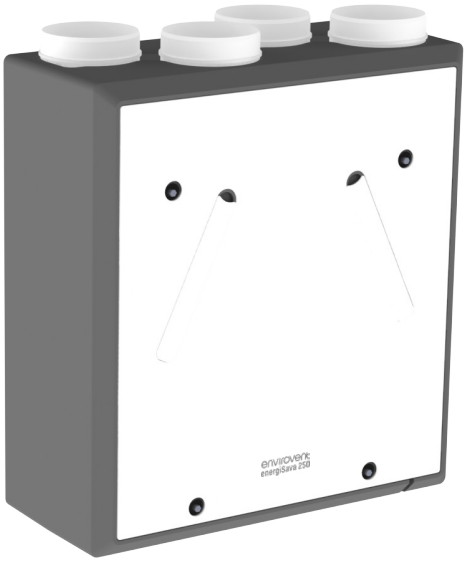
envirovent®

ENERGISAVA® 250

CEILING MOUNTED VERSION

INSTALLATION GUIDE FOR ENGINEER / INSTALLER



Lifetime Range®

Safety

Be sure to have read and understood these instructions before beginning the installation process.

PRE-INSTALLATION CHECK LIST

Make sure that the unit can physically fit in to the desired location.

The energiSava® 250 unit should be situated so that access for maintenance or replacement of parts is possible. Make the ductwork runs as short as possible. Having the most direct route and using as few bends as possible will reduce air resistance and improve the efficiency of the unit.

SAFETY AND RECOMMENDATIONS

- All wiring must comply with Building Regulations and the current I.E.E. Wiring Regulations (BS7671) or the equivalent standards for your country. The final installation should be examined and tested by a qualified electrician.
- The appliance is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30mA.
- Precautions must be taken to avoid the back-flow of gases into the dwelling from the open flue of gas or other fuel-burning appliances.
- Make sure the mains supply complies with the rating label for voltage, frequency and phase.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- The appliance is considered suitable for use in countries having a warm damp equable climate, but may also be used in other countries.

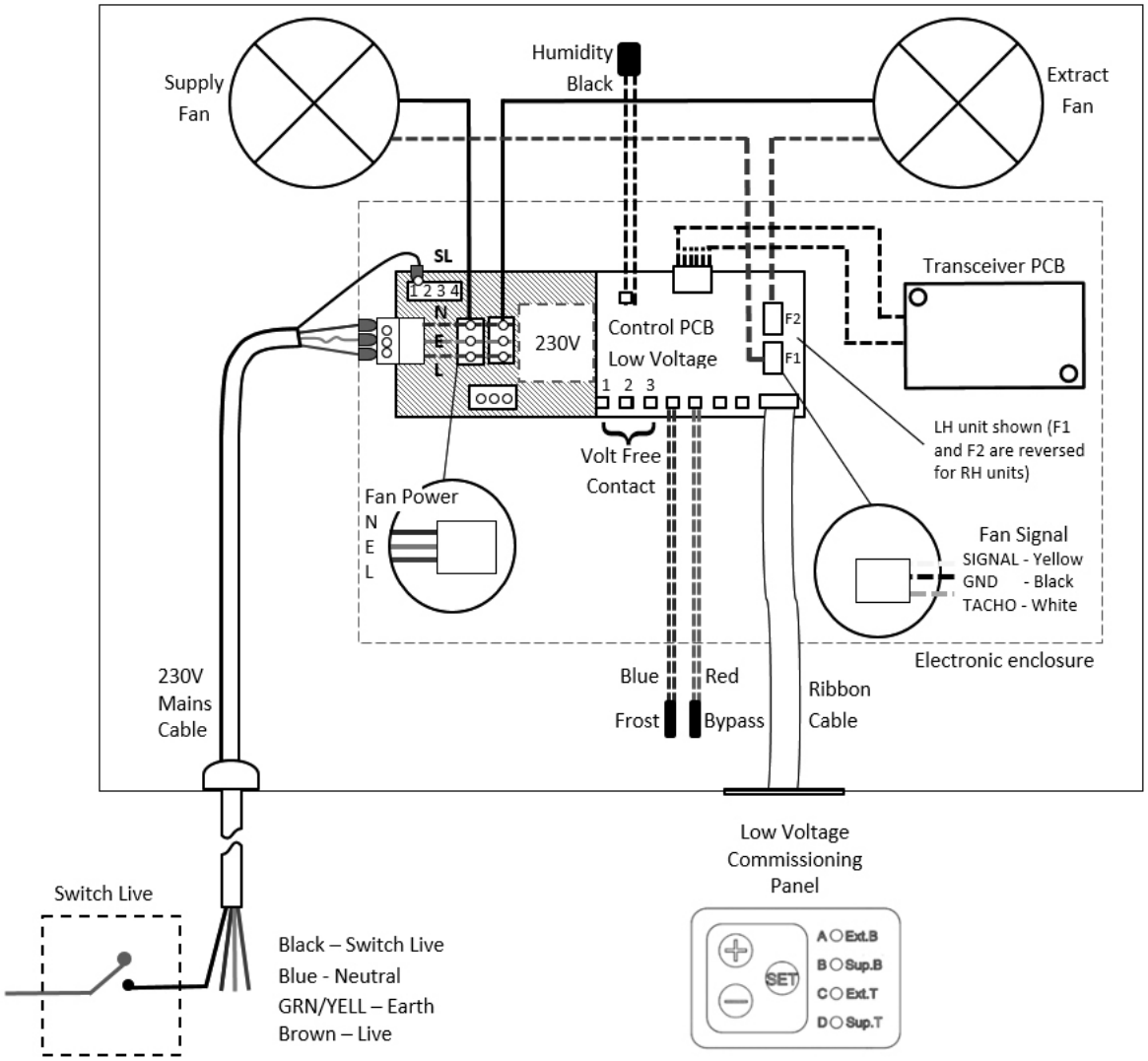
Wiring

Commissioning - Electrical Connections

The appliance must be earthed and a double pole switch having a minimum contact separation of 3.0mm must be used to provide isolation for the unit. If the switch live is utilised, a triple isolator must be used. Switch live must also be isolated / disconnected before opening the unit. For New Zealand, disconnection to be in accordance with AS/NZS 3000.

All wiring must be completed by a qualified electrician. This appliance is suitable for 230V ~ 50Hz single phase supply fused at 3 amps.

