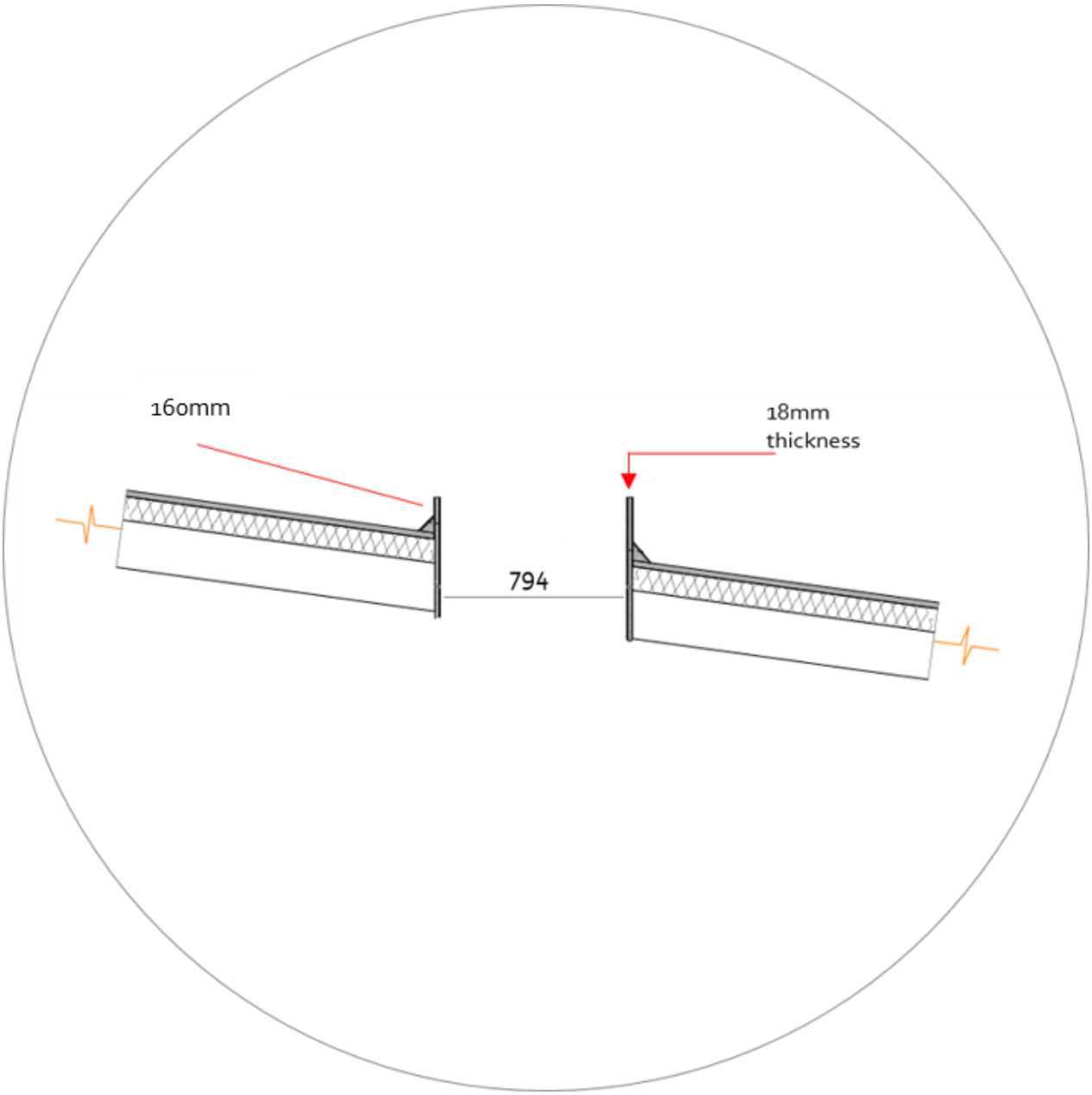


Fig. 3

Placing the heat exchanger

1. Place the heat exchanger in the hole (for the sake of simplicity the extension ring(s) have been omitted)
2. Ensure upper perimeter of heat exchanger balances evenly on the top of the plywood upstand

