



ventairtm

THE AIR MOVEMENT SPECIALISTS

VENT-AXIA MULTIVENT CONTINUOUS VENTILATION FOR HEALTHY HOMES

BY VENTAIR

VMEV - Fan Unit Only

VMEV-KIT - Ventilation Kit

Vent-Axia.
AUSTRALIA



Mechanical Extract Ventilation

Improving Indoor Air Quality

Carbon neutrality and emission reduction:

As the drive towards carbon neutrality continues to push forward, the challenge of further lowering dwelling emission rates requires continuous improvement from all within the building industry.

Indoor air quality isn't just limited to the physical make-up of the air we breathe through particulate emissions, but also extends to other forms of emission and one in particular - noise. The World Health Organization (WHO) claims that increased exposure to noise can lead to cardiovascular disease, cognitive impairment and negative effects on sleep. As a result of these findings, authorities are under ever increasing pressure to tighten requirements around noise in homes.

As modern 'energy efficient' homes become more 'airtight' by design there is increasing potential for condensation and poor air quality within the home.

Solution:

The Multivent by Vent-Axia is a whole dwelling ventilation system that supplies and extracts air continuously at a low rate. It is a low energy, continuous mechanical extract ventilation system designed with multiple extract points to simultaneously draw moisture laden and stale air out of bathrooms, toilets, laundries and kitchens providing a quieter and more efficient system compared to separate fans.

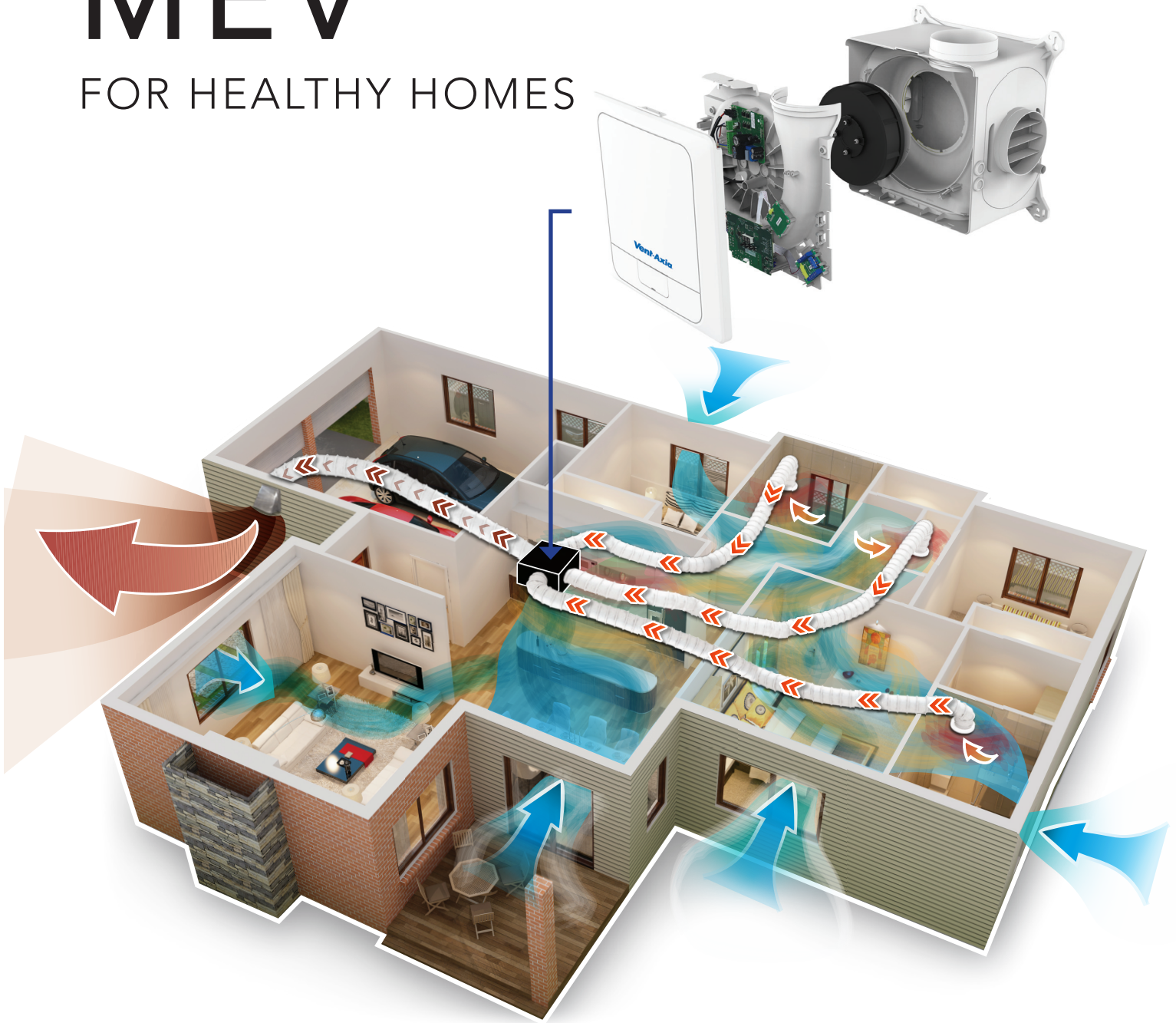
The Multivent is a system where a central unit is mounted in a roof cavity or cupboard and ducted to extract polluted air from the wet rooms of the house. As there is no heat recovery, there is no requirement for any ducts to supply the replacement air. Instead, replacement air enters the home through window vents and gaps around the home.

