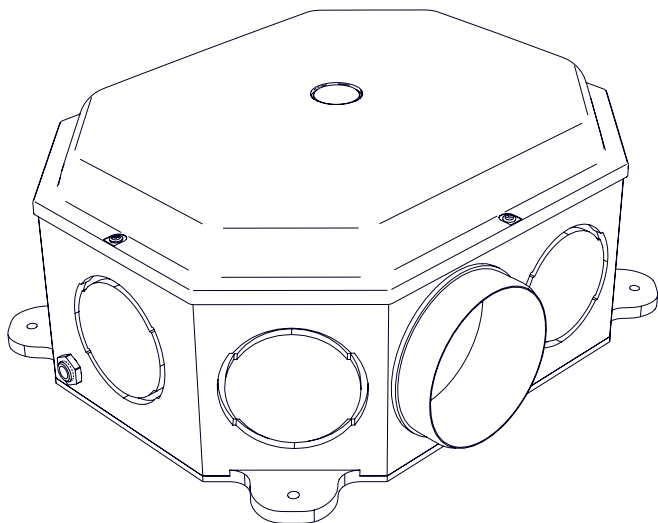


AFTER INSTALLATION THE END USER SHOULD
KEEP THIS GUIDE FOR FUTURE REFERENCE
DO NOT THROW AWAY

envirovent®

MEV SPIDER VENTILATION UNIT INSTALLATION GUIDE



Safety

Please read and understand these instructions before beginning installation. The unit should be installed by a competent person.

Location

Check there is space for the unit in your chosen location including room for access and future servicing of the unit. The unit must not affect the operation of open-flue appliances. Consider the external vent locations in relation to open-flues from appliances e.g. boilers. You must ensure the external grilles are positioned away from open flues to avoid drawing harmful gases into the property. Consult your local regulations or a qualified gas engineer.

Users

This unit is not intended for use by persons [including children] with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision and usage instruction by a person responsible for their safety. Children should be supervised to ensure they do not play with the unit. Cleaning and user maintenance must not be performed by children.

Electrical Connection

The unit requires a continuous electrical power supply. Connection to the fixed wiring must be made outside the unit in a suitable location.

It must be possible for the unit to be disconnected from the mains supply after installation. The unit must be earthed and a double pole isolator having a minimum contact separation of 3.0mm must be used to provide isolation for the unit, see wiring diagram on page 4.

The power cable running into the unit must remain the supplied flexible cable [not a solid core lighting cable]. If the power cable becomes damaged, it must be replaced by EnviroVent, an authorised service agent for your region/country, or a similarly qualified person in order to avoid a hazard. Do not remove or tamper with any electronic components inside the unit.

All wiring must comply with Building Regulations and the current IET Wiring Regulations (BS7671 in the UK) or equivalent standards for other countries. The final installation should be examined and tested by a qualified electrician.

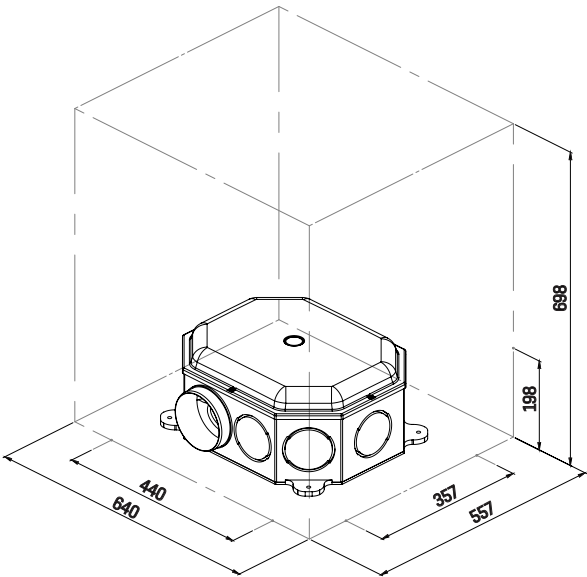
The unit is considered to be suitable for use in countries having a warm, damp equable climate. It may also be used in other countries.

Electrical power is to be supplied to the unit through a residual current device (RCD) with a rated residual operating current not exceeding 30mA.

