

WHHR150DC

SAP Q Eligible

WHOLE HOUSE HEAT RECOVERY UNIT



FEATURES

- Highly efficient, low energy solution to condensation and pollutant control
- Continuous ventilation in kitchen plus up to 5 additional wet rooms
- Up to 60% heat exchange efficiency
- Low noise levels
- Building Regulations Part L and Part F compliant

GENERAL

- SAP Q eligible whole house heat recovery unit for homes and offices
- continuous ventilation in kitchen and up to 5 additional wet rooms
- maximum airflow 233m³/hr
- suitable for areas up to 90m²
- up to 60% of heat is recovered from air extracted from warm, moist rooms to create a stable, comfortable, healthy environment
- easy to install and maintain
- for wall (can be above an optional cooker hood canopy) or loft installation - can be installed horizontally or vertically (mounting kit necessary for loft installation)
- multiple choice low (trickle) and boost (higher) speed set by installer
- boost speed can be tripped via a humidistat, air quality sensor or PIR sensor
- low noise levels
- low running costs
- gives extra security by removing need to open windows
- guaranteed for 3 years
- Vectaire Ltd can supply all accessories for use with these units, including ducting and metal filters, outside grilles and wall cowls

SPECIFICATION

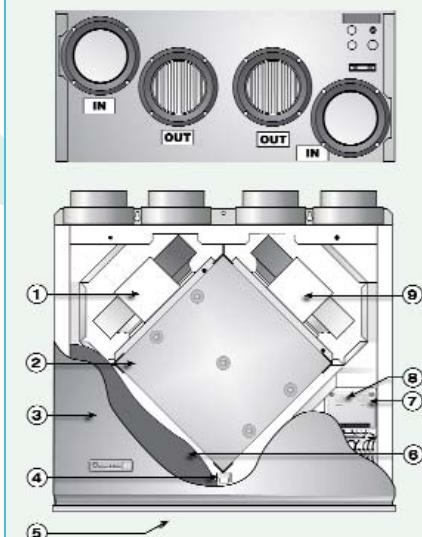
- casing manufactured from aludip steel in white
- low energy DC external motor
- aluminium plate heat exchanger

COMPLIES WITH

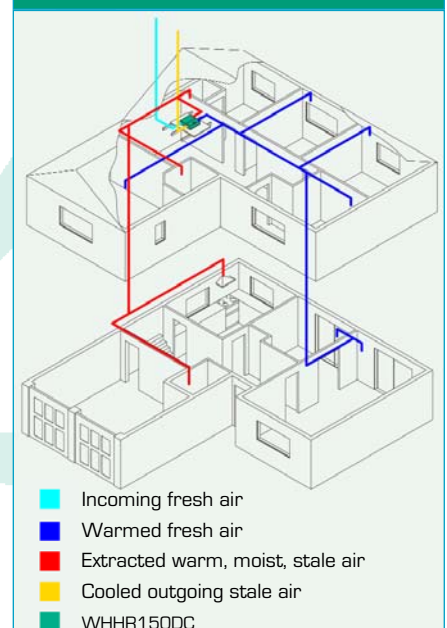
- Part L of Building Regulations for enhanced energy saving capability
- Part F of Building Regulations for reliable, efficient ventilation
- built to BS EN ISO 9001
- complies with IEC 60335-2-80, LVD2006/95/CE and EMC 2004/108/CE European Directive against radio interference and electro-magnetic compatibility
- CE marked
- SAP Q eligible

FEATURES

- | | |
|--------------------------|-------------------------|
| 1. fan | 6. sealing plate |
| 2. heat exchanger | 7. min/max control |
| 3. front decor panel | 8. normal/boost control |
| 4. locking wedge | 9. fan |
| 5. bottom blanking plate | |