The appliance is supplied with a 4 core mains flexible cable. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

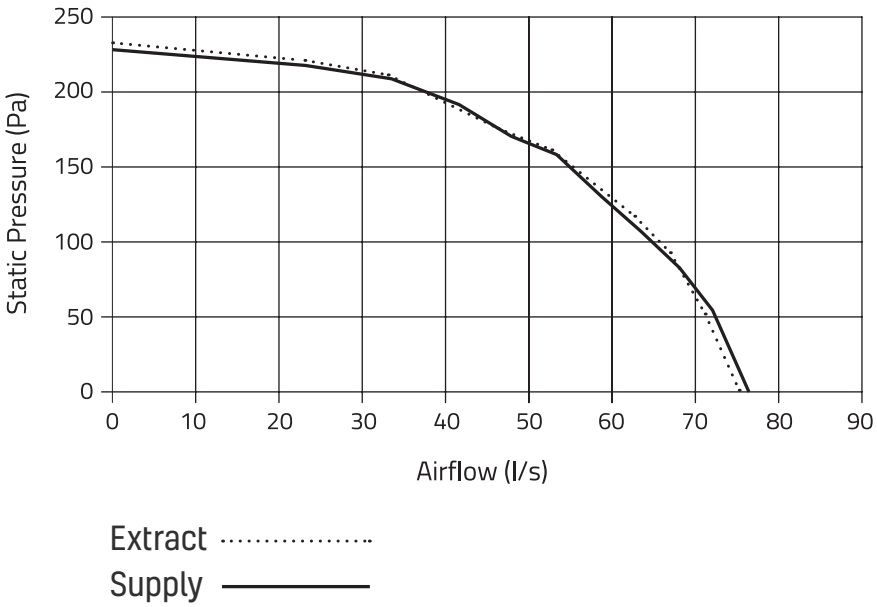


Emergency Shutdown Details ⚠

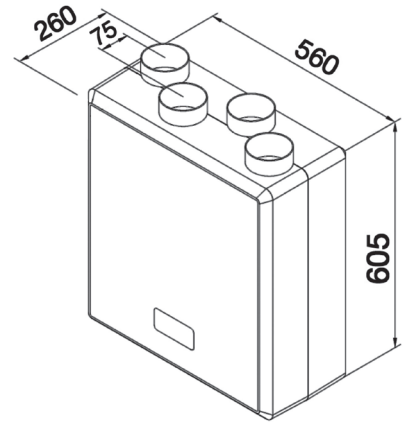
Unit to be isolated from the mains by turning it off at the isolating switch.

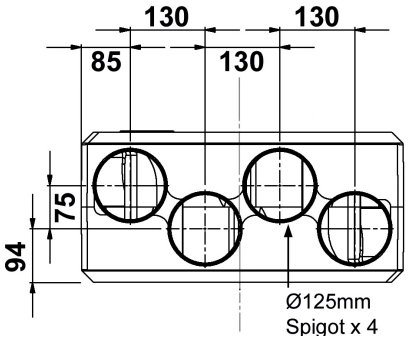
Technical Specifications

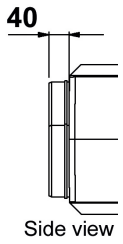
Maximum Flow Rate	75 l/s (270m³/h) MAX
Heat Exchanger	Counter Flow (Plastic)
Fans	EC (Electronically Commutated DC)
Electrical Supply	230V/1PH/50Hz
Max Power Consumption	140W
Protection Class	IPX2
Supply Filter Extract Filter	G3 G3
Spigot ø	125mm
Dimensions	560 x 635 x 260mm
Weight	14kg



Dimensions (mm)







SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: 0345 27 27 810

Thank you for choosing EnviroVent

The fastest growing ventilation company in the UK

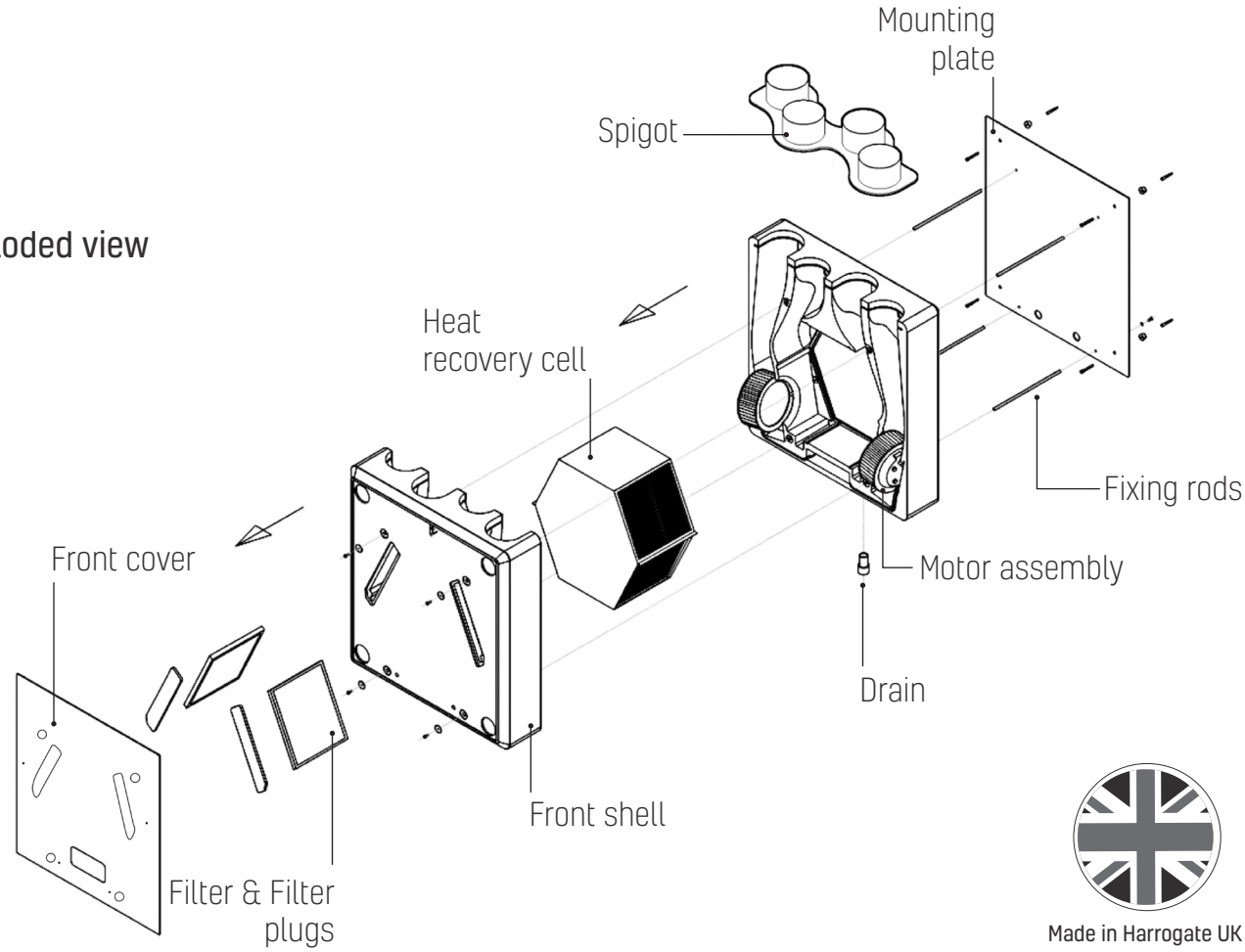
You are about to install a product that is designed to outlast the life-cycle of the building. Once installed the unit will operate continuously for 5 years and beyond without a major service. Please therefore ensure that this product is treated with care and installed properly i.e. for the life of the building. If the unit is mishandled you might break it! This invalidates the warranty.

