



Guide to Whole House Ventilation

Vent-Axia®

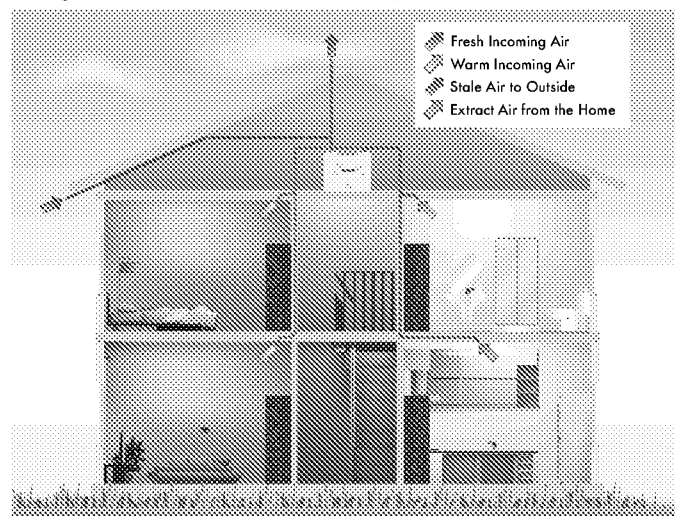


Guide to Whole House Ventilation

What is MVHR?

MVHR (mechanical ventilation with heat recovery) is a whole dwelling ventilation system that supplies and extracts air continuously at a low rate with the facility to be boosted as required meeting Building Regulations Part F System 4.

The unit is normally installed in the loft space or cupboard and rigid ducting supplies fresh filtered air to the habitable rooms and extracts stale polluted air from the 'wet' rooms. Supply and extract diffusers are fitted to the ceilings and are adjusted to balance the system.

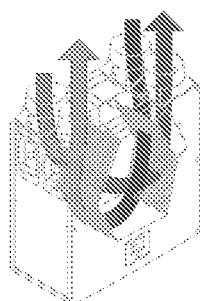


The unit incorporates a heat exchanger (see diagram below) that tempers the incoming air before it is delivered to the habitable rooms. The efficiency of the exchanger can vary from 70% to 95% heat recovery depending on whether it is of cross-flow or counter flow type, counter flow being the most efficient. Building Regulations are now calling for increased thermal efficiencies therefore the 95% heat exchanger is the best option.

The system can be controlled to boost speed when moisture is being generated by bathing or cooking either;

- Manually via single or multiple switches
- Automatically, typically via humidity or other sensors

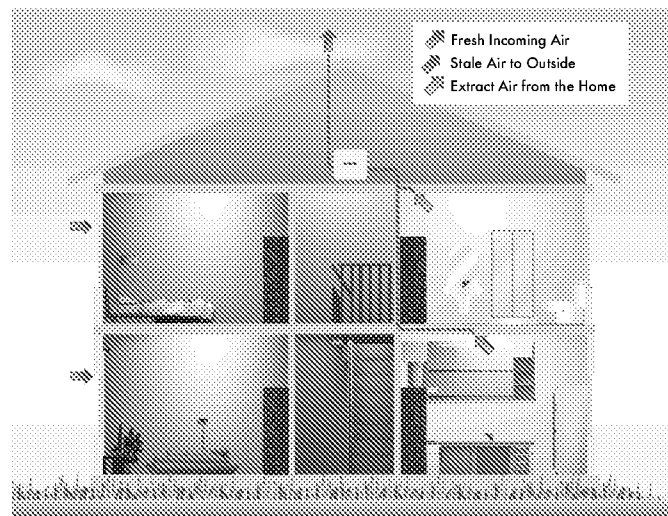
Manual switches should be located in or near the wet rooms. Background ventilators in windows are not required with this system.



- Fresh Incoming Air
- Warm Incoming Air
- Stale Air to Outside
- Extract Air from the Home

What is MEV?

Centralised mechanical extract ventilation (MEV) follows the same principle as MVHR except it does not include any heat recovery. A central unit is mounted in a loft or cupboard and ducted to extract polluted air from the wet rooms of the house. As there is no heat recovery, there is no requirement for any ducts to supply the replacement air. Instead, replacement air enters the home through window vents or airbricks. In many houses however, air naturally enters the building through gaps and cracks in the structure, providing adequate ventilation.



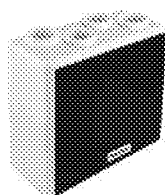
The removal of pollutants, such as moisture, carbon dioxide and external fumes are all important factors in maintaining good indoor air quality, helping to create a better living environment.