LOFT INSTALLATION



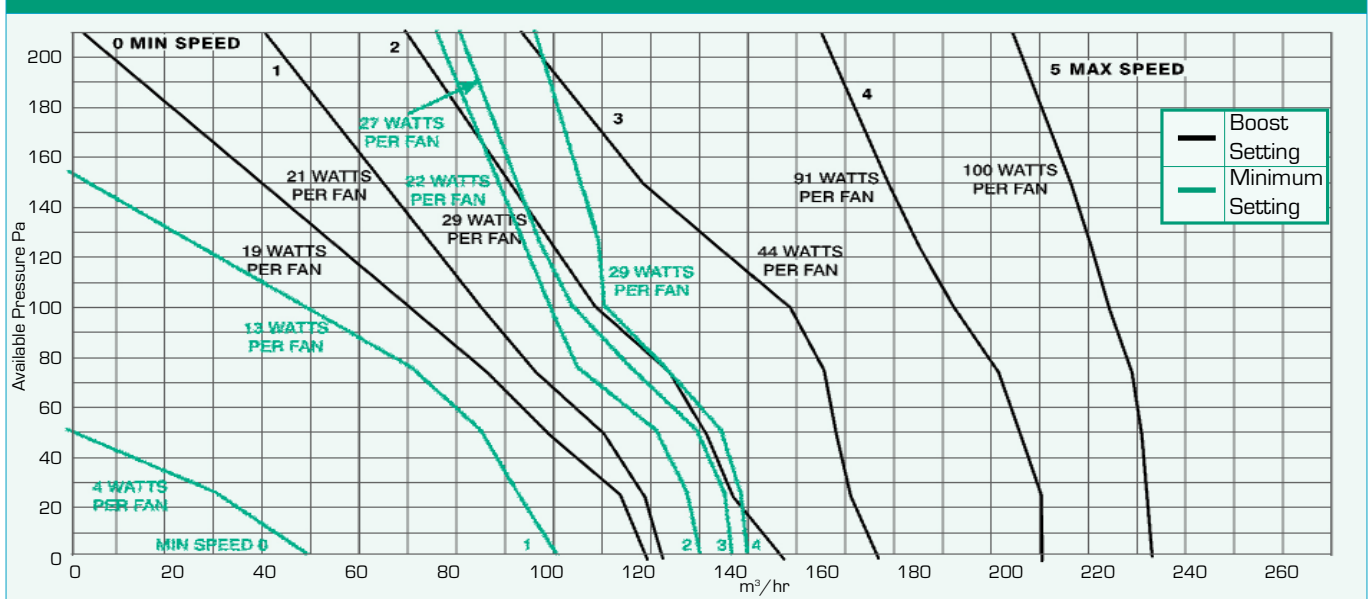
WHHR150DC - TECHNICAL INFORMATION

ENERGY LEVEL PERFORMANCE - using rigid ducting

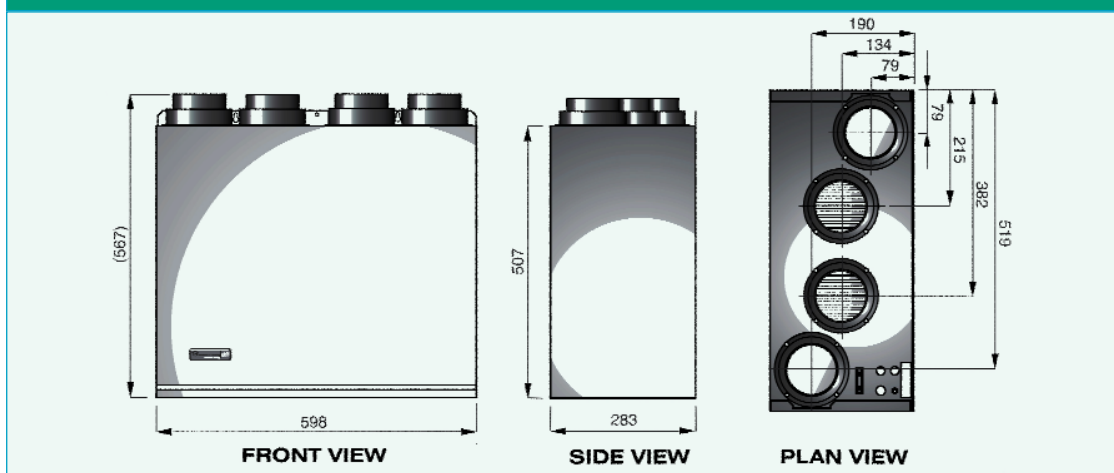
Exhaust Terminal Configuration	Fan Speed Setting	Specific Fan Power (W/l/s)	Heat Exchange Efficiency (%)
Kitchen + 1 additional wet room	100% variable	0.65	63
Kitchen + 2 additional wet rooms	100% variable	0.61	62
Kitchen + 3 additional wet rooms	100% variable	0.81	60
Kitchen + 4 additional wet rooms	100% variable	0.88	59
Kitchen + 5 additional wet rooms	100% variable	1.19	57

Figures from BRE test results

PERFORMANCE - for 2 extracts - kitchen and bathroom



DIMENSIONS - mm



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SAP Appendix Q Testing Results
Central mechanical supply and exhaust ventilation system
packages with heat recovery used in a single dwelling