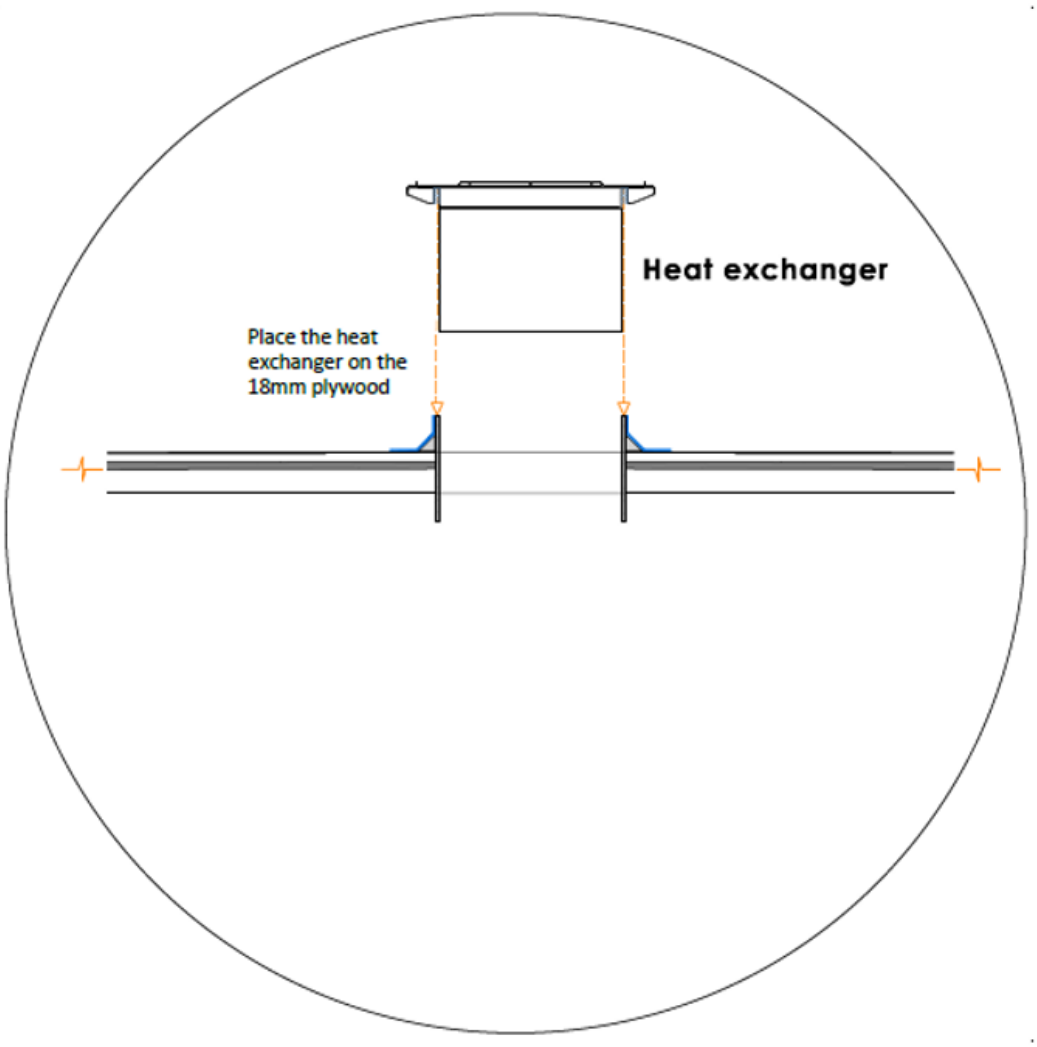


Fig. 4

Fitting the cowl casings

1. The cowl will have been pre-cut according to the pitch of the roof. Ensure the skirt is consistent with the angle of the roof before attempting to put in place
2. Adjust the outer casing to fit with the roof angle
3. Secure the casing to the heat exchanger using fixings