The Multivent includes a built-in humidity sensor, designed to increase the fan speed in proportion to relative humidity levels, saving energy and reducing noise. The removal of moisture and build-up of indoor air pollutants are all important factors in maintaining good indoor air quality, helping to create a healthier living environment.



MEV

FOR HEALTHY HOMES



**AUTOMATED HUMIDITY
SENSING & CONTROL**



**CONTINUOUS TRICKLE
EXTRACT VENTILATION**



**ULTRA QUIET
PERFORMANCE**



**EASY
INSTALLATION**



**COMPACT
DESIGN**



**PEACE OF
MIND**

MULTIVENT BENEFITS

Continuous ventilation with automated humidity sensing and boost fan speeds.

Condensation and Mould



The 'average' family produces approximately 12 litres of moisture per day.

Condensation in houses is a problem particularly where warm moist air is generated in areas like laundries and bathrooms or by drying clothes over radiators. The moisture in the air gets left on surfaces in colder parts of the house resulting in wet windows, mould on walls, ceilings and in cupboards.

How to reduce humidity levels



Walls, ceiling, floors & soft furnishings quickly show signs of black mould growth.

- Adequate Heating – Air is like a sponge, the warmer it is the more moisture it will hold
- Adequate Insulation – Prevents cold surfaces for moisture to condense
- Adequate Ventilation – Circulation removes the excess moisture held in the warm air and provides fresh air resulting in better indoor air quality.

Provide adequate ventilation

Traditional intermittent extract fans provide peaks of airflow, this means we are warming indoor air and then extracting it to outside, which is not energy efficient.

Instead, continuous running extract fans in bathrooms, kitchens and utility rooms work with the natural air flow in the house meaning you have a constant supply of fresh air which prevents mould and contaminants multiplying and spreading, giving you a healthy home, but without the heat loss associated with intermittent fans.

What is it and why is it there?

The Multivent continuous extract ventilation system is a centralised fan unit mounted in your roof cavity or cupboard that draws stale moist air and odours from your bathroom and toilet, and removes it from the home through vents in your ceiling or wall.

What does it do?

The slow "trickle" rate of the Multivent continuous extract ventilation system continuously moves air around your property at such a low level that you never feel it, which is replaced by clean air, drawn in through the gaps around doors and windows, or the Vent-Axia Fresh Air Vent (VAPFV100), 24 hours a day, 7 days a week. Your home is ventilated without the need to open windows which can let in noise and can compromise security. The fan is designed to operate at a lower flow rate than normal. However, through continuous humidity sensing, the fan will automatically speed up to a suitable boost speed when required. You DO NOT need to switch the system off.

How will it help?

The unit will prevent the build up of moisture in the house, remove steam/condensation and odours during bathing and cooking, cut black mould forming on the walls and behind cupboards, as well as extracting pollutants including volatile organic compounds, bacteria and viruses.

How do I control it?

The mechanical extract ventilation system operates automatically and continuously on 'trickle' setting to ensure your home is ventilated at the appropriate level. The system will automatically detect an increase in relative humidity triggered from bathing or showering and boost to a higher extract rate. As the unit removes the stale air from the home, it is replaced with air from outside. Please note the fan may run at the higher boost rate as the dwelling dries out. This should settle down once the dwelling has had time to dry out.

Vent-Axia Multivent



VMEV - Fan Unit Only
VMEV-KIT - Ventilation Kit

- Continuous extract with automated humidity control
- Reduces your carbon footprint
- Improved indoor air quality
- Specific fan power as low as 0.16 W/l/s
- Suitable for use with external sensors and controllers
- Manufactured in the UK

The Vent-Axia Multivent is a continuous mechanical extract ventilation system. It is designed for the simultaneous ventilation of separate areas in the home or as a multipoint extraction system for a wide range of commercial applications. This unit can be mounted in a roof cavity or in wall or ceiling.