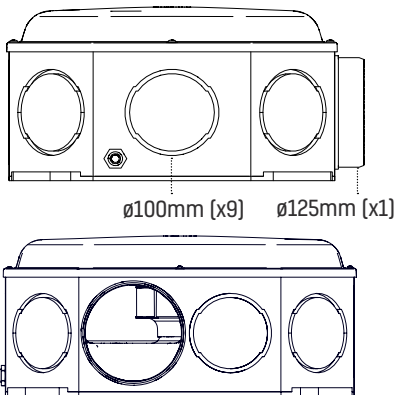
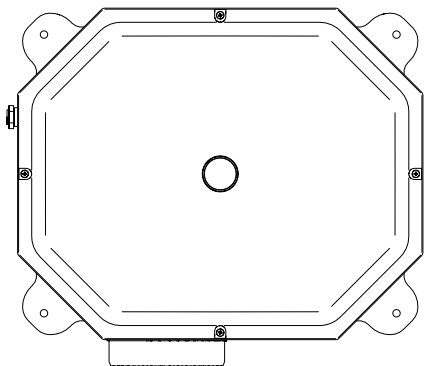
This ventilation unit is for indoor installation only.

Diagrams

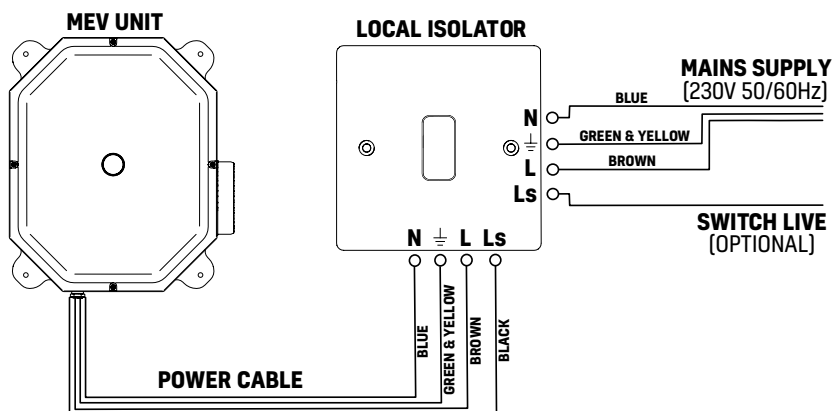
Overall unit dimensions and minimum area required for access/maintenance.



The extract spigots are compatible with $\varnothing 100\text{mm}$ duct.
The spigot to atmosphere is compatible with $\varnothing 125\text{mm}$ duct.



Wiring



The local isolator must be connected to the mains as part of the fixed wiring. Connect the cores of the power cable to the matching terminals on the local isolator [3A fuse spur or similar].

The black switch live core of the mains cable can be wired to a switch input such as the supplied boost switch or a light switch. When the switch is turned on, the boost function is engaged. When the switch is turned off, the unit will return to normal running mode. In this configuration a triple pole isolator must be used.

About the MEV Spider

The EnviroVent MEV Spider is a continuous mechanical extract ventilation system designed to help create a fresh and healthy living environment by drawing moist, stale air out of wet rooms, while minimising the migration of humidity to other rooms.

The unit is normally fitted in a central location such as a hallway cupboard, with ductwork running from the unit to the kitchen, bathroom, en-suite, utility and other wet zones. The unit includes up to nine possible extract spigot positions in order to extract air from multiple locations.

The unit is suitable for houses, apartments, and communal properties with a kitchen and up to 6 additional wet rooms. The unit is capable of delivering a maximum airflow of 124l/s [446m³/h] and a maximum system pressure of 470Pa. The unit is also covered by a two year warranty.

The unit will help create a fresh, healthy living environment by extracting moist stale air from the wet rooms, prevent condensation and mould within the property.

The Intellitrac® humidity tracking function monitors the humidity levels in the extracted air and will automatically increase the air flow rate when the humidity levels rise. Once the humidity levels are lower the air flow rates will return to the normal rate.

The MEV Spider includes a switch live function. The unit will enter boost mode whenever the switch live input is engaged.

