



**Fresh-r**

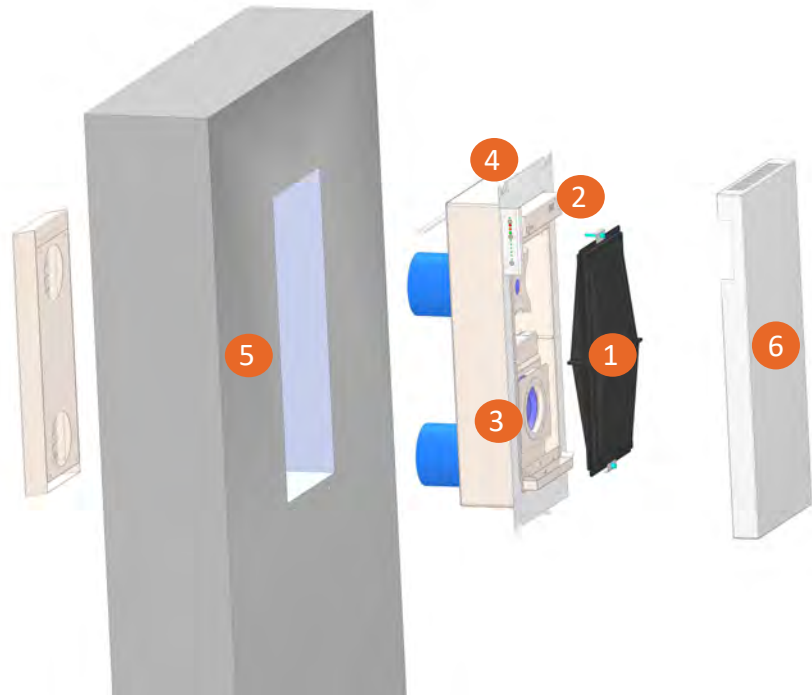
Smart indoor  
air care

# Fresh-r Compac In-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.

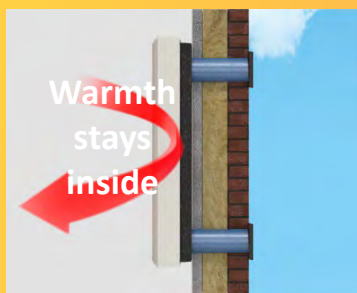


## Key Features

- 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. Below freezing point efficiency;
    4. Thermal efficiency of 90% at 35 CFM.
  - 2** Air quality is monitored by CO2 sensor, humidity sensor and temperature sensors. Ultra fine dust sensors are optional.
  - 3** Ventilators refresh the indoor air, with a capacity of up to 74 CFM.
  - 4** Runs on 110 Volt, with average use below 7 Watt, the same as one led lamp.
  - 5** Fresh-r can be installed both on and in the outside wall. For on the wall installation, only two holes of 5 inch need to be core drilled.
  - 6** Easy to maintain with low maintenance costs. All parts are easily accessible through a sound-insulated door. The heat-exchanger needs to be rinsed with water every six months.
  - 7** MERV 13-14 fine dust filter is optional.
-  2 year warranty when not connected to Wi-Fi or LTE.  
3 year warranty when connected to Wi-Fi or LTE.  
Extended warranty upon request.



World champion  
in ventilation



Fresh-r is like a breathing window

## Technical Data

Heat exchanger	Copper wire
HE efficiency	90 % *
ErP label	A+
Controls	CO <sub>2</sub> /RH /Temp /PM
Balanced	Yes
Mounting	In the wall or On the wall
Outside duct diameter	4 inch duct, 5 inch incl. insulation sleeve
Extract duct connection	In next model
Condensate discharge	Integrated in exhaust
Electricity supply	110V/1ph/60Hz
Max power consumption	25 Watt
Average power consumption	7 Watt
Wi-Fi inside / LTE inside	Yes / Optional
Filter class	Standard MERV 9-10 In next model MERV 13-14 optional
Dimensions (LxWxD in inches)	
- On the wall	28.2 x 11.2 x 7.6
- In the wall body	25.1 x 11.2 x 5.3
- In the wall door	28.5 x 12.8 x 2.3

\* Test at norm volume of 35 CFM and 87 % at 47 CFM performed by BRE UK in accordance with the requirements of EN 13141-7/8 and EN 308:1997

## Flow & electricity

15 CFM	5.3 Watt
31 CFM	11.7 Watt
45 CFM	17.6 Watt

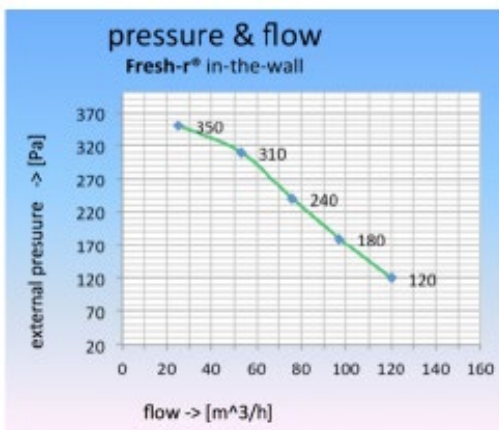
Testing by BRE UK, SAP Appendix F.  
Certified Passive House component.

## Flow & sound

20 CFM	25 dB(A)
38 CFM	30 dB(A)
47 CFM	35 dB(A)

NEN-EN-ISO 3741 tested by Cauberg-Huygen

## Pressure Flow Graph



## Air flow control

The Fresh-r saves 65% (avg.) on the overall ventilation flow by only ventilating when needed. The air flow rate is automatically adjusted. CO<sub>2</sub>, RH and temperature 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 by increasing / decreasing fan speed. The user interface indicates the air quality level in 3 steps with icons for good, medium and poor.

## 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.

## Modular Design

The Fresh-r is constructed of independent modules that can be easily connected, disconnected, or interchanged. Each module typically performs a particular task. This design approach offers benefits like ease of maintenance and cost-effectiveness.

**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.com](http://www.fresh-r.com)

Fresh-r is a brand name of  
Vaventis BV