Some MEV units will include a humidity sensor, designed to increase the fan speed in proportion to relative humidity levels, saving energy and reducing noise.

MVHR Systems

Lo-Carbon Astra

- Up to a 3 Bedroom house or flat



- Entry level MVHR unit Building Regulation compliant
- Up to 90% efficient and Lo-Carbon high efficiency motors
- Ideal for wall or horizontal mounting
- Comes complete with condensation drain kit, filters, mounting brackets and remote wired controller

Vertical mount:

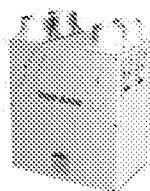
Stock Ref: 442919

Horizontal mount:

Stock Ref: 445048

Lo-Carbon Sentinel Kinetic

- Up to a 4 Bedroom house or flat

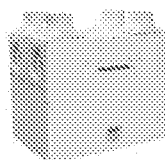


- Up to 91% efficient and Lo-Carbon high efficiency motors
- Comes complete with condensation drain kit, easy access filters, mounting brackets and integral commissioning controller
- Plug and play sensors and remote control available
- Top or sideways facing 125mm diameter adjustable spigots
- Summer bypass for comfort cooling in the summer

Stock Ref: 438222

Lo-Carbon Sentinel Kinetic Plus

- Up to a 7 Bedroom house, flat or commercial building



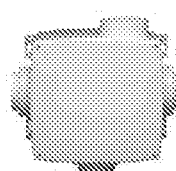
- Functional specification as the Sentinel Kinetic unit above
- Increased capacity for larger houses 150mm spigots for larger airflows

Stock Ref: 443028

MEV Systems

Multivent

- Up to a 4 Bedroom house or flat

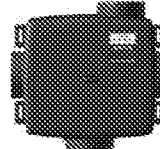


- Adjustable spigots (100 or 125mm diameter)
- Long life AC motor
- Wall, ceiling or loft mountable
- Fully adjustable trickle and boost speed

Stock Ref: 181510

Lo-Carbon Multivent MVDC-MS

- Up to a 7 Bedroom house or flat

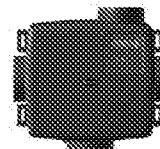


- Adjustable spigots (100 or 125mm diameter)
- Boost via a switched live
- High efficiency Lo-Carbon motor
- Wall, ceiling or loft mountable
- Fully adjustable trickle and boost speed

Stock Ref: 437634

Lo-Carbon Sentinel Multivent

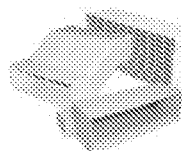
- Up to a 7 Bedroom house, flat or commercial building



- Functional specification as the Lo-Carbon Multivent unit above
- Increased controllability for even greater energy savings

Stock Ref: 437601

Rigid Ducting



Regardless of the size or shape of your project, we will be able to advise you on all of the ducting and fittings required to optimise your ventilation system.

- Full range of round and flat ducting with bends, connectors and ancillaries
- 204 x 60 and 110 x 50 ideal for installation in ceiling voids
- Made from recycled plastic



By Appointment to H.M. The Queen
Suppliers of Unit Ventilation Equipment
Vent-Axia, Crawley, West Sussex

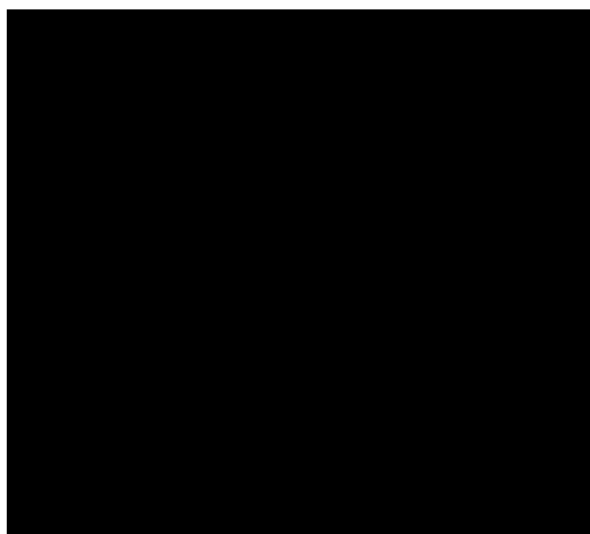
Vent-Axia®

VENT-AXIA CONTACT NUMBERS

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Domestic & Commercial



Supply & Service

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