And remember, if you have any problems please call our dedicated Technical Team.

About the unit

The energiSava® 250 is a whole house heat recovery unit which works by continuously extracting stale, moisture-laden air from the "Wet Rooms" of the apartment or a house - the kitchen, bathroom and en-suite rooms - and ducts this to a central unit. This extracted air passes through a high efficiency counter-flow heat exchanger before being ducted to the outside. Fresh air is drawn into the unit from outside, which is warmed by the heat exchange cell and delivered into the living, dining and bedroom areas.

Exploded view



Made in Harrogate UK

Installation Instructions

Standard Features

Frost Protection

When the cell temperature in the unit falls below 5°C the unit automatically warms the cell with extracted air to prevent the formation of frost.

Boost - Switch Live

The energiSava® 250 comes with Switch Live as standard. It is an automatic function, sending the unit to boost when the bathroom or kitchen light is on.

Summer Bypass

The summer bypass helps reduce the air temperature coming into the dwelling during the summer months. It is an automatic function and operates when the supply air temperature to the property is above 25°C.

Intellitrac® Humidity Tracking

When the energiSava® 250 unit senses a rise in humidity, caused by activities such as cooking or showering, the extract and supply airflows will slowly begin to increase in direct proportion to the increase in humidity.

The airflows will automatically track back down again when humidity falls. This controls condensation quietly and efficiently.

Boost - Remote Control

The energiSava® 250 unit also comes with a remote control switch or app (model dependent) which can be used at any time to send the unit to boost (see page 12).

Standard Features	
Frost Protection	✓
Boost Switch Live	✓
Summer Bypass	✓
Humidity Tracking	✓
Boost - Remote Control	✓

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: 0345 27 27 810

Installation Instructions

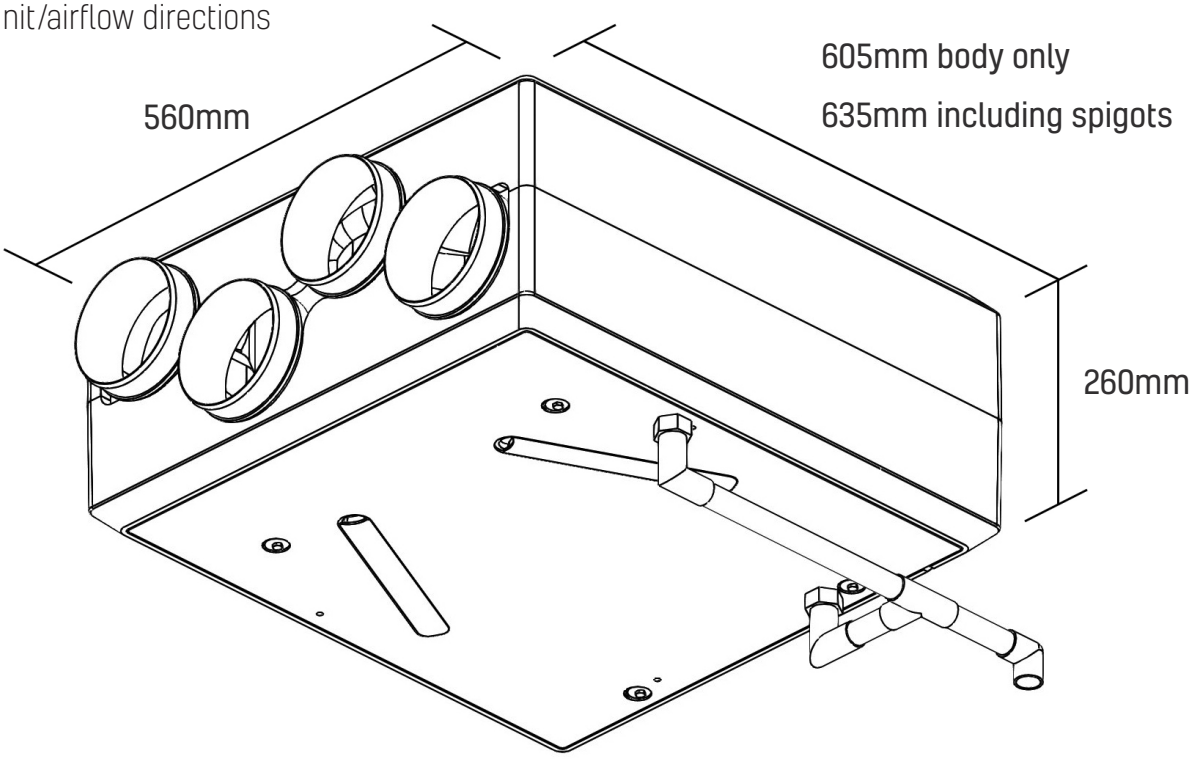
FIRST FIX - Installing ductwork and electrical supply

Important Note: This unit is for ceiling mount only. Wall and floor units are configured differently and should be ordered separately.

1. Locate external terminations (supply and extract) in accordance with the latest addition of the Domestic Ventilation Compliance Guide. Ducting to and from atmosphere needs to be insulated in accordance with the Domestic Ventilation Compliance guide.
2. Ductwork within house Ø125mm - maximise duct size where possible. Make sure that the ductwork is insulated in unheated spaces. Minimise flexible duct.
3. Locate the mains supply within 1m of the location of unit. The position of the electrical power supply or unit (a fuse spur or triple pole isolator) must not be mounted above or closer than 1m to a cooker where it could be affected by excessive heat or moisture.
4. Make sure that there is room for the MVHR unit. The unit is designed to be mounted horizontally on a ceiling or the underside of a ceiling slab.
5. Also make sure that there is a free space around the appliance for cleaning the filter and carrying out maintenance on the appliance.

Ducting Configuration

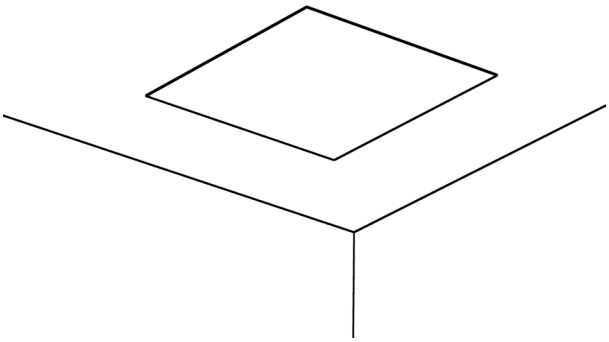
See page 9 for duct connections to the unit/airflow directions



