

IDEO



Intelligent Whole House Heat Recovery



How does the IDEO work?

The IDEO works by extracting stale, moisture-laden air from the wet rooms such as bathrooms, WCs, kitchen and shower rooms, which is released into the atmosphere. At the same time it supplies fresh, filtered air into the

living areas. The energy from the extracted air is transferred to the new fresh air through the high efficiency heat exchanger before being re-supplied into the property.

Recovery of temperature in winter

Operation without by-pass

Air inside home	Outside air	New air heated and supplied into the home
21°C	2°C	20°C

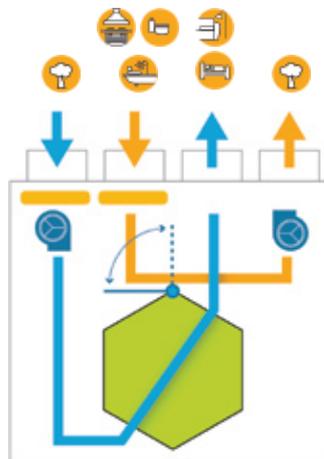
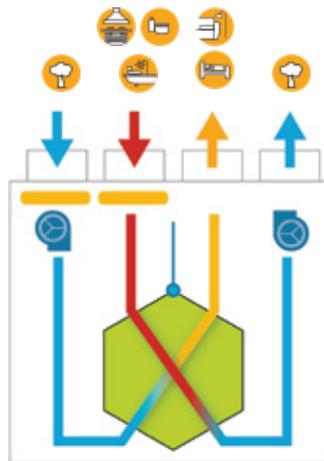
With a simple flow system, the new air would enter at 2°C through the air inlets which would lower the interior temperature of the home. Through the heat recovery process, the new air enters at 20°C.

Recovery of temperatures in summer during the night (free cooling)

Operation with by-pass

Air inside home	Outside air	New air heated and supplied into the home
28°C	21°C	21°C

During the summer nights, when the outdoor air is colder than the indoor air, the air does not pass through the exchanger. The by-pass is activated automatically and air is supplied directly into the home.



About

The IDEO is an intelligent whole house heat recovery unit designed with the latest technological innovations to specifically provide optimum user functionality and comfort.

features & benefits

- High efficiency heat exchange cell achieving up to 87% efficiency
- Intelligent control module to set multiple functions and indicators (as standard)
- Wireless kitchen boost switch as standard
- High efficiency F5 and G4 filters
- EC motor technology
- Monthly energy savings per kWh indicator
- Filter change indicator
- Noise levels down to 22 dB(A)
- Automatic or manual 100% summer by-pass as standard
- Optimum user functionality
- Low energy consumption
- Ease of access to user manual and filters
- Ease of servicing of internal components
- Night time cooling
- SAP Appendix Q eligible
- Energy Savings Trust Best Practice Performance Compliant
- 3 year guarantee





Wireless Programmable Control



External Antenna



Wireless Kitchen Boost



Easy access to filters



Hydraulic strut for opening

Vertical installation on the wall or the floor



Easy access to internal elements

Fresh, clean indoor air quality all year round

Innovative control module for optimum user functionality

Supplied as standard with the IDEO is the intelligent control module, enabling the setting of multiple functions and indicators. It is in permanent communication with the unit and allows the setting of the ventilation speed, the summer by-pass, frost protection and absence mode.

The absence mode is particularly beneficial when the residents are on holiday or away for a longer time period. The control module also

provides an indication of energy saving in kW/hr/month, battery level, indoor temperature and filter change.

The intelligent filter change indicator is programmed to monitor the level of particulate in the filters and will notify the user when these need replacing, as opposed to simply being set to a specific time period. This ensures optimum efficiency of the unit and that filters are only replaced when necessary.

Integrated



Wall



Surface



> Innovative Control Module

The programmable control module is a radio frequency remote control with multiple user functions.

→ 3 programming modes

2 PREDEFINED

1 USER CONFIGURABLE

→ Automatic or manual 100% by-pass

→ Automatic defrosting function

→ Absence mode

The programmable control module also incorporates the following indicators.

→ Time

→ Filter change

→ Monthly energy savings in kWh

→ Interior/exterior temperature

→ Ventilation speed

→ Battery charge level

→ Radio frequency signal strength

> Kitchen Boost

The kitchen boost control is a radio frequency remote control providing maximum airflow for half an hour.



