

Multivent

Continuous Extract Ventilation

from **Vent-Axia**.

Complies with

New Zealand Green Building Council Homestar v5 - Level 6 to Level 8*

*An additional 1 point available for commissioning

FAN7200









www.branz.co.nz/appraisal-codemark-certificates/vent-axia-mechanical-extract-ventilation-mev-system/



Continuous Extract Ventilation

Continuous ventilation with automated humidity sensing and boost fan speeds

Home Owner Benefits

Ideal for apartments, multi-unit dwellings & free-standing homes.

Traditional intermittent extract fans remove the peak of extra humidity created by bathroom or laundry activity. European countries have long understood that combining continuous running slow-rate "trickle' extraction, with high boost levels from bathrooms, laundries and utility rooms, delivers better indoor air quality. The extracted air is replaced through natural air flow through the gaps around doors and windows, trickle inlet slots, or best of all, the Manrose Puro Filtered Passive Vent Kit (DCT4565) with typhoon cowl that has an effective aerodynamic area of 3000mm² without the filter and 1400 mm² with the filter fitted.

This slow continuous flow with humidity sensed boost automation from the Vent-Axia MultiVent unit ensures refreshed indoor air quality by extracting pollutants including volatile organic compounds, bacteria and viruses - as recommended by health authorities including WHO.

Vent-Axia bought to you by Simx Ltd

Market leading Vent-Axia and Manrose extraction products are supplied and supported in the New Zealand market by Simx Ltd.

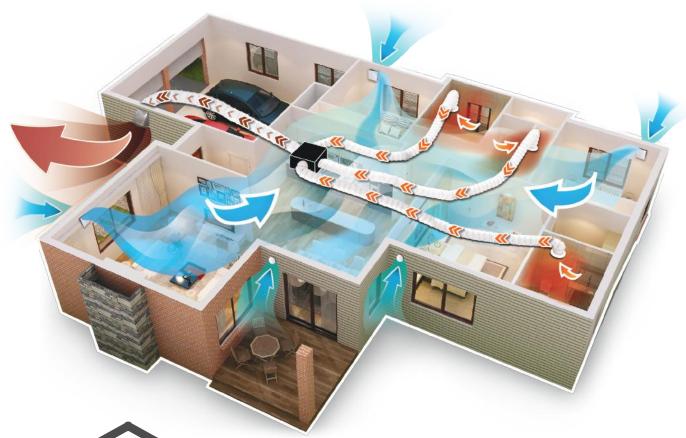
Vent-Axia MultiVent systems have been proven and refined over decades in the UK and Europe.







Continuous Extract Ventilation





Improved Indoor Air Quality

Virus and pollutant extraction as part of improved IAQ. Continuous slowly refreshed air through market leading MultiVent continuous extract ventilation system.





Continuous Extract with Automated Humidity Control

The air quality benefits of continuous "trickle" extract ventilation with automated boost speeds when needed via continuous humidity sensing and control.



Ultra Quiet & Energy Efficient Performance

The MultiVent continuous extract ventilation system has been carefully designed using cutting edge computational fluid dynamics airflow modelling to reduce energy loss and noise across all performance speeds.

FAN7200

Lo-Carbon Sentinel Multivent/Plus







Overheated Air Purging Via Manual Switch Control

Manual switching to extract surplus hot internal air - for dwellings experiencing **summer overheating** especially from sun exposure.



Easy Installation

With a proven digital control platform the MultiVent continuous extract ventilation system is a breeze to install, commission and control.



Compact Design

The sleek design and compact footprint of the MultiVent continuous extract ventilation system from Vent-Axia ensures an unobtrusive offering in the home without requiring you to take up valuable real-estate.



Peace of Mind

Along with 3rd party testing for all sound and efficiency data, 80 years of supplying market leading ventilation products across the world gives you the peace of mind that Vent-Axia is the number one choice for MultiVent continuous extract ventilation.

Lo-Carbon Sentinel Multivent/Plus

- BRANZ Appraised for New Zealand
- Reduces Carbon Footprint
- Improved Indoor Air Quality
- Configurable to Continuous Extract with Automated Humidity Control
- Designed for New Zealand Building Code G4 Compliance
- Base Unit Manufactured in the UK



Sentinel MultiVent continuous extract ventilation 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. The units can be wall, ceiling or loft mounted. Where the ambient air has a high humidity content condensate drains are provided.

In support of MultiVent, Simx offers a design guidance service:

- Practical advice on product selection and installation
- Guidance on solutions to meet leaislation requirements

The need to improve efficiency

Sentinel 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 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

Regulations and Standards

New Zealand Building Code and Healthy Homes

The following two category requirements have been established for mandatory mechanical extraction ventilation in New Zealand.