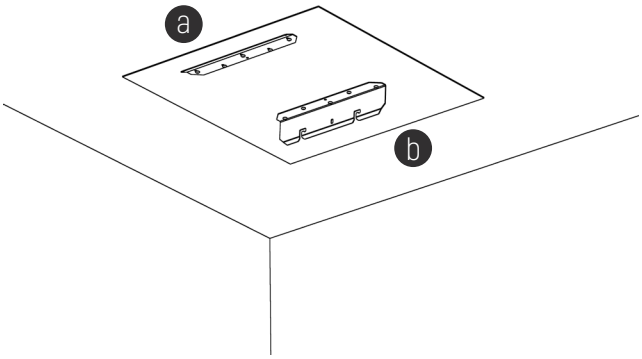
Installation Instructions

SECOND FIX - Installing the unit

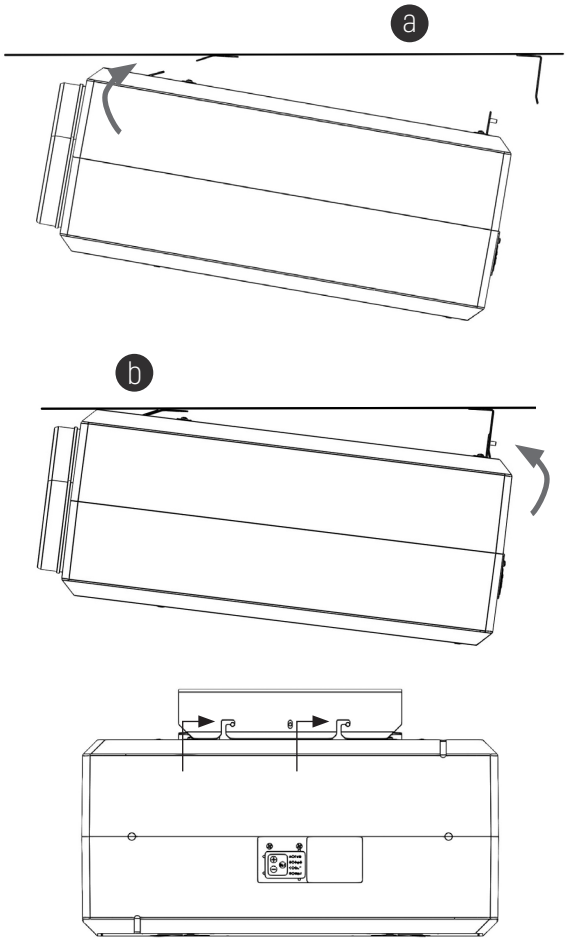
1. Tape template flat to ceiling. Ensure it is in the correct orientation and that you have left space for access.



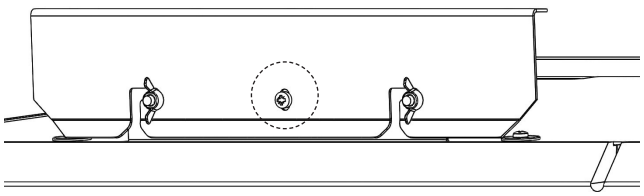
2. Fix brackets to template in positions indicated by using screws provided.



3. Slot unit into bracket (a) and then lift the threaded pins up into and across the 'J' slots on bracket (b).



4. **IMPORTANT!** Ensure you have a firm footing and the unit is fully supported until secured in place. Place security screw and nuts into the bracket (b) to ensure the unit is secure.

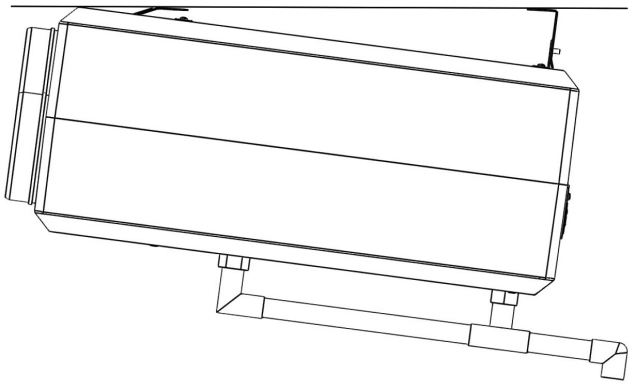


SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: 0345 27 27 810

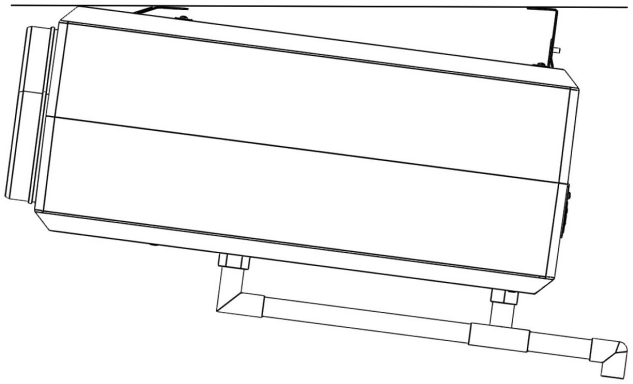
Installation Instructions

SECOND FIX CONT.

5. Ensure that there is enough space for the condensate drain to be fitted and ducts to be connected.



Ensure that the slope of the unit is maintained once fitted.

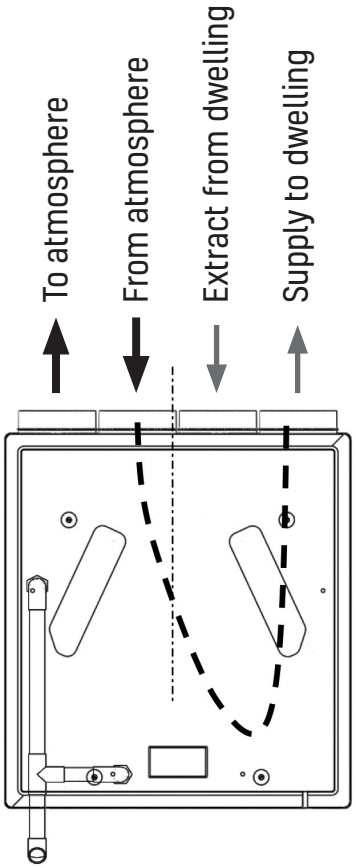


6. Prepare the drain. All MVHR units produce condensate. The condensation drain should be located at the lowest point in the foam moulding as shown overleaf. It is recommend that the drain is now prepared before the case assemblies are remounted. See pages 9 and 10.

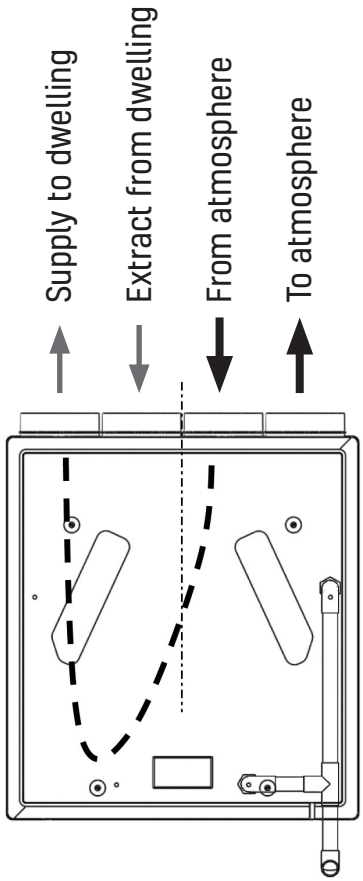
Installation Instructions

SECOND FIX CONT.