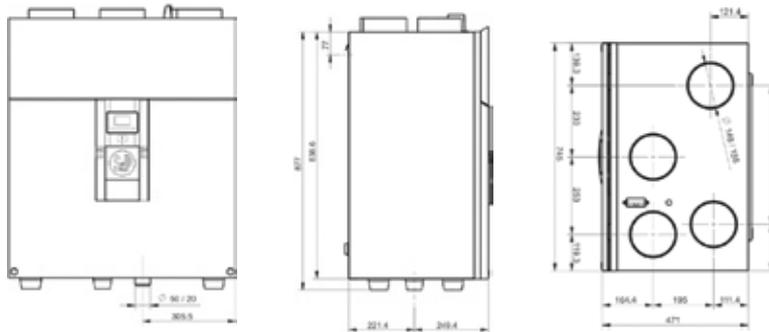
SAP Appendix Q Test Results ▼

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 (%)
Kitchen + 1 additional wet room	-	-	-	-	-
Kitchen + 2 additional wet rooms	90 m³/h	30.8	31.2	1.29	87
Kitchen + 3 additional wet rooms	90 m³/h	31.2	31.8	0.99	87
Kitchen + 4 additional wet rooms	95 m³/h	33.1	34.1	0.88	87
Kitchen + 5 additional wet rooms	120 m³/h	39.6	41.0	0.98	87
Kitchen + 6 additional wet rooms	145 m³/h	45.0	46.3	1.08	87
Kitchen + 7 additional wet rooms	170 m³/h	51.9	53.1	1.25	86

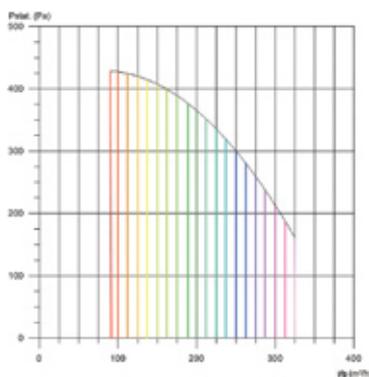
Technical Characteristics ▼

Model	Voltage	Airflow l/s (m³/h)		Power (W)		Current (A)		Sound Power @ 3m dB(A)		Weight (Kg)
		Min	Max	Min	Max	Min	Max	Min	Max	
IDEO 325	230	(45/90)	(325)	21	198	0.1	0.7	22.9	35.5	45

Dimensions (mm) ▼



Performance Curve ▼



Accessories ▼

Filter Kit F5/G4	KIT F5/G4 IDEO
Filter Kit F7/G4	KIT F7/G4 IDEO
Filter G4	KIT G4 IDEO
Additional Wireless Boost Switch	BOOST IDEO
Air Quality Sensor	SQA
Humidity Sensor	HIG-2

Technical Specifications ▼

Product

High performance whole house heat recovery unit.

Application Suitability

Shall be suitable for houses with a kitchen plus up to 7 additional wet rooms. The IDEO will ventilate the property in full compliance with current building regulations and is SAP Appendix Q eligible. The unit is Energy Savings Trust Best Practice Performance Compliant.

Installation

The motor shall be Low Watt EC.

Performance

Description	Kitchen + Additional Wet Rooms						
	+1	+2	+3	+4	+5	+6	+7
Heat Recovery Efficiency (%)	-	2 x 21 l/s	2 x 27 l/s	2 x 33 l/s	2 x 39 l/s	2 x 45 l/s	2 x 51 l/s
Specific Fan Power (SFP) (W/l/s)	-	1.29	0.99	0.88	0.98	1.08	1.25
Fan Speed Setting (m³/h)	-	90	90	95	120	145	170

Motor

Incorporates the Ultra Low Watt EC motor technology with sealed for life ball bearings designed to operate continuously at a pre-set 'background' rate.

Fans

The unit shall incorporate two high performance forward curved continuous running fans.

Heat Exchange Cell

The heat exchange cell within the unit shall be a counter-flow, multi plate heat exchanger manufactured from Polyethylene (PE) and shall be designed to deliver up to 87% efficiency.

Construction

The housing of the unit shall be constructed out of powder coated sheet metal with the internal casing constructed out of EPP moulding.

Filtration

There shall be filters incorporated into the unit to protect both the extract and supply air. An F5 filter (optional f& filter available) shall protect the supply airflow with a G4 pre-filter. A G4 filter shall protect the extract airflow.

Controls

The unit shall be controlled through various options: Using a wireless boost switch (1 switch supplied as standard, additional switches available to order on request); programmable remote control module (as standard); or remote sensors such as humidity sensor or air quality sensor as optional extras.

Maintenance/Serviceing

The unit shall require cleaning/replacement of the filters located within the unit every 6 to 12 months depending on conditions of use, location etc. The remote control module will indicate when the filters should be replaced. These are located in the front of the unit within easy access for the user. The motor, fan and heat exchange cell shall require a service check once every 5 years. This is enabled by removing the front cover and cleaning any dust away with a dry brush.

Accreditation

SAP Appendix Q eligible

Order Code

IDEO

Standard IDEO unit

envirovent

For more information on this product call 0845 27 27 810