



Fusion HRV2HT



Fusion HRV2HT

Whole house ventilation with heat recovery

Key features

- One of the most efficient small MVHR units for apartments and 2-3 bedroom houses on SAP Appendix Q*
- Simple on-site commissioning via new, innovative wireless GRF1 controller
- Acoustically insulated casing ensures quiet operation
- Designed for quick and simple installation on-site and now featuring new quick-fix condensate connector
- Lightweight design – can be installed by a single fitter on-site
- Building Management System (BMS) compatible
- Carbon Neutral
- Designed including anti-bacterial properties



Guaranteed Installed Performance (GIP) is about ensuring what is installed is what has been designed.

Fusion HRV2HT is a Greenwood GIP product that has been designed to assist in the delivery of GIP on-site simply and easily. With 100% variable airflow settings, the product can be tested and commissioned to be accurate to Building Regulation requirements each time.

Best Performance

As low as 0.47W/l/s with 93% Heat Recovery, Fusion HRV2HT is one of the UK's best performing heat recovery products* and is both SAP Appendix Eligible and EST Best Practice compliant. Suitable for apartments and houses, its cutting edge performance helps reduce DER's in SAP and contributes to dwellings built to Code Levels 3, 4, 5, and 6. The unit also incorporates the most sophisticated technology which enables the outstanding 93% heat transfer.



Greenwood HumidiSMART™



Fusion HRV2HT features a new and innovative way of using humidity to control boost ventilation.

It's SMARTer because, in contrast to traditional humidity sensors, Greenwood HumidiSMART™ only reacts to man-made increases in humidity.

This is because it continuously monitors the room and knows what the 'normal' ambient levels are on each individual day. Ventilation is therefore only ever on when it needs to be.

Greenwood HumidiSMART™ helps to reduce nuisance running (especially at night), unnecessary heat loss and energy usage because the fan/unit isn't running or in boost mode in response to increases in background humidity which naturally occur throughout the day and with the changing seasons.

Saving Time and Money On-Site

The Fusion HRV2HT has been designed for a fuss-free installation on-site.

Supplied with a flying lead, the unit is ready to wire into power, reducing setup time.

Once fixed, a simple method for changing the handing of the unit (from right to left hand) allows a quick and easy setup for all dwelling types and designs.

This is further enhanced by the inclusion of the new John Guest **Speedfit Condensate Connector** which provides a simple and effective push fit connection to the condensate drain. This eliminates the need to use additional fixing materials and dramatically improves the seal between the unit and piping. Fusion HRV2/HRV2HT units are the only heat recovery products to incorporate this type of fuss-free condensate connector.



New Speedfit condensate connector for the easiest and quickest connection to condensate piping (total height of unit when condensate connector is installed is 676mm)

 **John Guest®**



Greenwood TimerSMART™



Fusion HRV2HT also features a new and logical approach to timer operation.

It's SMARTer because in contrast to traditional timers, it looks at the duration of occupancy to define running time rather than having a fixed running period. This removes nuisance running noise (especially at night), unnecessary energy wastage and heat loss typically associated with traditional timers.

Greenwood CommissionSMART™



Fusion HRV2HT gives a new and fuss-free way of assisting commissioning on-site, thanks to Greenwood CommissionSMART™ technology.

It's SMARTer because it uses wireless design technology. One LCD controller (GRF1) can be used to commission numerous units on-site. You simply pair the controller with the unit and un-pair once commissioning is complete, repeating this process for each additional unit that requires commissioning.

Having this feature also enables the unit to be commissioned and amended at the same time at each ceiling valve, in each room, rather than having to keep returning to the unit which may be in the loft.

Peaceful Nights

Fusion HRV2HT has been designed with a night mode facility which helps prevent unnecessary boosting of the unit throughout the night therefore eliminating any nuisance noise.

When night mode is activated, boost is disabled during 23:00 - 05:00, however this is fully programmable and adjustable through the wireless GRF1 controller.

Keeping Control

Fusion HRV2HT has been designed with new innovative controllers offering simple fuss-free setup and operation for the whole house system;

GRF1 - Wireless Control

In addition to wireless commissioning via pairing with the unit, this innovative LCD controller has full functionality to set/adjust all programs inclusive of temperature and maintenance options. The controller can also be wall mounted at a central location in the dwelling for ease of use and is a Greenwood CommissionSMART™ design.



