



Ventilation Systems
Overview Brochure



Continuous Mechanical Supply & Extract with Heat Recovery otherwise known as 'MVHR'

Where can it be used?

MVHR is an energy efficient solution for the provision of controlled ventilation in residential and commercial properties with a number of features over traditional ventilation products, such as automated control and summer boost. Specifically designed to meet modern building regulations and energy efficiency objectives. This system is designed to capture the heat that is otherwise lost through ventilation to reduce heat demand particularly in more airtight buildings.

How does it work?

The centrally located continuously running mechanical supply and extract unit extracts air via ducts from moisture producing

areas or "wet rooms" such as kitchens and bathrooms to remove odours and excessive humidity. The out going air passes through a heat exchanger which transfers the majority of the heat from the extracted air to the incoming air, which is supplied by the second fan, then distributed to the habitable rooms via ducts.

The unit is usually discreetly located in a service cupboard or roof space and the air is ducted to the rooms. The extract rate is normally boosted at times when excessive moisture is being generated such as when cooking or bathing.

Our units have been SAP Q tested in accordance with the appropriate European

legislation EN 13141-7 and EST Best Practice compliant. All units are equipped with the latest low energy EC-DC motors, some are available with constant flow EC-DC motors as standard.



Are Titon MVHR units Passivhaus tested?












Yes, some are, but not for full Passivhaus certification purposes. Very few properties in the UK are built to full Passivhaus certification levels. However, many are built with facets of Passivhaus performance in mind.

To this end, we have had our MVHR units tested according to TÜV SÜD standards, including important elements of the Passivhaus testing regime, which are recognised throughout Europe for strict test criteria and commitment to quality.

Titon units can achieve the actual $\leq 1\%$ leakage recorded during testing in Munich and therefore we can offer this 'PHI' specification if required. Please contact us for details. It is important to note all Titon MVHR units are rigorously – and individually – tested under strict conditions to ensure they perform to a high standard.



MVHR Comparison Chart

											
	HRV1.25 Q Plus	HRV1.35 Q Plus	HRV1.75 Q Plus	HRV2 Q Plus	HRV2.85 Q Plus	HRV3 Q Plus	HRV10 Q Plus	HRV10M Q Plus	HRV10.25 Q Plus	HRV10.25M Q Plus	H200 Q Plus
Width	600mm	600mm	715mm	715mm	715mm	715mm	790mm	800mm	790mm	800mm	600mm
Height excl. Ports	430mm	430mm	490mm	490mm	490mm	490mm	665mm	675mm	665mm	675mm	200mm
Depth	285mm	285mm	415mm	415mm	415mm	415mm	485mm	495mm	485mm	495mm	1000mm
Depth incl. Mounting Bracket	295mm	295mm	426mm	426mm	426mm	426mm	495mm	505mm	495mm	505mm	-
Housing	Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel	Expanded Polypropylene	Zintec Sheet Steel	Expanded Polypropylene	Zintec Sheet Steel	Zintec Sheet Steel
Weight	16kg	16kg	24kg	24kg	24kg	24.5kg	17.5kg	31kg	18kg	31.5kg	32kg
Filters	G3 Synthetic	G3 Synthetic	G3 Synthetic	G3 Synthetic	G3 Synthetic	G3 Synthetic	G4 Pleated Panel Filters	G4 Pleated Panel Filters	G4 Pleated Panel Filters	G4 Pleated Panel Filters	G4 Pleated Panel Filters
Maximum No. Wet Rooms	Kitchen + 3	Kitchen + 4	Kitchen + 4	Kitchen + 6	Kitchen + 6	Kitchen + 9	Kitchen + 7	Kitchen + 7	Kitchen + 9	Kitchen + 9	Kitchen + 5
Specific Fan Power (down to)	0.53 W/l/s	0.65 W/l/s	0.41 W/l/s	0.56 W/l/s	0.52 W/l/s	0.66 W/l/s	0.48 W/l/s	0.48 W/l/s	0.39 W/l/s	0.39 W/l/s	0.55 W/l/s
Heat Recovery % (up to)	91%	88%	91%	90%	91%	90%	92%	92%	90%	90%	83%
Available with Summer Bypass*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Available with SUMMER boost®**	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Air Tightness (m³/(h.m²))	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
Recommended Max. Floor Area (m²)	90	125	130	170	150	230	180	180	220	220	150
Airflow (m³/h) at 100Pa	215	217	270	285	330	415	475	475	505	505	300

Product features include Intelligent Humidity Control, Boost, Summer Mode, Summer Bypass and SUMMERboost® and Duct Heater Control options. See www.titon.co.uk/mvhr for an explanation of these features and further information.

