

# Certificate

## Certified Passive House Component

for cold climate, valid until 31.12.2026

Passive House Institute  
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Category: **Attic staircase**  
 Manufacturer: **Wellhöfer Treppen GmbH & Co.KG**  
**97084 Würzburg, GERMANY**  
 Product name: **Passive House Attic Stairs**  
**with PH-connection-system**

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

A given component size of 1.40 m by 0.70 m results in:

$$U_D = 0.48 \text{ W/(m}^2\text{K)} \leq 0.80 \text{ W/(m}^2\text{K)}$$

Taking the installation situations into account, the component meets the following criterion.

$$U_{D,installed} \leq 0.80 \text{ W/(m}^2\text{K)}$$

Functional requirements of hygiene:

$$f_{Rsi} = 0,25 \text{ m}^2\text{KW} \geq 0.70$$

Following thermal bridge coefficients  $\Psi$  [W/(mK)] have been determined:

	Wooden- beam ceiling	Concrete-ceiling	-
<b>Thermal bridge coefficient <math>\Psi</math> [W/(mK)]</b>	0.05	0.07	-
<b><math>U_{D,installed}</math> [W/(m<sup>2</sup>K)]</b>	0.69	0.78	-

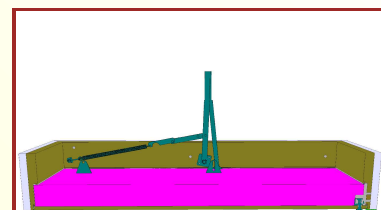
### Description

Coated chipboard ( $\lambda = 0.136 \text{ W/(mK)}$ ) with insulation panel ( $\lambda = 0.039 \text{ W/(mK)}$ ) with two EPDM sealings between frame and insulation panel. In order to reduce the thermal bridge of the installation, the supplied PH-connection-system comprising sealing, jointplait and insulation filling ( $\lambda = 0.033 \text{ W/(mK)}$ ) is installed at the structural connection.

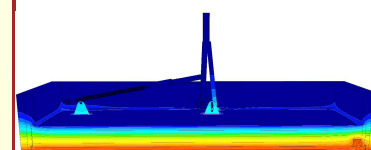
Please ask the manufacturer for a detailed report containing all calculations and results.

[www.passivehouse.com](http://www.passivehouse.com)

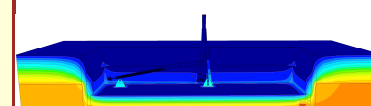
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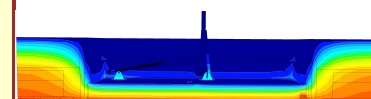
Representation of the Passive House Attic Stairs



Isothermal map of the Passive House Attic Stairs



Isothermal map installation in concrete ceiling



Isothermal map installation in wooden beam ceiling

cold climate



**CERTIFIED COMPONENT**

Passive House Institute

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