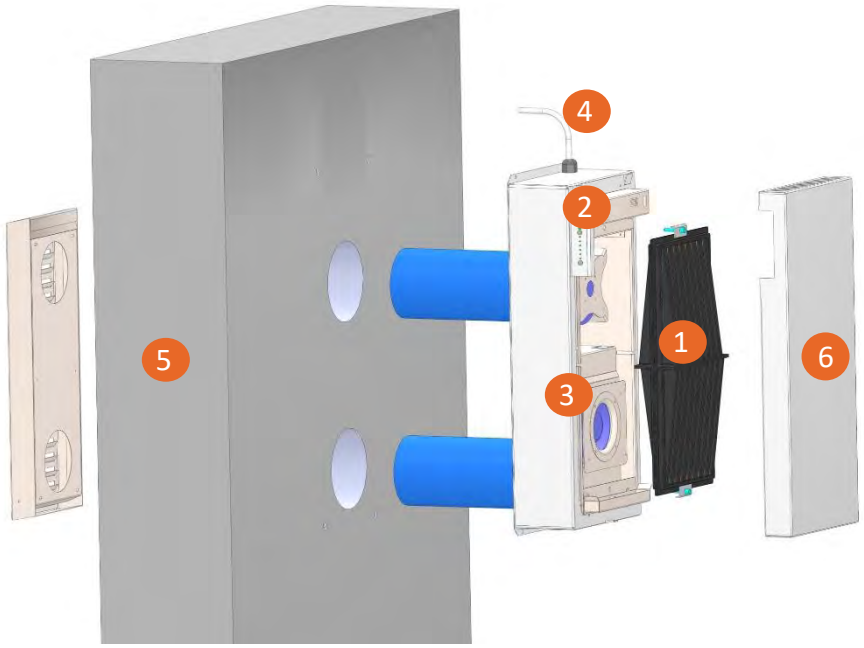
Fresh-r
Smart indoor air care

Fresh-r Compac On-the-Wall
Specifications and Data

Smart measurement and control technology that reuses heat in the winter and coolness in the summer.

Keeps it comfortable indoors and the air healthy, without losing energy.

Demand-driven and balanced HR ventilation without ducts.



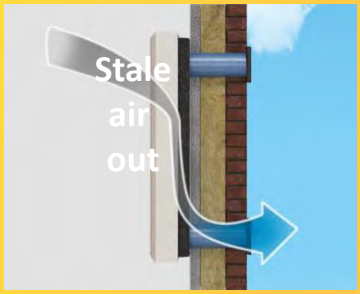
Key Features

1. The heat exchanger is made of copper, that conducts heat 1000 times better than polyethylene, of which other heat exchangers are made. Therefore temperature is exchanged from the outgoing air to the incoming air in a much shorter air path, which has multiple advantages:
   1. Keeps the unit compact;
   2. Low pressure drop, resulting in low fan energy usage and very low noise levels;
   3. Sub-zero °C efficiency;
   4. A thermal efficiency of 90% at 60 m^3 / hour.
2. Air quality is monitored by CO_2 sensor and humidity sensor. Dust sensors are optional.
3. Ventilators refresh the indoor air, with a capacity of up to 120 m^3 per hour.
4. Runs on 220 Volt, with average use below 7 Watt, the same as one led lamp.
5. The outside wall. Fresh-r can be installed both on as well as in the wall. For on the wall installation, only two holes of 130 mm need to be drilled.
6. Easy to maintain with low maintenance costs. All parts are easily accessible through a sound-insulated door.

✓ 3 year warranty when connected to Wi-Fi or LTE.
2 year warranty when not connected to Wi-Fi or LTE.

CERTIFIED COMPONENT
Passive House Institute

World champion in ventilation



Fresh-r is like a breathing window

Technical Data

Heat exchanger	Copper wire
HE efficicency	90 % *
ErP label	A+
Controls	CO_2 / RH / Temp.
Balanced	Yes
Mounting	In the wall or On the wall
Outside duct diameter	100 mm duct, 120 mm incl. insulation sleeve
Extract duct connection	Optional
Condensate discharge	Integrated in exhaust
Electricity supply	230v/1ph/50Hz
Max power consumption Average power consumption	25 Watt 7 Watt
Wi-Fi inside / LTE inside	Yes / Optional
Filter class	M5 standard F8 optional
Dimensions (HxWxD in mm) - On the wall - In the wall body - In the wall door	 716 x 284 x 192 638 x 284 x 134 725 x 326 x 58

* Test at norm volume of 60 m^3/hr and 87 % at 80 m^3/hr performed by BRE UK in accordance with the requirements of EN308:1997

Flow & electricity

25 m^3/ hr (7 l/s)	5.3 Watt
53 m^3/ hr (15 l/s)	11.7 Watt
76 m^3/ hr (21 l/s)	17.6 Watt

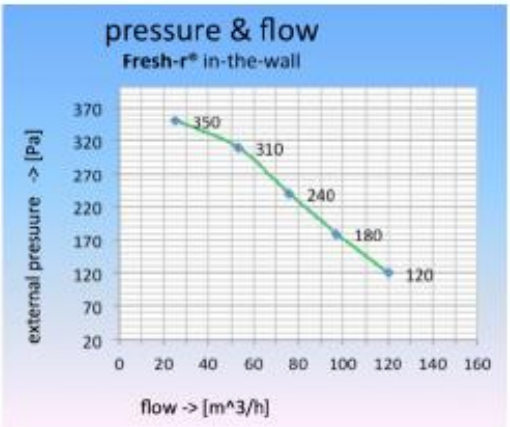
Testing by BRE planned for SAP Appendix F.
To be certified as Passive House component.

Flow & sound

35 m^3/ hr (7 l/s)	25 dB(A)
65 m^3/ hr (15 l/s)	30 dB(A)
80 m^3/ hr (21 l/s)	35 dB(A)

NEN-EN-ISO 3741 tested by Cauberg-Huygen

Pressure Flow Graph



Air flow control

The Fresh-r saves 35% (avg.) on the overall ventilation energy by only ventilating when needed. The air flow rate is automatically adjusted to keep air quality good (1200 PPM CO_2 level). CO_2 and RH sensors with its smart control are always included in the Fresh-r and are situated in outgoing air stream. The automatic mode can manually be overruled for 90 minutes by increasing / decreasing fan speed. The user interface indicates the air quality level in 3 steps with icons for good, medium and bad.

Air balance control

Two backward curved fans are continuously balanced using smart controls combined with 4 temperature sensors. This worldwide patented system enables very direct balance control, also with strong winds.

Minimised cold bridge

The cold side of the Fresh-r is completely separated from the warm side.

Circular Design

The design of the Fresh-r takes into account the different technical lifespans of various components. Repair and reuse of all used parts - for other Fresh-r's or a completely different product - is easy because the Fresh-r is designed for disassembly for a circular economy.

Fresh-r, Vaventis BV reserve the right, in the interests of continuous development, to alter specifications without prior notice. All orders are accepted subject to our conditions of sale which are available on request.

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www.fresh-r.eu

Fresh-r is a brand name of Vaventis BV

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