Brand Name		Vectaire
Model		WHHR150DC
Model Qualifier (if applicable)		
Current Manufacturer and Contact Details	Name	Vectaire Ltd
	Address	Lincoln Road Cressex Business Park High Wycombe Bucks HP12 3RH
	Telephone	01494 522333
	Website	www.vectaire.co.uk
Original Manufacturer (if different)		
First Year of Manufacture		2007
Last Year of Manufacture		
Testing Body		BRE
Date of test		03/12/2007
Serial Number of Product Tested		0898000101
MVHR to outside grille duct types and size		100mm diameter rigid plastic & 100mm rectangular rigid plastic
Duct types and sizes used for supply and exhaust		100mm diameter rigid plastic & 100mm rectangular rigid plastic

Results of leakage tests

Table Q1

Internal	Pass
External	Pass

Results for SAP calculations (at minimum flow rate condition)

This product has only been tested with rigid ductwork and the data are not applicable for SAP calculations if installed with flexible ductwork.

Table Q2 – Systems with rigid ductwork only

Exhaust terminal configuration	Fan speed setting	Specific fan power (W/l/s)	Heat exchange efficiency (%)	Energy Saving Trust Best Practice Performance Compliant
Kitchen + 1 additional wet room	100% variable	0.75	63	No
Kitchen + 2 additional wet rooms	100% variable	0.98	62	No
Kitchen + 3 additional wet rooms	100% variable	1.32	60	No
Kitchen + 4 additional wet rooms	100% variable	2.04	60	No

These figures are entered into either:

- (a) In the case of SAP software amended to SAP 2005 version 9.81 allowing direct entry of MVHR data, the SAP software, or
- (b) In the case of SAP software amended to SAP 2005 version 9.81 not allowing direct entry of MVHR data, the SAP Q MVHR Calculation Spreadsheet v9.81 and the results from the spreadsheet into the Special Features part of the SAP 9.81 software, or
- (c) In the case of SAP software to SAP 2005 version 9.80 , the SAP Q MVHR Calculation Spreadsheet v9.80 and the results from the spreadsheet into the Special Features part of the SAP 9.80 software. They must **NOT** be entered directly into SAP 2005 version 9.80 software

Table Q3 – Systems with flexible ductwork only

Exhaust terminal configuration	Fan speed setting	Specific fan power (W/l/s)	Heat exchange efficiency (%)	Energy Saving Trust Best Practice Performance Compliant
Kitchen + 1 additional wet room	N/A	N/A	N/A	N/A

Results for Approved Document F (at maximum flow rate condition)

Table Q4

Exhaust terminal configuration	Fan speed setting	Total exhaust flow rate (l/s)	Total supply flow rate (l/s)
Kitchen + 1 additional wet room	100% variable	15.0	15.0
Kitchen + 2 additional wet rooms	100% variable	21.0	21.0
Kitchen + 3 additional wet rooms	100% variable	27.0	27.0
Kitchen + 4 additional wet room	100% variable	33.0	33.0

Comments

Only figures from Table Q2 or Table Q3, not both, should be used with the SAP Q Calculation Spreadsheet for this technology type.

Table Q4 results are only applicable for Approved Document F requirements.

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Central mechanical supply and exhaust ventilation system
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	Telephone	01494 522333
	Website	www.vectaire.co.uk
Original Manufacturer (if different)		
First Year of Manufacture		2007
Last Year of Manufacture		
Testing Body		BRE
Date of test		03/12/2007
Serial Number of Product Tested		0898000101
MVHR to outside grille duct types and size		125 & 150mm diameter rigid plastic & 200mm rectangular rigid plastic
Duct types and sizes used for supply and exhaust		125 & 150mm diameter rigid plastic & 200mm rectangular rigid plastic

Results of leakage tests

Table Q1

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Kitchen + 2 additional wet rooms	100% variable	0.61	62	No
Kitchen + 3 additional wet rooms	100% variable	0.81	60	No
Kitchen + 4 additional wet rooms	100% variable	0.88	59	No
Kitchen + 5 additional wet rooms	100% variable	1.19	57	No

These figures are entered into either:

- (a) In the case of SAP software amended to SAP 2005 version 9.81 allowing direct entry of MVHR data, the SAP software, or
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Kitchen + 3 additional wet rooms	100% variable	27.0	27.0
Kitchen + 4 additional wet room	100% variable	33.0	33.0
Kitchen + 5 additional wet rooms	100% variable	39.0	39.0

Comments

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