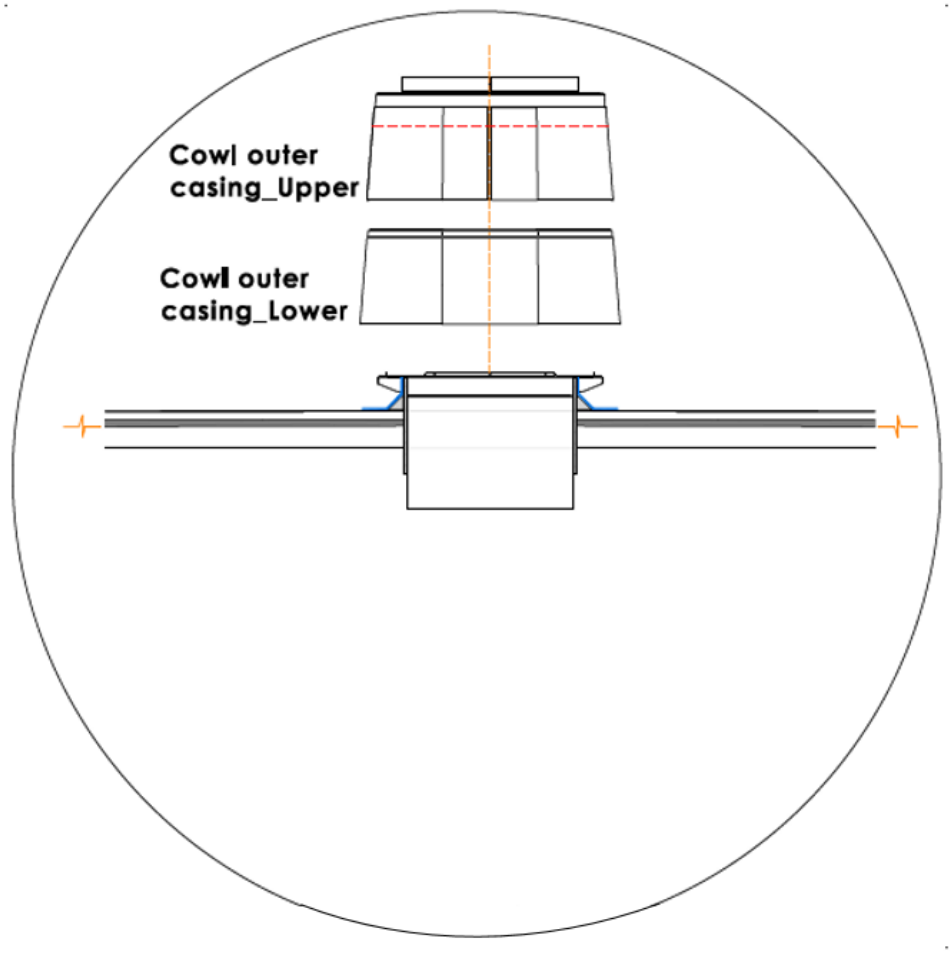


Fig. 5

Fitting the cowl

1. Adjust the upper part of the cowl to fit over the roof opening
2. Lower it onto the casing ensuring it forms an airtight connection
3. Affix to the roof using fixings

