## **Certificate**

## **Certified Passive House Component**

For cool, temperate climates, valid until 31 December 2014

Category: Heat recovery unit

Manufacturer: Paul Wärmerückgewinnung GmbH

08141 Reinsdorf, GERMANY

Product name: novus F 300

## This certificate was awarded based on the following criteria:

Thermal comfort	$\theta_{\text{supply air}} \ge 16.5  ^{\circ}\text{C}^{-1)}$
	at $\theta_{\text{outdoor air}} = -10 ^{\circ}\text{C}$
Effective heat recovery rate	η <sub>HR,eff</sub> ≥ 75%
Electric power consumption	P <sub>el</sub> ≤ 0.45 Wh/m³
Moisture recovery	Moisture recovery rate < 0.6 no Adjustment of air flow by means of moisture control required: yes
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 $L_w \le 35$ dB(A) not met Here $L_w = 43.0$ dB(A) Unit must be installed in a separate building services room.
Indoor air quality	Outdoor air filter F7 Extract air filter G4
Frost protection	Frost protection for the heat exchanger with continuous fresh air supply down to θ <sub>outdoor air</sub> = -15 °C

1) Only with additional heater coil in the supply air stream

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

Passive House Institute
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Certified for air flow rates of

121 - 231 m<sup>3</sup>/h

 $\eta_{HR,eff}$ 

84%

Average moisture recovery  $\eta_x=0.73$ 

Electric power consumption

0.26 Wh/m<sup>3</sup>

