

Certificate

Passive House suitable component

For cool, temperate climates, valid until 31 December 2012

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
GERMANY



Category: **Heat recovery unit**
Manufacturer: **Helios Ventilatoren GmbH & CO KG**
78056 Villingen-Schwenningen,
GERMANY
Product name: **KWL EC 700 D**

This certificate was awarded based on the following criteria:

Thermal comfort	$\theta_{\text{supply air}} \geq 16.5 \text{ }^\circ\text{C}$ at $\theta_{\text{outdoor air}} = -10 \text{ }^\circ\text{C}$
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 pressure level $L_p \leq 35 \text{ dB(A)}$ based on a 4 m ² equivalent absorption area not met Here $L_p = 61 \text{ dB(A)}$ 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 $\theta_{\text{Outdoor air}} = -15 \text{ }^\circ\text{C}$

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

www.passivehouse.com

Certified for air flow rates of

210 - 500 m³/h

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

82%

Electric power consumption

0.37 Wh/m³



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