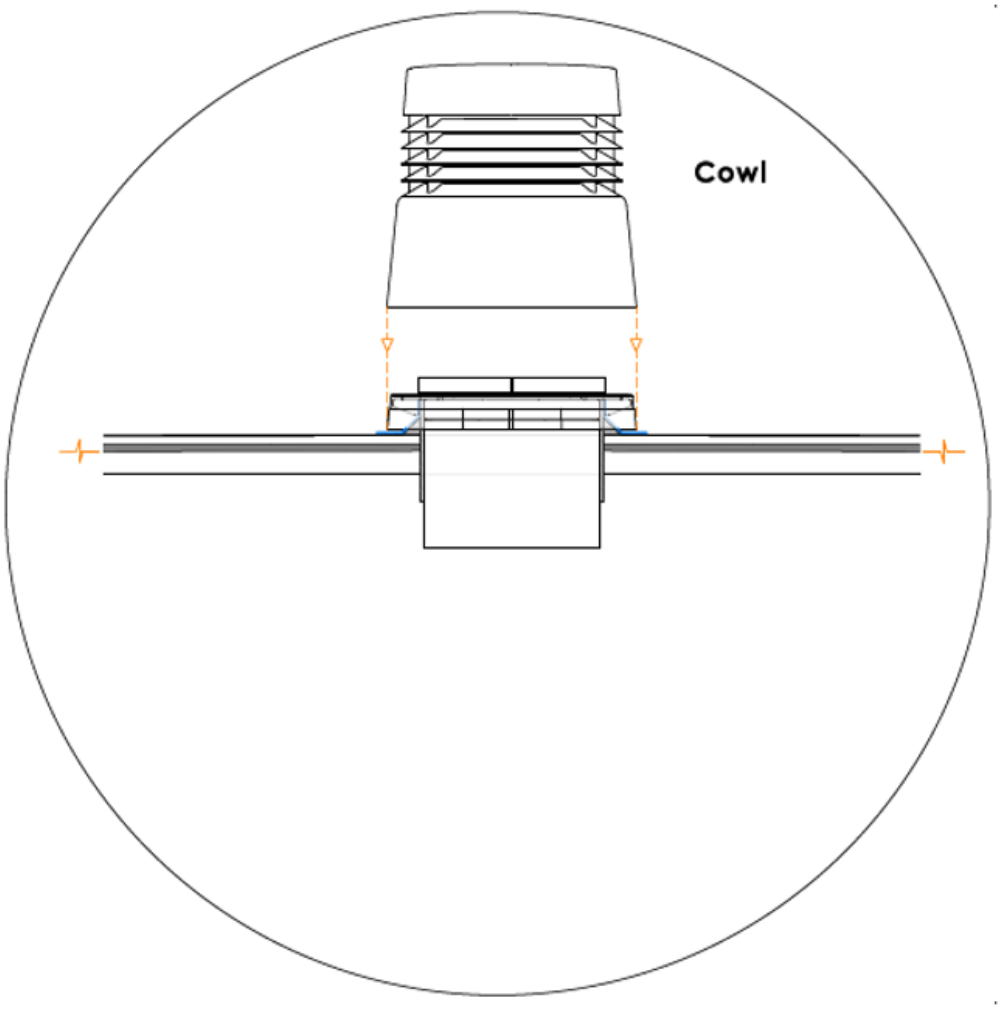


Fig. 6

Fitting the diffuser

1. Adjust the centre of the diffuser to align with the centre of the opening. Rotate as required for optimum duct position
2. Connect condensation outlet of the diffuser to an overflow pipe (φ21.5mm) and discharge accordingly to site conditions
3. Seal the connections with aluminium tape
4. Insulate diffuser, if not within an insulated area
5. Please note you will need to connect the internal sensor to a 24V DC power supply

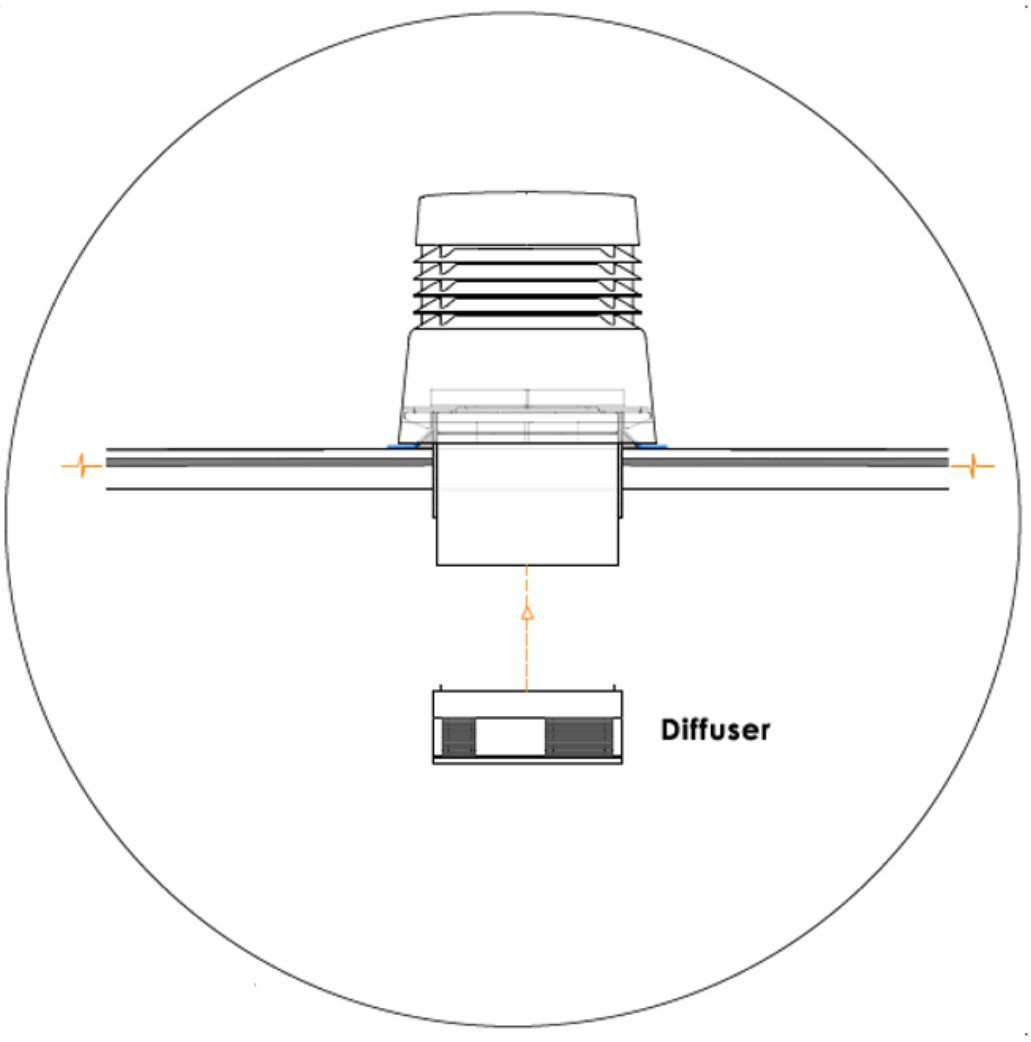


Fig. 7

Air Supply

1. You should now have a fully fitted Ventive Windhive ventilation system with three air flows; Supply, Extract and Bypass