Box Contents

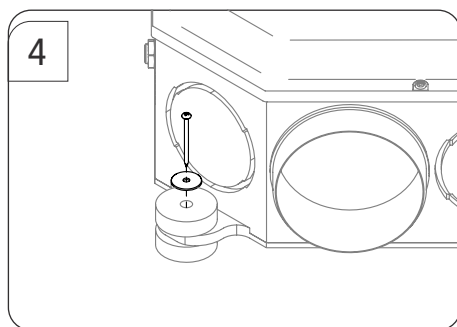
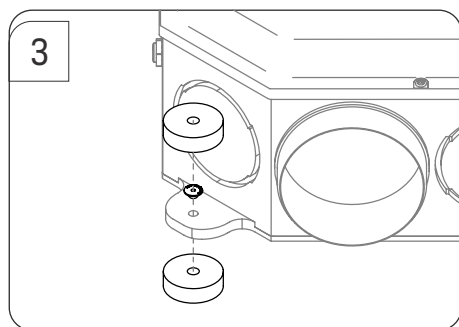
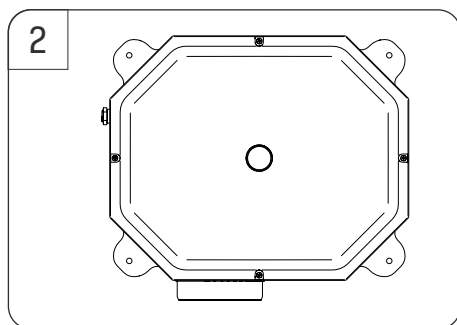
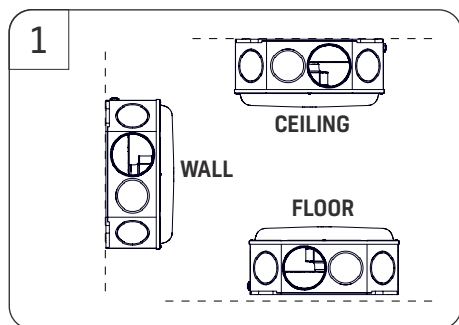
- 1 x MEV Spider unit
- 3 x ø100mm Spigots
- 1 x Spigot blank cap
- 1 x User guide
- 4 x Screws 8g x 2.0"
- 4 x Steel washers
- 4 x Plasterboard plugs
- 8 x Adhesive foam pads
- 4 x Rubber sleeves
- 1 x Wireless remote control [MEVS2-W units only]
- 1 x Wired boost switch [MEVS2-H units only]

Pre-installation checklist

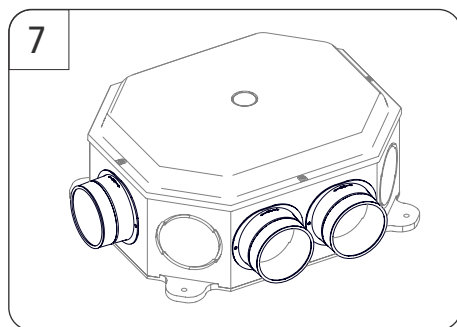
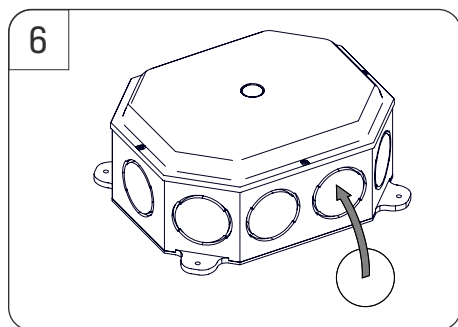
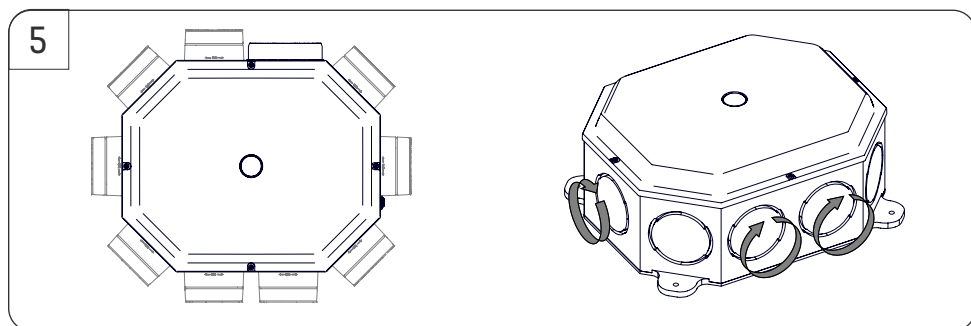
- Does the unit fit in the space where it will be installed?
- Is there room to connect ducts to the spigots without tight duct bends?
- Are there any obstructions above or below the locations where the extract valves are to be fitted?
- Is the mounting surface strong enough to support the unit?
- Is the mounting surface level?