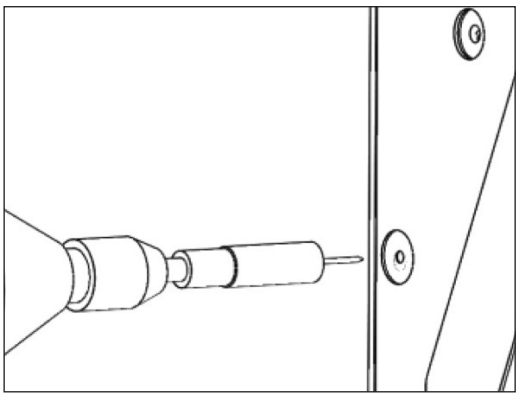
Airflow and drain fitting



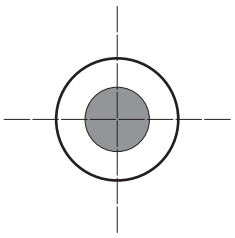
Ceiling mount LH



Ceiling mount RH



7a. Use the pilot hole to drill through the foam case with a 20mm saw then remove excess material and clean edges. The drain must be fitted on the side of the cover with the two pre drilled pilot holes.

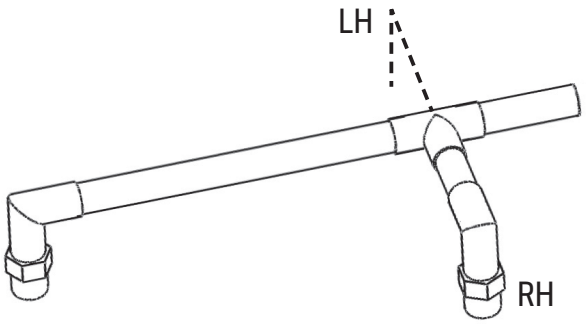


7b. Finished hole.

Installation Instructions

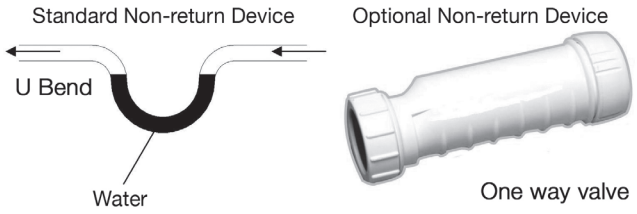
SECOND FIX CONT.

7c. Continued.
The supplied drain connections should be solvent welded as here. The centre tee section is reversed to make either LH or RH drain. Check fit before gluing.

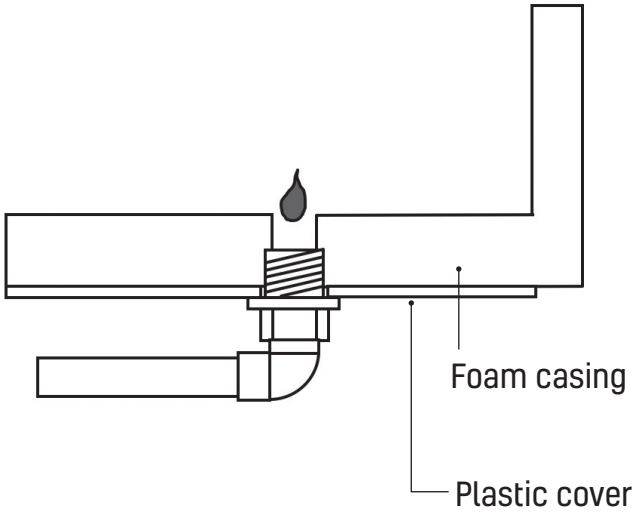


Connect 22mm PVC drain fitting

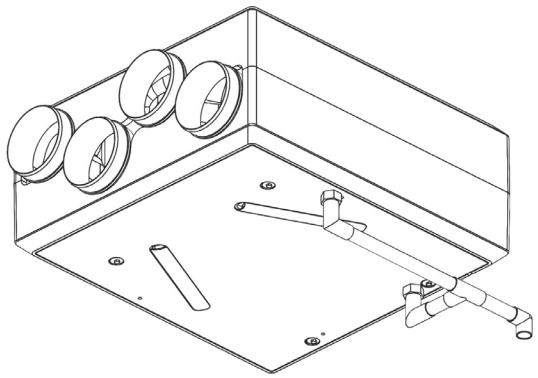
7d. Drill Ø20mm hole, remove excess material and clean edges. Push in the supplied drain fitting and seal as appropriate making sure the drain is watertight (See page 10). The drainage from the unit may be connected to an internal waste water system or soil pipe with an appropriate non-return device. One way valve device is recommended. Insulate pipes in an unheated loft space.



IMPORTANT! The drain must be fitted on the side of the unit with the pre-drilled pilot holes. See Fig 7a.



8. Reassemble the case assemblies to the mounting plate. Steps 4, 3, 2, 1.



Completed assembly (RH)

IMPORTANT! This unit is for ceiling mount only. Wall and floor units are configured differently and should be ordered separately.

Commissioning Part 1

Commissioning of a continuous running ventilation system - MVHR

Commissioning of the system is necessary to provide adequate ventilation to the dwelling, as stipulated in **Approved Document F (ADF) of the Building Regulations***

Conditions

All maintenance and development works should be completed prior to the commissioning of the unit, this is to avoid high levels of dust being drawn into the system and general disturbance to the setup. The unit should only be commissioned when fully installed, with power, ductwork, valves and vents in place. **See Domestic Ventilation Compliance Guide.**

Equipment required

Anemometer which is capable of measuring l/s or m^3/hr.

Commissioning method

Once the previous conditions are met, boost and trickle rates need to be set. These should be set as outlined in the commissioning guide (See page 12). Ensure all internal & external windows and doors are closed. Required background vents are in the open position. See relevant guides.

Extract and Supply

(flow rates should be balanced on boost and trickle)

Commissioning guide

Boost rate (minimum high rate)

- Determine the whole building ventilation rate. **See ADF of the Building Regulations.**
- Open ceiling/wall valves.
- Measure all extract points summing the individual room rates. Measurements to be carried out with an appropriate anemometer.
- Adjust using ⊕ and ⊖ buttons, press up or down until the total extract rate is met. See the individual product's instruction guide for method (See page 12).
- When the desired overall extract rate is achieved, the individual valves should then be adjusted to draw the appropriate volume of air from each room, typically starting with the largest extract requirement first: kitchen, bathroom, utility room, en-suite and WC.
- It may be necessary to adjust the fan unit slightly to account for increased pressure.
- When adjustments are completed the valves should be locked into position to maintain settings.

Trickle rate

See ADF of the Building Regulations.