Controls and switches

auramode®

Low voltage LCD display with user friendly interface. Available in multiple languages, with 7 day and 8 programmable fan speed settings.



auralite®

A low voltage LED system status indicator which is wired to, but sited remotely from the HRV unit.



aurastat®

A low voltage intelligent LCD controller for system information and set up which is wired to, but sited remotely from the HRV Unit.



3 speed switch

A low voltage switch to change between setback, continuous or boost running speeds. The switch is wired to, but sited remotely from the HRV unit.



Humidistat

Set to put the unit in boost when a predefined level of relative humidity is met. Wired to, but sited remotely from the HRV unit.



Sensors

CO₂, Temperature, Humidity and Air Quality sensors are all available in conjunction with our aurastat®. Creating Demand control when you need it.



Continuous Mechanical Extract & Background Ventilators

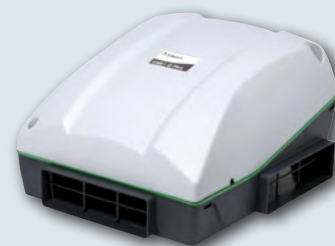
An MEV/CME system works by continually extracting stale polluted air from rooms where moisture is generated.

Fresh air is normally provided from outside to habitable rooms by trickle ventilators fitted on windows, creating a flow of clean fresh air throughout the dwelling. The extract air is ducted from "wet rooms" to the outside and the extract rate is normally boosted at times when excessive moisture is being generated, such as when cooking or bathing. Titon offers solutions for both centralised and decentralised continuously running extract systems.

Centralised Mechanical Extract Ventilation

CME2 Q Plus

- SAP Appendix Q eligible and EST Best Practice compliant
- Compact - unit is very small and can be fitted in airing cupboards, cupboards or loft spaces
- Rectangular ports saves on cost and installation time
- Capable of up to 400m³/h - suitable for small and large dwellings



Decentralised Mechanical Extract Ventilation

Solitude (Constant Flow Version)

- The most efficient dMEV fan on the market
- SAP Appendix Q eligible*

Solace (Non-Constant Flow Version)

- 100mm bathroom/kitchen extract fan
- Aesthetic flat front cover design
- Quiet running, only 11dB(A) at 3m, low speed



*Further information available from the Product Characteristics Database: www.ncm-pcdb.org.uk.



Trimbox NO₂ Filter®

Titon's Award winning Trimbox NO₂ Filter® reduces Nitrogen Dioxide (NO₂) which is predominately produced by exhaust gases from diesel engines.

Due to this pollution arising in cities and urban areas there is a need to implement mitigation measures to improve the indoor air quality (IAQ). The Trimbox NO₂ Filter® is an effective means of reducing high NO₂ to an acceptable mean annual concentration level of 40µg/m³.



- Effective in reducing pollutants in the home, improving Indoor Air Quality (IAQ) and reducing the risk of Toxic Home Syndrome
- Low pressure drop
- Compact design
- Optional F7 filter can be installed to further improve IAQ
- Compatible with Titon's range of MVHR units
- Fully lined box to reduce duct bound noise and condensation
- The unit can be installed in both intake air and supply ducting.

Ducting - Rigid and Semi Rigid

Titon offers a comprehensive range of ducting, terminals and accessories to complement fan units and we advise you ensure the appropriate components are selected in accordance with Regulatory, Best Practice and SAP Q requirements.

The range includes Titon exclusive product for more efficient performance. Comprehensive advice is available from Titon on request. Using ducting or duct accessories from other sources may compromise system performance.



NEW



HRV Condensate Drain Cover

NEW



Sound Attenuating Flexible Ducting

NEW



HRV Duct Cover

NEW



HRV First Fix Solution