

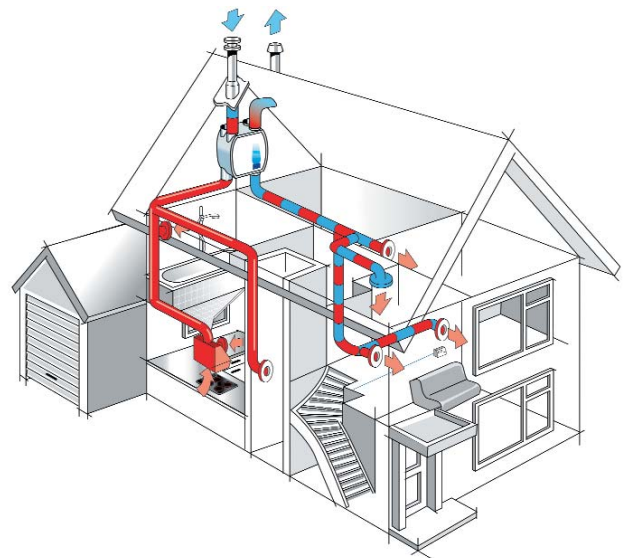
HRU ECO 4

Suitable for new builds and high and low rise buildings, the Itho HRU ECO 4 is one of the most energy efficient whole house ventilation and heat recovery systems on the market, with a Specific Fan Power (SFP) as low as 0.46 W/l/s and a heat recovery efficiency of 91%.

SAP Appendix Q eligible, the HRU ECO 4 is fitted with a sophisticated synthetic heat exchanger offering maximum surface area for heat to be transferred, along with a quiet energy saving DC motor for maximum efficiency.

Technical Information

- The HRU ECO 4 has a specific fan power (SFP) of 0.46 W/l/s.
- The heat exchange efficiency of the HRU ECO 4 is 91%.
- Ducting within the dwelling should be 204mm x 60mm modular plastic or 125mm diameter rigid plastic ducting. NOTE: Connections to the unit are 150mm diameter.
- The HRU ECO 4 comes with two G3 filters.
- Dimensions: height 848mm, width 730mm, depth 477mm.
- Condensate discharge diameter: 40mm external.
- The HRU ECO 4 comes in two versions- Apartment and House. The Apartment version has all four duct connections at the top of the unit: The House version has both the "fresh air supply to" and "stale air extract from" the dwelling connections at the bottom of the unit.



HRU ECO 4 variations available (supplied with silencer).

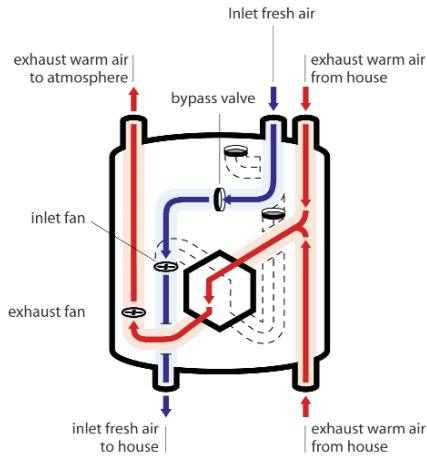
UK CODE	PRODUCT	m3/hr	Voltage
105-0058	HRU ECO 4 (House) 5 core cable	325	230
105-0060	HRU ECO 4 (House) RF supplied with one Controller	325	230
105-0059	HRU ECO 4 (Apartment) 5 core cable	325	230
105-0061	HRU ECO 4 (Apartment) RF supplied with one Controller	325	230

Ventilation for all seasons...

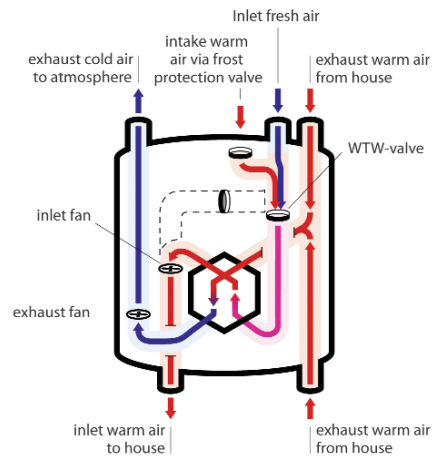
100% summer bypass valve diverts incoming air away from the heat exchanger to prevent warm outside air being further heated.

