

Certificate

Passive House suitable component

For cool, temperate climates, valid until 31 December 2014

Category: **Heat recovery unit**
Manufacturer: **Paul Wärmerückgewinnung GmbH**
08141 Reinsdorf, GERMANY
Product name: **novus 450**

This certificate was awarded based on the following criteria:

Thermal comfort	$\theta_{\text{supply air}} \geq 16.5 \text{ °C}$ at $\theta_{\text{outdoor air}} = -10 \text{ °C}$
Effective heat recovery rate	$\eta_{\text{HR,eff}} \geq 75\%$
Electric power consumption	$P_{\text{el}} \leq 0.45 \text{ Wh/m}^3$
Airtightness	Interior and exterior air leakage rates less than 3% of nominal air flow rate
Balancing and adjustability	Air flow balancing possible: yes Automated air flow balancing: yes
Sound insulation	Sound level $L_w \leq 35 \text{ dB(A)}$ not met Here $L_w = 52.9 \text{ dB(A)}$ Unit should be installed so that it is acoustically separated from living areas
Indoor air quality	Outdoor air filter F7 Extract air filter G4
Frostprotection	Frost protection for the heat exchanger with continuous fresh air supply down to $\theta_{\text{outdoor air}} = -15 \text{ °C}$

Further information can be found in the appendix of this certificate.

Certified for air flow rates of

140 – 348 m³/h

$\eta_{\text{HR,eff}}$

89%

Electric power consumption

0.29 Wh/m³



CERTIFIED COMPONENT

Passive House Institute