- As the valves have been commissioned at boost they will not need to be altered further, the trickle buttons should be adjusted up or down, until the lower extract rate is met. See the individual product's instruction guide for method on page 12.

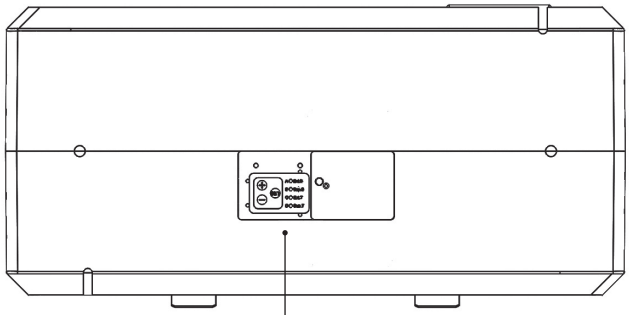
For guidance on good installation practice for MVHR systems see the latest edition of the **Domestic Ventilation Compliance Guide*.** This guide provides in depth information on all aspects installation, inspection, testing and commissioning.

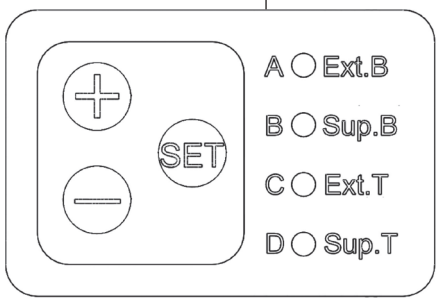
*Applicable in England and Wales. For other countries please refer to your local building regulations.

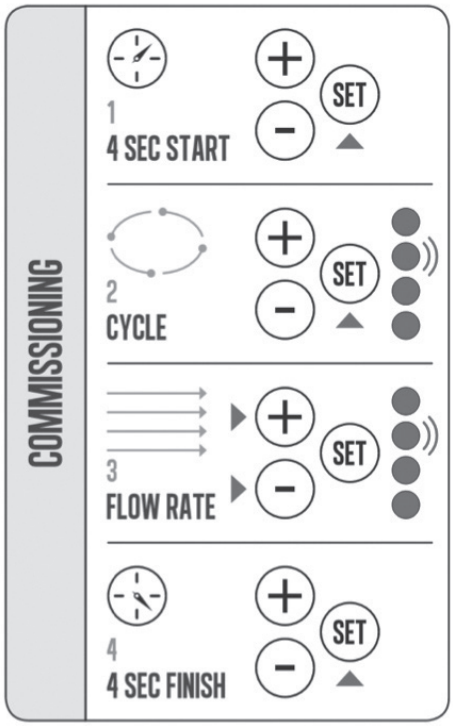
Commissioning Part 2

Setup guide for the energiSava® 250

The control panel is found on the bottom of the unit.







Commissioning mode is chosen by pressing the SET button for 4 seconds, all sensor inputs will be disabled in this mode so that they do not interfere with flow rates. All LEDs will light with the Extract Boost flashing (Ext B), this indicates that the flow rate may now be increased/decreased as required.

The next press of the SET button will move commissioning to the next setting, Sup.B and so on. When the unit has been fully commissioned, press the SET button for 4 seconds and this will put the unit back into status mode. If the unit is not put back into status mode after commissioning, it will automatically revert back to status mode after an hour.

Note: Settings will be retained if the power supply is interrupted.

LED Indications	
Constant LED	Flashing LED
A Frost protection mode ON	**A** Service required
B Boosted state Humidity ON	**B** Service required
C Boosted state Switched input ON	**C** N/A
D Summer bypass mode ON	**D** Check filter*
Supply and extract LED indications Commissioning mode only	

*To reset filter indication, see maintenance section on page 20.

Commissioning Part 2

Remote Control Versions

The energiSava® 250 operates continuously on 'Normal' setting to ensure the home is ventilated at the appropriate level although you can boost the system via the remote control switch.

For remote control switches, press the button once to see the current status of your unit and again to boost the unit. The boost LED will light and the unit will go to boost for 20 minutes.

Indications:

To view the current status of your unit press the button once. The functions currently in operation will be indicated with a lit LED. If the filter light is on the filters will need checking, see maintenance page 16.

Warnings:

All LEDs flashing indicates a fault with the unit.
-Filter LED flashing = Check filter.

Remote Control Pairing

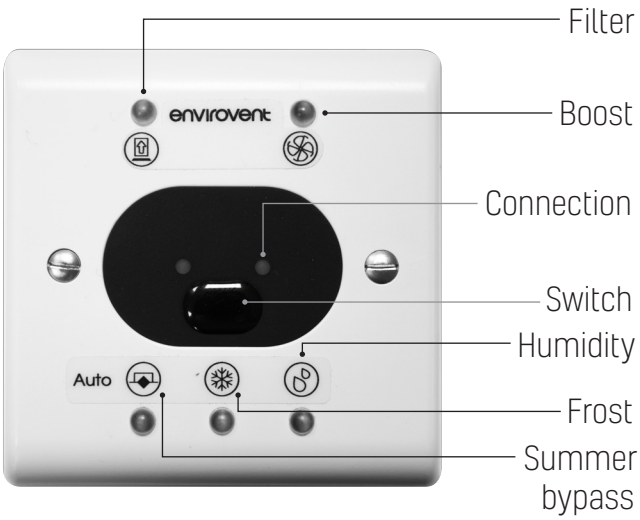
To pair additional remote control switches (wireless units only)

1. Turn the unit off at the isolation point.

2. Restore power; for 20 seconds from restart the unit will be in pairing mode.

3. Press the remote button once within the 20 seconds and the control will pair to the unit.

4. Successful pairing is indicated by a green light on the control.



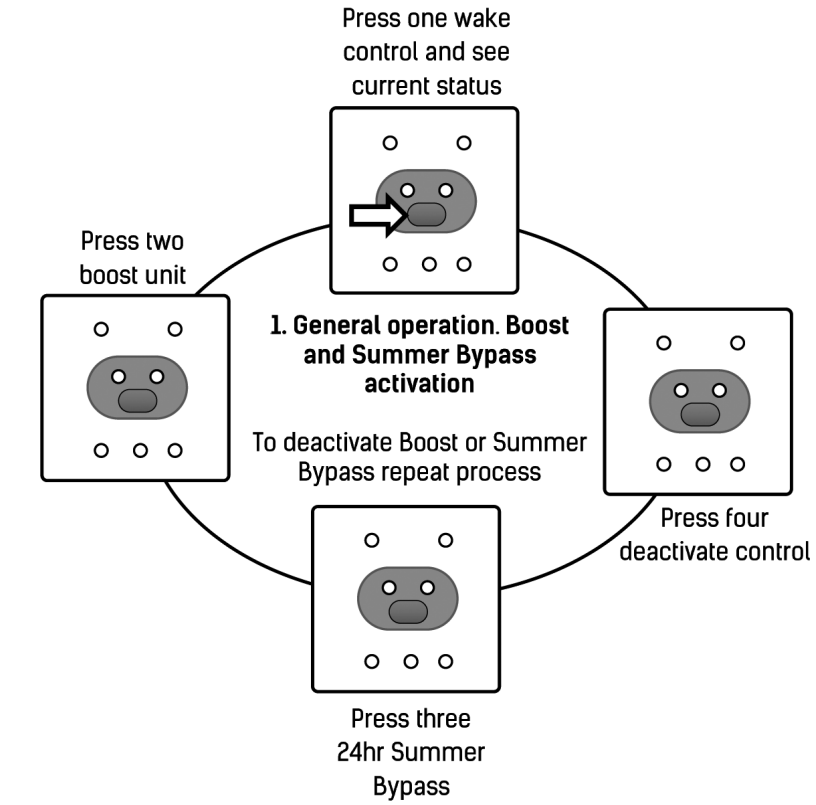
Batteries

When the battery requires changing, unscrew the switch front cover. The batteries are located on the back of the cover. Battery type - CR2032 x 1.