Installation

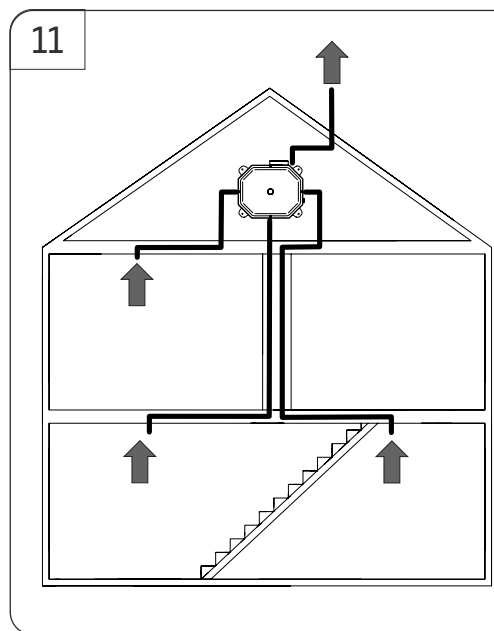
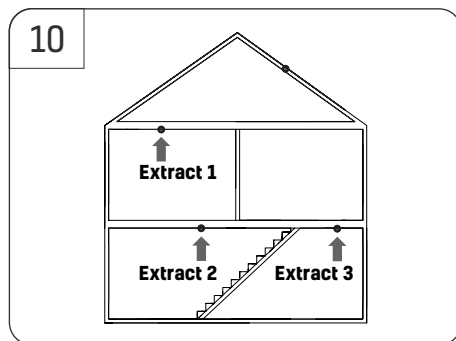
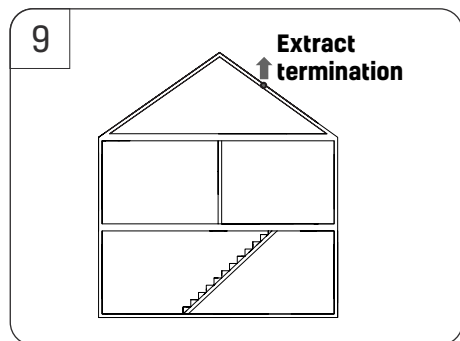
1. Hold the unit up to the chosen location (wall, floor or ceiling) and ensure there is space for ducts and maintenance access.
2. Use the unit as a guide to mark the 4 fixing holes. Then remove the unit and drill the fixings holes and insert a plasterboard plug into each hole.
3. Insert a rubber sleeve into each of the four fixing points at the corners of the unit. Then stick an adhesive foam pad above and below each hole.
4. Use an 8g x 2.0" screw and a steel washer to attach each of the four fixing points to the mounting surface. Do not over tighten the fixing assembly.



5. Select up to three 100mm extract spigot locations. If more than three are required you will need to order extra spigots (see spares on page 16). Slice around the edge of the chosen positions with a sharp knife then knock out the blanks with a light tap and discard them. It may be necessary to remove excess material with the knife.
6. If a spigot hole is removed in error use the spare blank provided to cover the hole and glue it in place.
7. Push then twist a spigot into each of the cut holes and secure it to the unit through the two screw holes with the self-tapping screws provided.
8. Ducts must be attached securely to the unit. For maximum performance use rigid duct and a short length of flexible duct (300mm) for final connections to the unit and the extract valves.



9. Fit a suitable low resistance external extract termination (e.g. a roof vent or fixed louvre grille).
10. Fit adjustable extract valves in the chosen room locations.
11. Fit $\varnothing 125\text{mm}$ duct between the external termination and the MEV unit. Fit $\varnothing 100\text{mm}$ duct between the extract valves and the MEV unit.