The New Zealand Building Code for New Building Consents

The building regulatory system sets out a framework to promote good quality decisions being made during the Building Consent process. The legislation and regulations work together, as the building regulatory system. The functional clauses of the NZ Building Code are grouped and described by a letter and number. Clause G of the NZ Building Code covers services, with G4 setting out the performance requirements for ventilation. The Building Code is enshrined in law. The New Zealand Building Code, G4, has been changed. This is supported by Acceptable Solution G4/AS1 Fourth Edition that specifies mechanical ventilation in accommodation units that contain cooktops, showers and baths.

Residential Tenancy Regulations to the Healthy Homes Standards

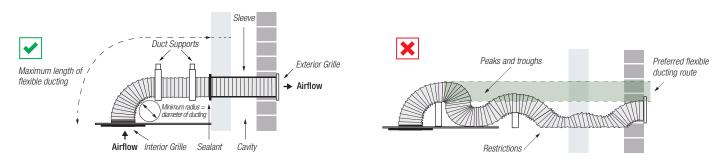
Residential Tenancy Regulations for rental properties only is changing to the Healthy Homes Standards, sub part 4 - Ventilation Standards.

Complying with the Acceptable Solution G4/AS1

To comply, the mandatory mechanical extract system must deliver minimum airflow rates for the complete installed ventilation system. This means that airflow rates must deliver the airflow after resistance of the ducting, internal and external grilles, as well as all other accessories, such as backdraught shutters, are included.

Fan selection is important as some types are far better at overcoming ducting system pressure drops.

Additionally, the quality of the ducting system installation can be all important. Rigid duct systems are best as they are the most efficient. Good installation practice is vital for flexible duct systems.

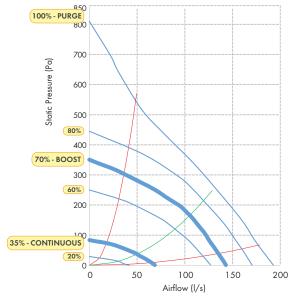


Model Overview

Maximum Power (W)	85
Maximum Pressure	810 Pa
Free Air Performance	159 l/s
Air Volume @ 200 Pa (I/s)	123
Minimum Specific Fan Power (W/I/s)	0.14
Maximum Specific Fan Power (W/I/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 - variable speed range

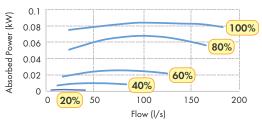
Note: The default Continuous Speed is 35%, with default Boost at 70%. These are fully adjustable via the configurable parameters settings - see the Instruction Manual.



Performance Data

	% (RPM)	Speed (RPM)	Peak Pressure (Pa)	Input Power (kW)	Motor Current (A)	
	100%	3750	810	0.084	0.13	
	80%	3000	445	0.043	0.07	
	60%	2250	250	0.018	0.03	
	40%	1500	112	0.005	0.01	
	20%	750	29	0.001	0.001	

Power Curves



Tested in Accordance with ISO5801

FAN7200 Kit Contents

1x Mullivelli Base Ollii
1x 150mm Weatherproof Cowl - Stainless Steel

3x 125mm x 6m Aluminium Foil Flexible Duct
1x 150mm x 6m Aluminium Foil Flexible Duct

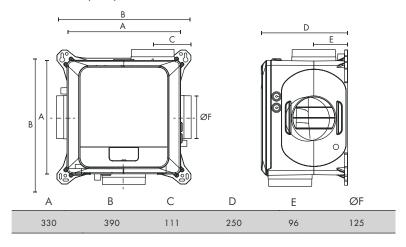
3x 125mm Cone Adjustable Mainflow Ceiling Extract Diffuser

1x 150mm to 125mm Reducer and Joiner

1x 30m x 48mm PVC Duct Tape



Dimensions (mm)



Sound Data

Sound Pow		WL dB re 1	l pw			:	Sound Pres	sure Leve	l dBA @ 3m
Speed	63	125	250	500	1K	2K	4K	8K	Spl@3m
100%	53	62	72	82	66	63	54	49	60
80%	46	58	79	66	60	58	49	43	56
60%	41	55	67	61	54	51	41	33	45
40%	44	55	61	55	46	43	31	25	37
20%	30	50	44	40	33	25	18	22	23

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

Consultant's Specification

The MultiVent continuous extract ventilation unit as manufactured by Vent-Axia, exact unit sizing and specification shall be in accordance with the particular specification. The unit shall be delivered with a 7 year warranty.

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 continuous extract ventilation 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 continuous extract ventilation 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.