Ensure that the new batteries are inserted with the correct polarity and that the exhausted batteries are removed and safely disposed of. If the control is stored unused for a long period, it is recommended batteries are removed.

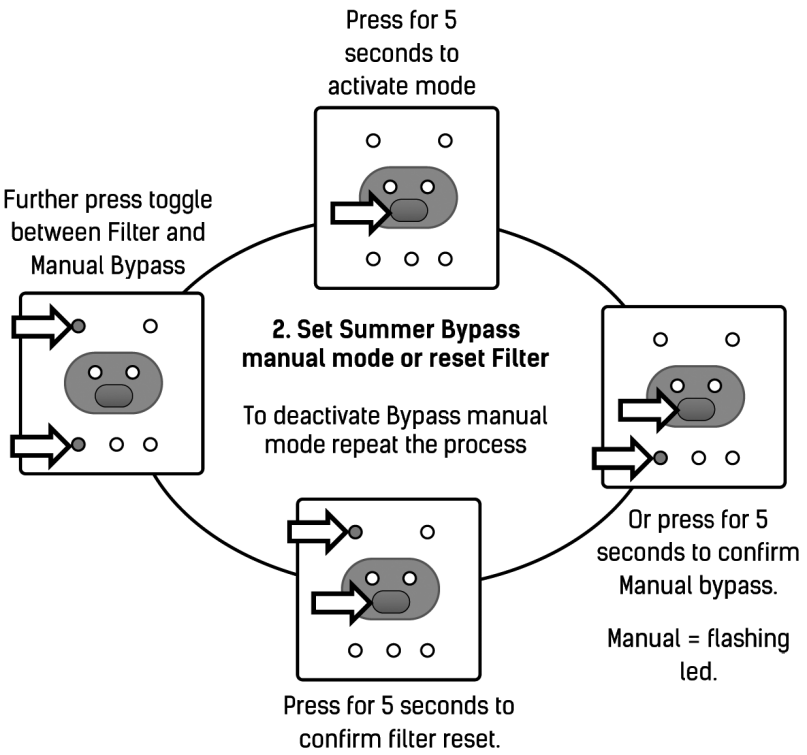
Commissioning Part 2

Remote Control Operations



Boost Note:

If the unit is running at boost due to switch live activation or a volt free connection then boost can't be cancelled.



Note:

To set the Manual bypass to ON of OFF see **1. General Operation**

-Filter maintenance required = Flashing LED. Filter reset should only be done after filter maintenance is complete.

Commissioning Part 2

App Control Versions

For App control versions see the separate App instruction booklet.

App controlled units allow a large degree of control over the unit via a smart device.

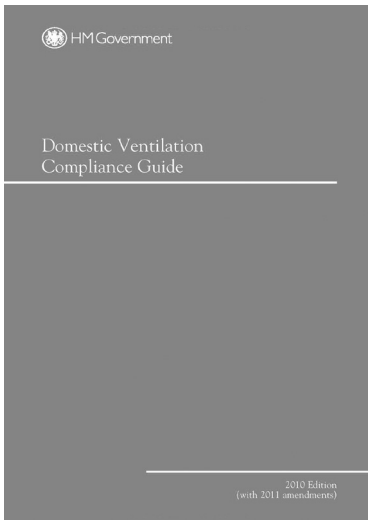
For SSID and password information, see the back page of the instructions.

Checklist

Checklist to ensure Guaranteed Installed Performance

energiSava® 250 installation instructions have been understood	
Ductwork to the unit is Ø125mm or larger with no more than 10% flexi duct used (90% rigid duct). Duct in unheated areas is insulated	
All ducts, vents and diffusers are securely connected & sealed, with supply and extract filters in place	
The unit is securely fixed into position with enough space left for servicing	
Condense drain is tight, drains to a suitable location and has been water tested	
All major building works have been completed prior to commissioning	
Supply and extract have been commissioned to meet Part F of the Building Regulations with a calibrated anemometer	
Commissioning data has been recorded	
Inform building owner/user on how to operate and maintain the system	

These checks are required to ensure the proper function of this unit. **For EnviroVent Technical help call 01423 810 810**



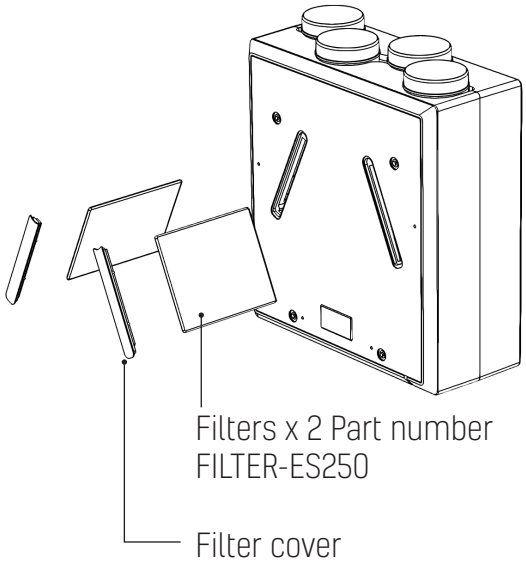
AFTER INSTALLING THIS UNIT, PLEASE PASS ONTO END USER

DO NOT THROW AWAY

Maintenance

General Advice

It is recommended that airflows at the diffusers are periodically checked by the resident or home owner.



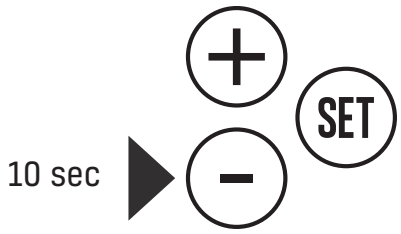
Filter Maintenance - to be checked as required. 6 to 12 months recommended

1. Switch off the power supply
2. Remove filter covers
3. Remove the filters
4. Vacuum the outside of the filter or replace if required
5. After cleaning replace filters at same side
6. Replace filter covers and front panel

Maintenance

Clearing filter indication using control switch

To clear the filter indication light press minus (-) on the switch panel for 10 seconds.