With the need to improve efficiency Multivent has been designed to meet the exacting demands of developers, installers and users offering advanced control options and easier installation and commissioning.

- Demand Control - enables precise ventilation rate, is set in 1% increments based on property size
- Comfort mode allows homeowners to control when the unit runs and for how long to avoid disturbance
- Integral digital display allows the installer to select appropriate low, normal, boost and purge speeds to meet demand
- Manual and automatic control options
- Integral adjustable overrun timer and delay on timer
- Switched live and SELV - Safety Extra Low Voltage connections
- Energy efficient EC/DC motor - 1/3 less energy lost to heat than a conventional AC motor
- Low Specific Fan Power (SFP) making it one of the most efficient products on the market

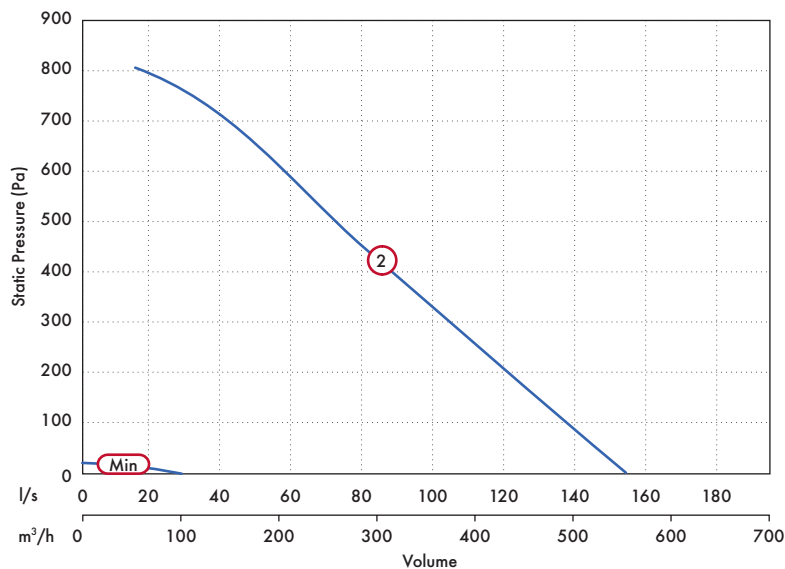
- The need for better health: Removal of pollutants such as moisture, carbon dioxide and external fumes are all important factors in maintaining indoor air quality, helping to create a healthier living environment
- The integral humidity sensor increases fan speed in proportion to relative humidity levels, saving energy and reducing noise
- The sensor also reacts to small but rapid increases in humidity, even if the normal trigger threshold is not reached. This unique feature ensures adequate ventilation, even for the smallest wet room
- Night time relative humidity increment setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature



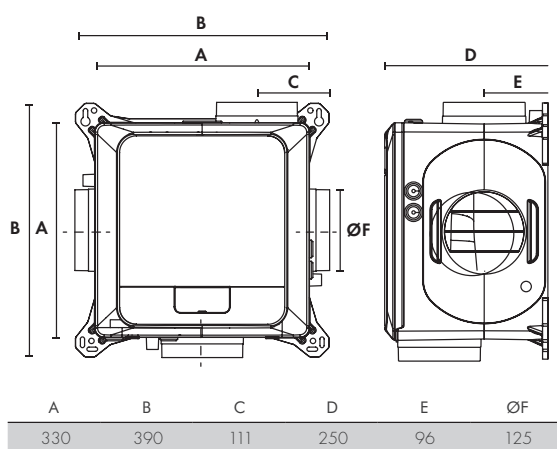
Model Overview

Maximum Power (W)	85
Air Volume @ 200 Pa (l/s)	123
Maximum Specific Fan Power (W/l/s)	0.68
Onboard Digital User Interface	✓
Switched Live LS Connection	2
Volt Free	2
Proportionate Control	2
Adjustable Delay On Timer	✓
Adjustable Overrun Timer	✓
Adjustable Humidistat	✓
Ambient and Rapid-Rise Humidistat	✓
Wired UI Compatible	✓
Normal, Boost & Purge Switch Compatible	✓
Number of Adjustable Fan Speeds	4
Run Time Clock	✓
Fault Indication	✓

Performance Guide



Dimensions (mm)



Kit Contents - Part Number: VMEV-KIT

MEV Base Unit
150mm Weatherproof Cowl with backdraft flap - V150WPC
3 x 125mm x 4m Aluminium Foil Flexible Duct
1 x 150mm x 5m Aluminium Foil Flexible Duct
3 x 125mm Cone Adjustable Mainflow Ceiling Extract Diffuser
150mm to 125mm Reducer and Joiner
30m x 48mm PVC Duct Tape