Ductwork should be fitted in accordance with the Domestic Ventilation Compliance Guide and follow any system designs that have been produced for the property.

Ductwork to atmosphere or through unheated spaces needs to be insulated.

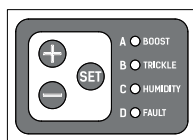
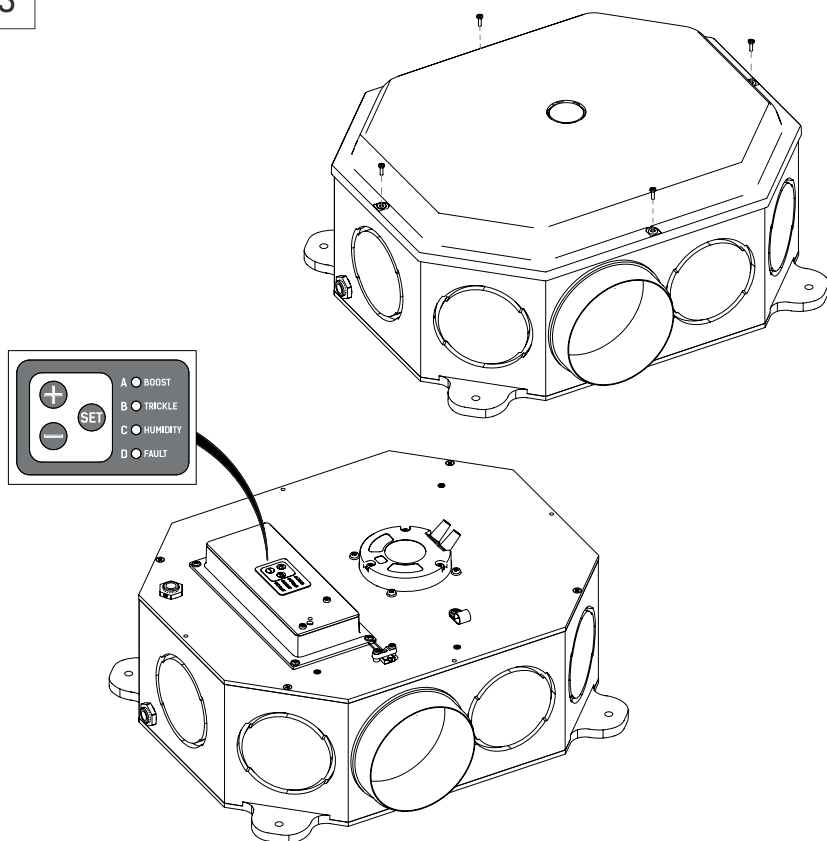
For efficiency, all ductwork should be as large a diameter as possible (internal spigots 100mm minimum, external spigot 125mm minimum)

EnviroVent recommend fitting inline filters to the extract valves.

12. With the mains supply isolated, wire the unit to the local isolator as per the wiring diagram on page 4 and in accordance with the local wiring regulations. When the power is turned on, air will begin flowing through the system after a few seconds.

13. To commission the unit and change settings, remove the four lid screws. A keypad is located underneath the lid on top of the motor plate.

13



Commissioning

All maintenance and building works should be complete before commissioning this MEV unit. This will avoid any major disturbance to the installation or high volumes of dust or debris being drawn into the system. Do not commission the MEV unit until it is fully installed including power, ductwork, internal valves and external vents.

MEV systems must be commissioned in accordance with Approved Document F of the Building Regulations for England and Wales. Further good practice and advice for the installation of MEV systems can be found in the latest edition of the Domestic Ventilation Compliance Guide for England and Wales. For MEV commissioning guidance in other countries, please refer to the relevant local Building Regulations for that country.

- Determine the required ventilation rates. For guidance see Approved Document F of the building regulations for England and Wales.
- During normal running mode, press the SET button for 4 seconds to enter commissioning mode. (Humidity sensor input is disabled temporarily while the unit is in commissioning mode).
- LED's B C D will light and LED A will flash, indicating that the extract boost flow rate is being modified.
- Fully open all extract valves then measure the air flow rate at all system extract points using a calibrated air flow meter capable of measuring in l/s or m³/hr.
- Add the extract rates from all rooms together then compare this value to the calculated whole building (boost) extract ventilation rate.