An integral frost protection device prevents the unit from freezing during the colder months.

Example based on House Version



Example based on House Version



Technical Information

	Capacity [m ³ /h]	Pressure [Pa]	Power [W]*	Current [A]*	Voltage [V]*	Cos phi *	Thermal efficiency [%]
Mode 1 Minimum mode	50	10	8	0.05	230	0.07	98
Mode 1 Low mode	75	20	12	0.1	230	0.55	98
Mode 2 Medium mode	150	40	29	0.24	230	0.53	96.2
Mode 2 Medium mode	150	80	38	0.31	230	0.53	96.2
Mode 3 High mode	225	100	74	0.59	230	0.59	94
Mode 3 High mode	225	150	88	0.69	230	0.56	94
Mode 3 High mode	275	100	106	0.83	230	0.56	93
Mode 3 High mode	275	150	126	0.99	230	0.56	93
Mode 3 Maximum mode	325	100	156	1.22	230	0.56	92
Mode 3 Maximum mode	325	150	176	1.36	230	0.56	92

The right to make changes is reserved 9.04

3.3

* Values to be used in the EPC calculation at 230V, according to NEN5128.

Other technical specifications

Power supply: 230V

Frequency 50Hz

Dimensions: height 848mm
width 730mm
depth 477mm

Condensate discharge diameter: 40mm external

Filterclass: G3

SAP Appendix Q

The Standard Assessment Procedure (SAP) Appendix Q website, www.sap-appendixq.org.uk, is a UK-based government led initiative for demonstrating compliance with Building Regulations within Part L (England and Wales), Section 6 (Scotland) and Part F (Northern Ireland). Also Dwelling Energy Assessment Procedure (DEAP) for the Irish Republic.

SAP Appendix Q is a database of energy efficient technologies which have been assessed for performance. The results can be input into a SAP assessment submission.

BRE test results for the HRU ECO 4

The Energy Saving Trust's 'Demonstrating Compliance - Best Practice', states that MVHR units must have a specific fan power (SFP) of 1.0 W/l/s or less and a heat recovery efficiency of 85% or above. The HRU ECO 4 exceeds both of these figures (←0.46W/l/s and up to 91% respectively)

Test report – SAP Appendix Q – MVHR Test report Number 244-174
Test report issued 02/04/08