Sound Data

Octave Band (Hz) Sound Power Levels, dB

Model	Speed	Test Mode	63	125	250	500	1k	2k	4k	8k	LwA	SpL @ 3m
Multivent (VMEV)	20%	Extract	30.3	49.6	43.5	40.4	33.2	25.2	18.2	22.4	40.3	22.8
		Breakout	30.5	39.8	35.3	31.3	22.3	16.5	17.9	22.8	32.5	12.0
	40%	Extract	43.5	54.7	60.8	54.5	46.2	42.5	31.0	24.5	54.5	37.0
		Breakout	47.0	49.3	54.0	42.1	33.9	29.1	20.6	22.6	45.7	25.2
	60%	Extract	40.8	55.2	67.0	61.0	54.0	50.9	41.3	33.3	62.1	44.6
		Breakout	40.1	51.2	58.7	48.2	41.3	37.4	28.4	23.5	52.0	31.5
80%	Extract	45.5	57.6	79.1	66.3	59.7	57.5	48.5	42.7	73.2	55.7	
	Breakout	45.6	54.6	64.5	54.7	46.5	44.2	35.2	26.5	59.1	38.6	
100%	Extract	52.7	61.8	71.6	81.8	66.1	62.7	54.0	49.2	77.8	60.3	
	Breakout	56.0	56.6	61.2	63.1	51.3	49.0	40.4	31.4	60.9	40.4	

Tested according to BS EN 13141-6:2010. Breakout quoted spherical. Extract quoted hemispherical.

Consultant's Specification

The mechanical extract ventilation unit shall be the Multivent as manufactured by Vent-Axia.

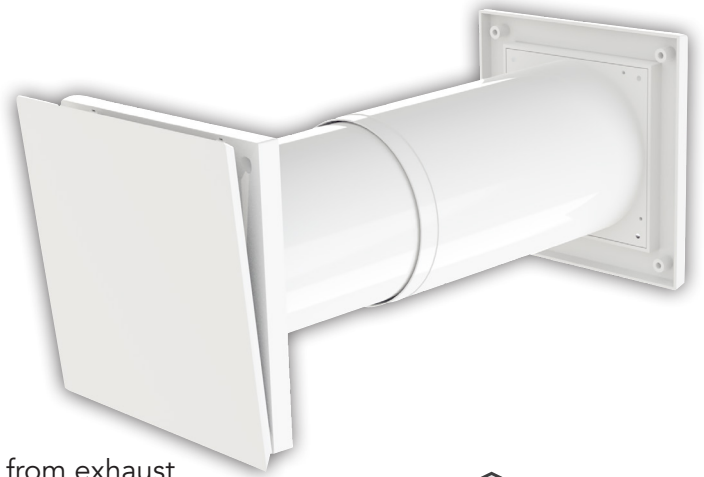
The unit shall comprise a single high efficiency EC/DC backward curved impeller that will extract air from wet rooms from as many as 3 x 125mm spigots, exhaust air shall be terminated through a 150mm spigot to atmosphere.

The controls for the Multivent unit shall be fully digital with the ability to adjust and commission 4 speeds (low, normal, boost, purge) to 1% increments of the maximum fan speed. The Multivent unit shall also provide an LS contact with assignable and adjustable overrun and delay-on timers.

The unit shall include an integral humidity sensor with adjustable threshold, which increases fan speed in proportion to the level of humidity detected.

The unit shall also automatically raise the humidity threshold set point as temperature decreases in order to prevent hunting or unnecessary boosting due to background humidity.

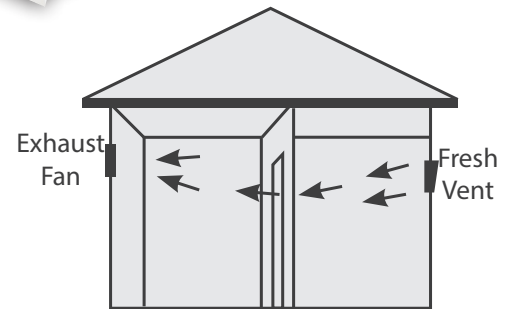
The unit shall be acoustically treated and independently 3rd party tested at the Sound Research Laboratory, tested to BS EN 13141-6.



FRESH VENT

FRESH FILTERED SUPPLY AIR VENT

- Supplies fresh filtered air to replace the air extracted from exhaust fans - Ideal for use with the VMEV
- Ideal for use in more airtight homes or homes with poor air circulation
- Replaceable filter designed to provide a very high separation capacity on particles of all sizes and types
- Discreet and minimal styling



Model	Colour	Duct Size	Mount Options	Cutout
VAPFV100	White	Ø100mm	Wall or Ceiling	Ø100mm

Model **VARP100**

Replaceable flimmer filters available