- Use the + and - buttons to increase or decrease the flow rate in order to meet the calculated whole building extract ventilation rate. [See Approved Document F]. When maximum speed setting is reached, the LED will flash fast. When the minimum speed setting is reached, the LED will flash slowly.
- Now adjust the individual valves to extract at the appropriate rate for each wet room. [Once this step has been completed it may be necessary to adjust the unit boost rate again to account for any increase in pressure]. Then lock the valves in position.
- Press the SET button once to move on to the extract trickle flow rate. LED's A C D will light and LED B will flash indicating that the extract trickle flow rate is being modified.
- Again use the + and - buttons to increase or decrease the flow rate in order to meet the calculated whole building [trickle] ventilation rate. [See approved document F].
- When commissioning is complete for the boost and trickle flow rates, press SET for 4 seconds to return to normal running mode. If this is not done, the unit will automatically return to normal running mode after 60 minutes of inactivity.

Humidity Function

The MEV Spider operates at a continuous normal air flow rate setting. The unit fan speed will increase if the unit detects a rise in humidity levels in the property.

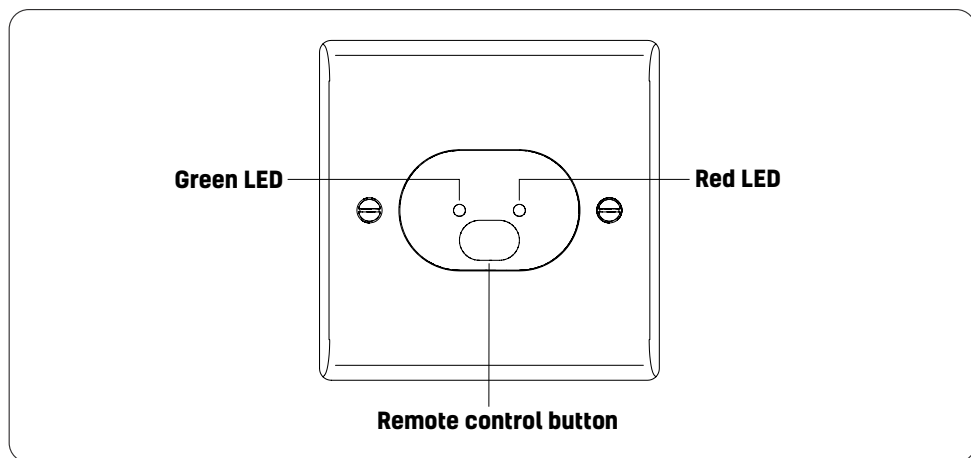
Wired Boost Switch (MEVS2-H only)

The wired boost switch can be pressed to manually activate boost mode. Turn the switch off to deactivate the boost mode.

Wired Switch Live Boost (MEVS2-H and MEVS2-W)

The Switch Live Boost switch (this might be a bathroom light switch) can be pressed to manually activate boost mode. Turn the switch off to deactivate the boost mode.

Wireless Remote Control (MEVS2-W only)