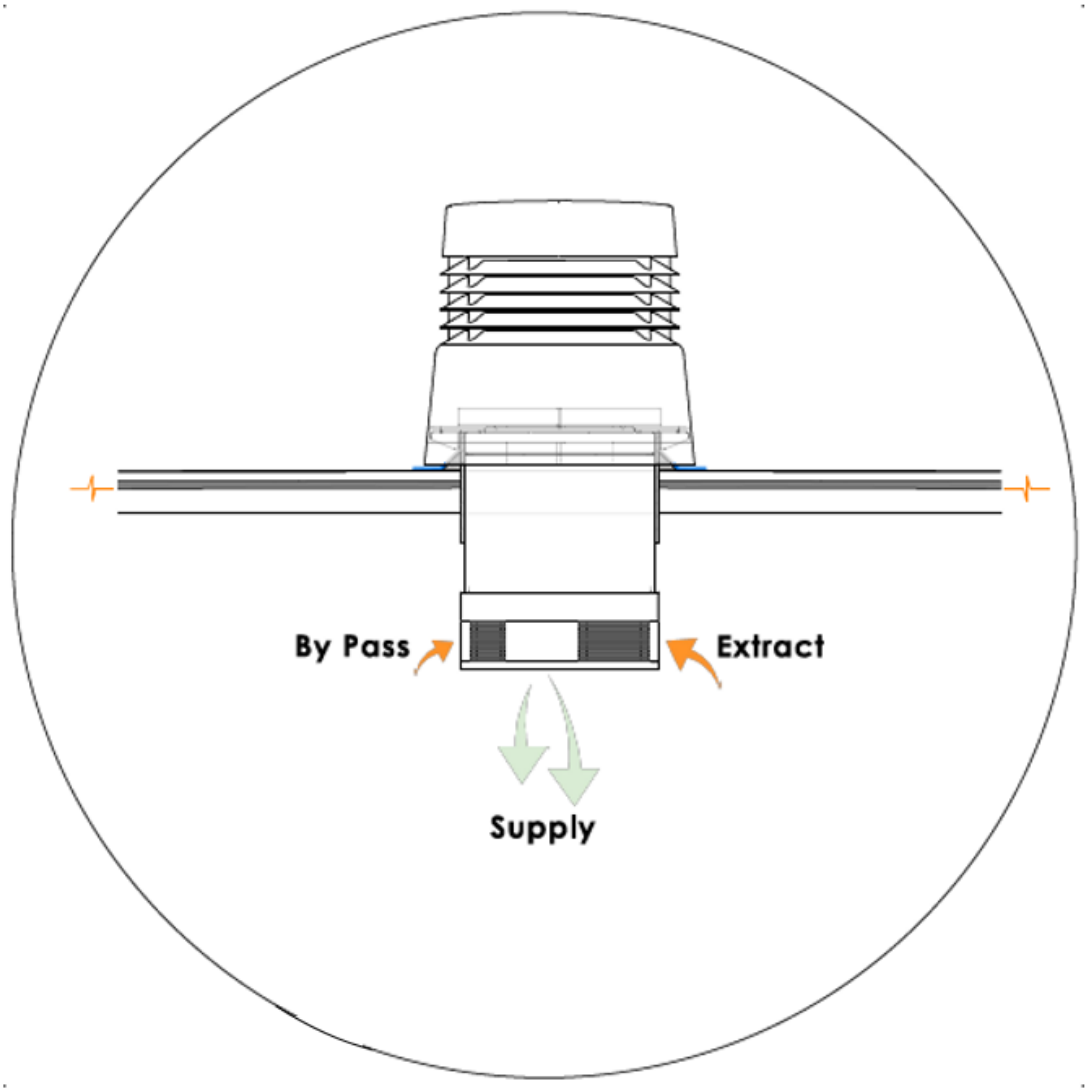


Fig. 8

Your installation is now complete!

Windhive wiring diagram (generic)