GRF2 - Wireless Boost Switch

The GRF2 is a ventilation switch designed for purpose to adjust the operating speed of the unit in the home. This switch can be wall mounted at numerous points throughout the dwelling.



Greenwood SummerSMART™



Fusion HRV2HT incorporates a clever approach to the intake of warm external summer air and its effects on the indoor environment.

It's SMARTer because it senses outside temperature and automatically makes changes to the way in which supply air from a central ventilation system is introduced during periods of high external temperatures. This is done via a slow down process.

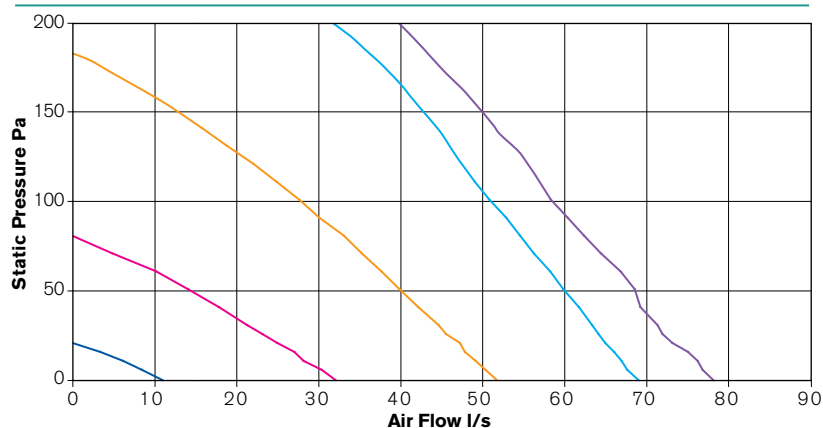
Greenwood WinterSMART™



Fusion HRV2HT also features an advanced approach to the intake of cold external air during the autumn/winter months.

It's SMARTer because it senses the outside temperature and automatically makes changes to the way in which the supply air is being introduced during periods of low temperatures. This is done via a slow down process, and is also a form of frost protection for the unit itself.

Performance



Fusion HRV2HT has 100% variable motors which are commissioned via the wireless GRF1 controller.

- Variable setting 1
- Variable setting 2 (factory trickle speed)
- Variable setting 3
- Variable setting 4 (factory boost speed)
- Variable setting 5 (max)

Consumption

Trickle speed – 9.8W
Boost speed – 22W
Max speed – 75.2W

Sound Pressure Level @ 3m dB(A) Variable Settings				
1	2	3	4	5
14.5	25.5	31.5	35.5	38

SAP Appendix Q Performance*

Exhaust terminal configuration (W/l/s)	Specific fan power efficiency (%)	Heat exchanger performance compliant	Energy saving trust best practice
Kitchen + 1 additional wet room	0.48	93	YES
Kitchen + 2 additional wet rooms	0.47	93	YES
Kitchen + 3 additional wet rooms	0.51	92	YES
Kitchen + 4 additional wet rooms	0.6	92	YES
Kitchen + 5 additional wet rooms	0.7	91	YES
Kitchen + 6 additional wet rooms	0.85	90	YES

Physical Specification and Installation

- Weight: 18Kg
- Materials: EPP – Body, ABS – Spigots and Motor Housing.
- Wiring: Must comply with current IEE Regulations.
- Fuse: 3 amp (when unit is supplied from a 6A lighting circuit, no local fuse is required).
- Installation: Supplied with fixing bracket to allow screw fixing for increased support.
Install using rigid aluminium, PVC or galvanised ducting.
Install in loft or cupboard.
Installation and user manuals supplied with each unit.

*Information extracted from the full HRV2 SAP Appendix Q report (www.sap-appendixq.org.uk) as at October 2009.

Ancillaries



GD8 Modular rectangular and round 125mm light weight PVC ducting system.



Galvanised Ducting A range of galvanised ducting.



GFA5.3 or GFA5.10 Flexible 125mm aluminium ducting.



GFA5.10I Insulated flexible 125mm aluminium ducting.



GRF1 New wireless multi-function controller for commissioning, switching between trickle, medium & boost speeds and options for homeowner temperature & maintenance control.



GRF2 New wireless switch to control trickle, medium & boost speeds.



GS2 2 position switch available for controlling trickle & boost speeds.



KE125/KE100 Ceiling mounted supply valves.



KSOP125/KSOP100 Fire rated kitchen extract valves.



KSO125/KSO100 Ceiling mounted extract valves.



GG68 or GG47W 125mm & 100mm ceiling mounted extract valves.



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