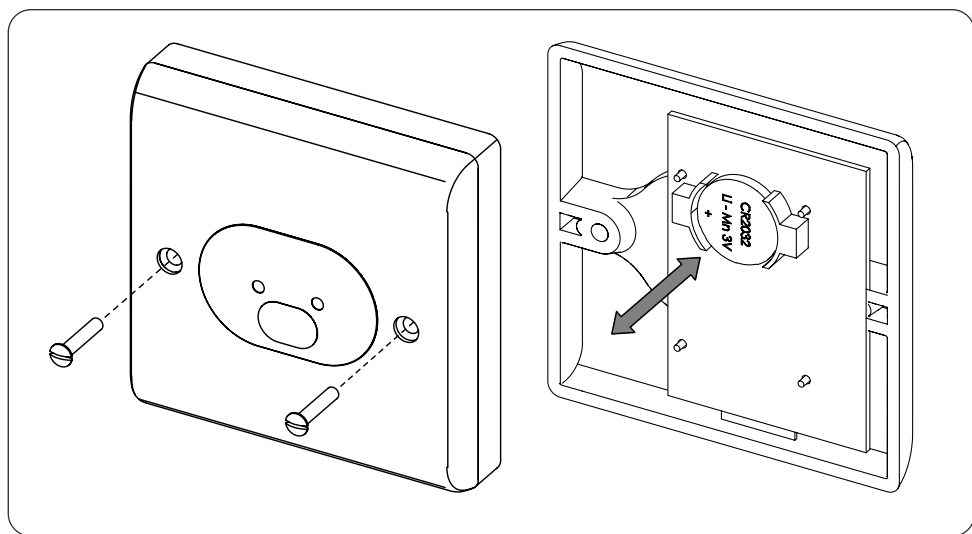
- **To manually activate the boost function:**
- Press the button once.
- The green LED will light up and the unit will enter boost mode for 20 minutes then automatically return to normal mode.
- To manually deactivate the boost mode, repeat the above steps.
- If the switch live connection is turned on then boost cannot be cancelled until the switch live connection is turned off.

- **Pairing an extra remote-control:**

- Turn the unit off at the isolation point.
- Restore the power to the unit. For 20 seconds from restarting, the unit will be in pairing mode.
- Press the button on the new remote control once within the 20 seconds and the remote control will pair to the unit.
- If the pairing has succeeded the green LED will light up.

- **Replacing the remote-control battery:**

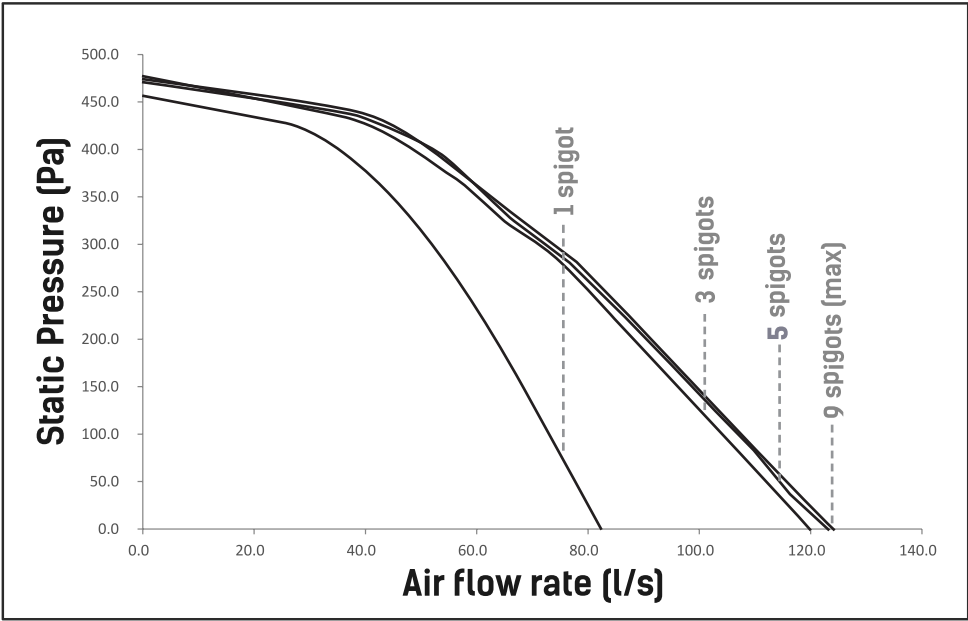
- Undo the two screws and remove the rear casing.
- The battery is located behind the front cover. The remote control requires 1 x CR2032 battery.
- Replace the battery ensuring the correct polarity then replace the rear cover and screws. The switch will remain paired with the unit after battery replacement.
- Dispose of the old battery in a safe manner.



