

# Certificate

## Passive House suitable component

For cool temperate climates, valid until 31 December 2012

Passive House Institute  
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Category: **Thermal bridge free connection**  
Manufacturer: **Finnforest Merk GmbH**  
**86552 Aichach, GERMANY**  
Product name: **Leno Brettsperrholz**

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

Heat transfer coefficient of building envelope:

$$f * U_{\text{opaque}} \leq 0.15 \text{ W}/(\text{m}^2\text{K})$$

with f: temperature reduction factor

Thermal bridge free design:

$$\Psi_e \leq 0.01 \text{ W}/(\text{mK}) \text{ for key connection details}$$

with  $\Psi_e$ : linear heat transfer coefficient

$$U_{\text{w,standard window, installed}} \leq 0.85 \text{ W}/(\text{m}^2\text{K})$$

with standard window: width 1.23 m; height 1.48 m

Interior surface temperatures above 17°C

at  $\vartheta_{\text{ext}} = -10^\circ\text{C}$  und  $\vartheta_{\text{int}} = 20^\circ\text{C}$

Airtightness of all components and connection details is provided

### Certified connection details as per the certification report are listed below:

(further information see Appendix!)

Foundation/ exterior wall: AW\_L\_41PH, AW\_L\_42PH (240 / 300), AW\_L\_48PH (300 / 360 / 400), AW\_L\_51PH, IW\_L\_46PH (200 / 240)

Exterior wall: AW\_L\_01PH, AW\_L\_02PH, AW\_L\_03PH, DE\_L\_40PH

Roof: DA\_L\_20PH, DA\_L\_23PH, DA\_L\_28PH

Windows: F1