This will reset the filter counter and no more action is required. Filter indicator is set to 12 months as standard.

⚠ **Filter maintenance is required for the proper function of the unit, not doing so may invalidate the warranty.**

Major service

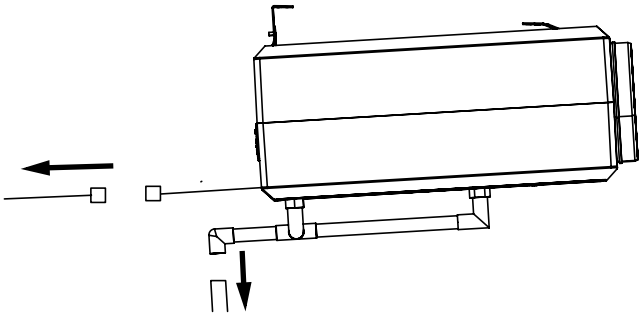
This is to be carried out at five years by EnviroVent or approved maintenance company.

Maintenance

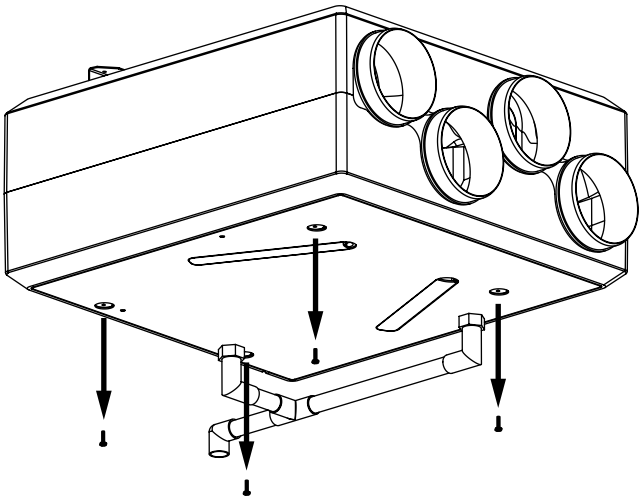
Disassembly of unit for engineering access and maintenance

Before maintenance ensure access to unit is clear and that you are working from a stable base.

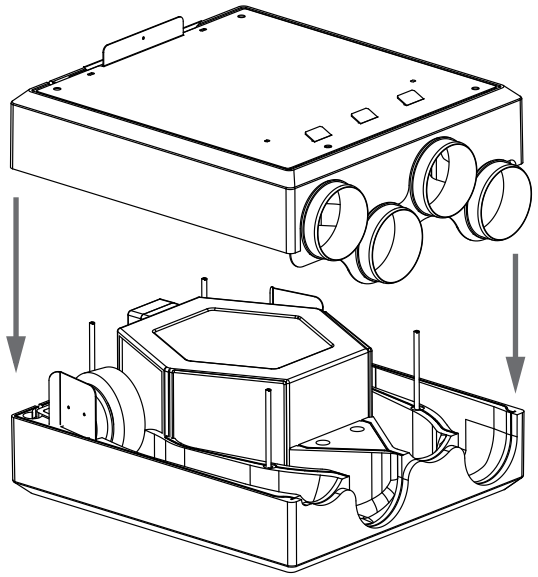
1. Disconnect wiring and drain



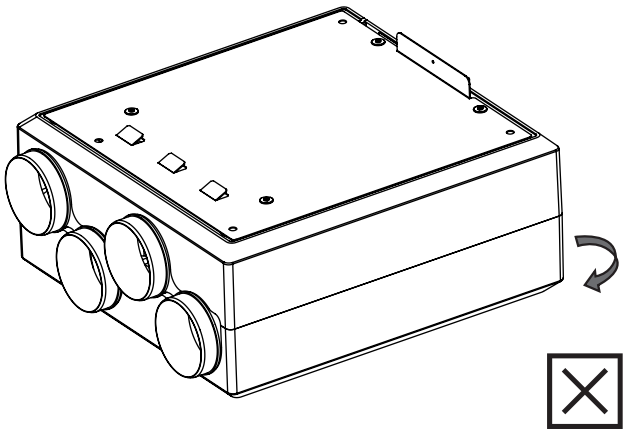
2. Remove 4x hex head screws. Store safely.



3. Carefully remove the bottom foam moulding and mounting plate by pulling it straight forward. Foam mountings must remain parallel. **Take care not to damage the sealing gaskets or mark the front cover.**



4. Do not pull from one edge only, as this may damage the internal fixing rods.



When reassembling the unit after maintenance, ensure all internal components are aligned, there are no trapped wires and that the seals are intact.

Warranty Conditions & Exclusions

The EnviroVent energiSava® 250 is covered by a full 5 year warranty which will benefit the occupier over many years. In the event that the product requires servicing, maintenance or reaches the end of its useful life, the quick, simple component replacement programme will ensure minimal disruption - no re-wiring, no drilling or dust.

What should I do if I have a problem?

If, after thoroughly reading this booklet, you feel that your energiSava® 250 is not working correctly, you can telephone **0345 27 27 810** (operational from 8:00am to 5:00pm Monday to Friday), and ask for technical assistance. You will either be given guidance over the telephone, or an arrangement will be made for an engineer to visit. In any event, please have the following information ready. This will enable your call to be dealt with quickly and efficiently.

Please note that proof of purchase by the way of a receipt is required and that any fans bought from an unapproved source, including but not limited to Ebay, will render the guarantee invalid.

Serial number of the unit .....

We appreciate you choosing this quality EnviroVent product, which is designed and manufactured to the highest specification in Harrogate, North Yorkshire. We are confident that you will be delighted with the performance of the system and the resulting improvement in air quality in your home after the installation of the unit.

Your warranty covers any defect or break down that arises due to faulty materials or construction.

Terms of Warranty

- The system must be correctly installed and operated according to the instructions contained in the user guide supplied.
- The warranty will be rendered invalid if the system has been serviced, maintained, repaired, taken apart or tampered with by any person not authorised by EnviroVent Ltd.
- The warranty will be rendered invalid if the unit is turned off. Turning the unit off can damage it.
- The warranty does not cover accidental damage, misuse or abuse.
- The warranty is in addition to your statutory or legal rights.
- The guarantee will only be honoured from approved suppliers.

Delivering innovative and sustainable ventilation solutions worldwide

Wi-Fi Password

Wi-Fi units only

EnviroVent Ltd
EnviroVent House
Hornbeam Business Park
Harrogate
HG2 8PA

T / 01423 810 810
F / 01423 301 022
E / info@envirovent.com
W / envirovent.com

Please read carefully to ensure simple installation and a long trouble free life for the user.

AFTER INSTALLING THIS FAN PLEASE PASS ONTO END USER
DO NOT THROW AWAY

E&OE | MKT ENV331-V3-11.06.18

We want to hear from you

Your feedback is important to us as we strive to improve our products, services, and overall customer experience. Please email us to help us serve you better: **feedback@envirovent.com**