Standard Assessment Procedure 2005 – Appendix Q MVHR Product Data

Product tested **HRU ECO 4**

Results for Appendix Q at minimum flow rate condition

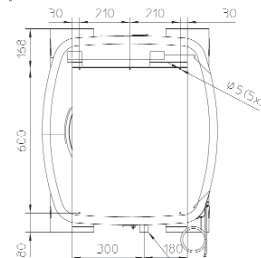
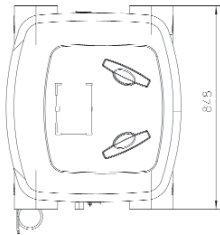
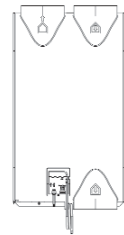
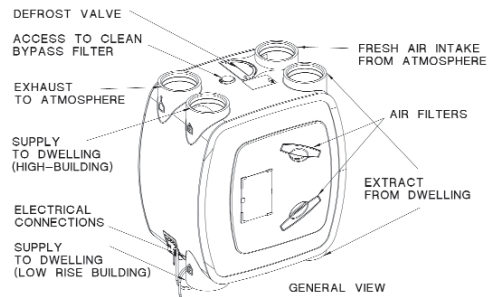
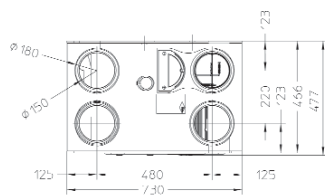
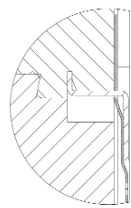
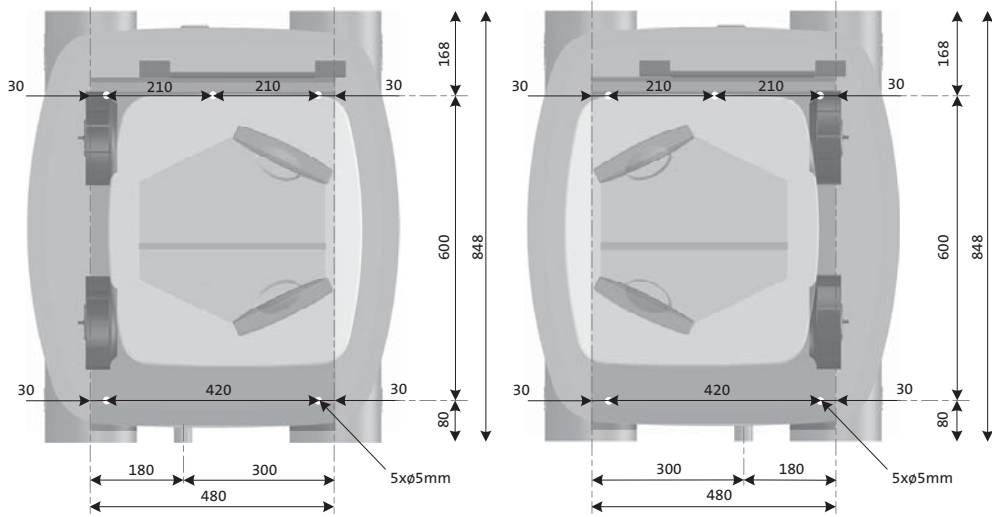
This product has only been tested with rigid ductwork and it is not applicable for SAP Appendix Q if installed with flexible ductwork.

Table Q2 – Systems with rigid ductwork only

Exhaust terminal configuration	Fan speed setting	Total flow supply rate (l/s)	Total exhaust flow rate (l/s)	Specific fan power (W/l/s)	Heat recovery efficiency (%)	Energy Saving Trust Best Practice Performance Compliant
Kitchen + 1 additional wet room	Supply & Extract – 100% variable	15.0	15.0	0.46	91	Yes
Kitchen + 2 additional wet rooms	Supply & Extract – 100% variable	21.0	21.0	0.46	90	Yes
Kitchen + 3 additional wet rooms	Supply & Extract – 100% variable	27.0	27.0	0.50	88	Yes
Kitchen + 4 additional wet rooms	Supply & Extract – 100% variable	33.0	33.0	0.56	88	Yes
Kitchen + 5 additional wet rooms	Supply & Extract – 100% variable	39.0	39.0	0.65	87	Yes
Kitchen + 6 additional wet rooms	Supply & Extract – 100% variable	45.0	45.0	0.75	87	Yes
Kitchen + 7 additional wet rooms	Supply & Extract – 100% variable	51.0	51.0	0.87	87	Yes

These figures must NOT be entered directly into the SAP worksheet or any software. They must be entered into the SAP Q Calculation Spreadsheet

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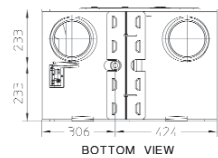


LEFT HAND SIDE VIEW

FRONT VIEW

RIGHT HAND SIDE VIEW

BACK SIDE VIEW



BOTTOM VIEW

CONDENSATE DISCHARGE



Itho UK Ltd
 10 Faraday Court
 First Avenue
 Centrum 100
 Burton on Trent DE14 2WX
 T 0845 250 8090
 F 0845 250 8091
 E info@itho.co.uk
 I www.itho.co.uk



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