

# Certificate

## Certified Passive House Component

For cool, temperate climates, valid until 31 December 2014

Passive House Institute  
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Category: **Heat recovery unit**  
Manufacturer: **Zehnder Group Nederland B.V.**  
**8028 PM Zwolle, NETHERLANDS**  
Product name: **ComfoAir 550, ComfoD550, WHR960**

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

|                              |   |
|------------------------------|---|
| Thermal comfort              | $\theta_{\text{supply air}} \geq 16.5 \text{ °C}$<br>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<br>Automated air flow balancing: no  |
| Sound insulation             | Sound level $L_w \leq 35 \text{ dB(A)}$ not met<br>Here $L_w = 48.1 \text{ dB(A)}$<br>Unit should be installed so that it is acoustically separated from living areas |
| Indoor air quality           | Outdoor air filter F7<br>Extract air filter G4  |
| Frostprotection              | Frost protection for the heat exchanger with continuous fresh air supply down to<br>$\theta_{\text{Outdoor air}} = -15 \text{ °C}$                                    |

1) up to 308 m<sup>3</sup>/h just with additional external freezing protection

Further information can be found in the appendix of this certificate

**Certified for air flow rates of**

**110 - 240  
(308)<sup>1</sup> m<sup>3</sup>/h**

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

**84%**

**Electric power consumption**

**0.31 Wh/m<sup>3</sup>**