Technical specification

Extract spigot diameter	100mm
External spigot diameter	125mm
Maximum air flow rate	122l/s [440m³/h]
Maximum power consumption	59.20W
Electrical Supply	230V Single Phase 50Hz
Ingress protection rating	IPX2
Boxed weight	5.8kg
Unboxed weight	4.3kg

Airflow performance



Post-installation checklist

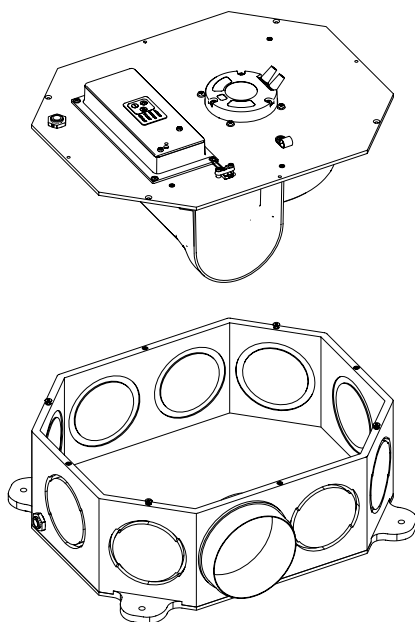
- Installation instructions have been understood. Contact EnviroVent on 01423 859 395 if you require further technical help.
- Ductwork travelling through unheated areas has been insulated.
- Ductwork diameter from extract points to the unit is 100mm or larger throughout the installation.
- Ductwork diameter from the unit to the atmosphere is 125mm or larger throughout the installation.
- Minimal amounts of flexible duct have been used in the installation.
- All ducts, valves and vents are connected, mechanically fixed and sealed.
- The unit is securely fixed with adequate space left for maintenance.
- All major building works have been completed prior to commissioning.
- Air flow rates have been commissioned with a calibrated anemometer or other suitable piece of equipment to meet Approved Document F of the Building Regulations for England & Wales.
- Commissioning air flow rate data has been recorded.
- The occupants of the property are familiarised with the operation and maintenance requirements of the system.

Spares/Accessories

Item Description	Order Code
100mm white extract valve	1DIFEXTRACT100WH
100mm extract valve filter	1AC FILTERCONE 100
Spare Remote Control	SWH-W
Spare 100mm spigot	SPIGOT
Connector for 90mm & 75mm semi-rigid duct	CONNECTOR100MM-W&M

Maintenance

- There is no requirement for maintenance other than cleaning during the two-year warranty period.
- Before cleaning, isolate the unit from the mains supply then undo the four screws and remove the lid (as in installation step 13).
- Now undo the motor plate screws and lift the motor plate assembly backwards then out of the unit. The power cable will remain attached between the two sections.
- Remove any dust and debris from the inside of the unit then replace the motor plate and four screws and the lid and four screws.
- Dust and debris should also be removed periodically from any extract valve filters that are fitted to ensure they do not become blocked.



Warranty

We appreciate you choosing this quality EnviroVent product, which is designed and manufactured 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 it has been installed.

This unit is covered by a 2-year warranty. You should not dismantle or remove any parts of the product other than those instructed in this guide. Tampering with the unit will void the warranty. The valves should be checked periodically to ensure there is air flowing through the system.

EnviroVent Supply & Installation

If your product has been supplied and installed by EnviroVent Ltd it is covered with a two-year parts and labour warranty. If you detect a fault, please contact us on 01423 810810. You will be given guidance over the phone, or an arrangement may be made for a member of our team to visit (call-out charges may apply if a fault cannot be identified).

Supply Only

If your product has been supplied by EnviroVent and installed by a third party it is covered by a two-year parts only warranty. If you detect a fault and the product has been installed in accordance to the fitting/wiring instructions, relevant guidance documents and by a competent and qualified person (proof may be required), please return the product to the place of purchase for a replacement.

Warranty Conditions & Exclusions

Please note that a receipt will be required as proof of purchase. Products bought from an unapproved source, including but not limited to auction websites, are not covered by the 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 authorized, which in any way contradicts the instruction guide set out by EnviroVent
- The warranty does not cover accidental damage, misuse or abuse.
- The warranty is in addition to your statutory or legal rights.

Your unit serial number

For warranty conditions and exclusions, visit www.envirovent.com/warranty

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Leading Manufacturer & Supplier of
Innovative & Sustainable Ventilation Systems

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HG2 8PA

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E / info@envirovent.com
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Boxed unit weight:
5.8kg

Unboxed unit weight:
4.3 kg

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Due to our policy of continuous innovation and improvement EnviroVent reserves the right to alter products specification and appearance without notice.

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