

Certificate

Certified Passive House Component
for cool, temperate climate, valid until 31.12.2024

Passive House Institute
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Category: **Attic staircase**
Manufacturer: **FAKRO Sp. z o.o.**
33-300 Nowy Sącz, POLAND
Product name: **LWT**

This certificate was awarded based on the following criteria:

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

$$U_D = 0.51 \text{ W}/(\text{m}^2\text{K}) \leq 1.00 \text{ W}/(\text{m}^2\text{K})$$

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

$$U_{D,\text{installed}} \leq 1.10 \text{ W}/(\text{m}^2\text{K})$$

Functional requirements of hygiene:

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

Following thermal bridge coefficients Ψ [W/(mK)] have been determined:

	Wooden- beam ceiling	Concrete- ceiling	-
Thermal bridge coefficient Ψ [W/(mK)]	0.10	0.14	-
$U_{D,\text{installed}}$ [W/(m²K)]	0.93	1.10	-

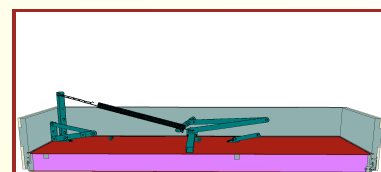
Description

Attic stairs made of pinewood with thermally separated metal fittings and 3 sealing-levels (EPDM). Attic stair hatch of Styrofoam ($\lambda = 0.031$ W/mK) with a coating of high density fibreboard (HDF). Surrounding insulation ($\lambda = 0,035$ W/mK) to ceiling structure connection.

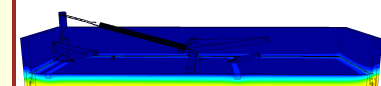
Please ask the manufacturer for a detailed report containing all calculations and results.

www.passivehouse.com

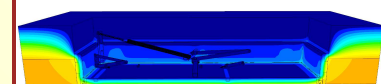
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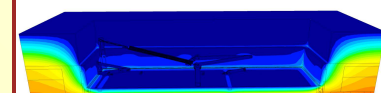
Representation of the Passive House Attic Stairs



Isothermal map of the Passive House Attic Stairs



Isothermal map installation in concrete ceiling



Isothermal map installation in wooden-beam ceiling

cool, temperate climate



CERTIFIED COMPONENT

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