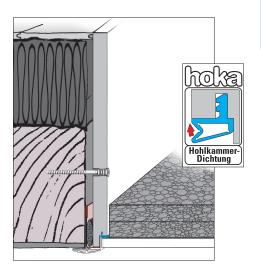
# Wellhöfer attic stairs with WärmeSchutz: More than only insulation!

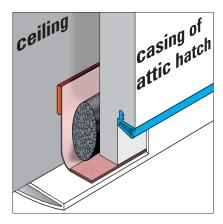




#### Insulation and sealing.

The attic stairs cut in on the ceiling on about 1 sqm. Only the Wellhöfer WärmeSchutz offers full surface covering insulation and the efficient hoka twin-wall sealing. There are no hidden weak points.

Thermal protection - Visibly effective!



### Airtight ceiling connection.

Insulation and sealing are of little use if the air is blowing through the installation gap. It is 4 metres long! Mould growth and structural damage may be the consequence.

The certificated sealing system ensures the airtight installation.

Always included with the Wellhöfer WärmeSchutz.

Sealing system - Ensures the airtight gap!

## Be careful when comparing U-values!

U-value indications for attic stairs differ considerably. Do not let sensational values confuse you. When comparing U-values, it is essential to know how the different values have been created.



U-value
installed, complete component tested
according to DIN EN ISO 12567-1:2001-02
by an independent institute

This simplified sketch of the closed attic stairs (view from bellow) shows: The component tested U-value for the complete attic stairs is the honest one. Insist on this! With the U-value, look for the information:

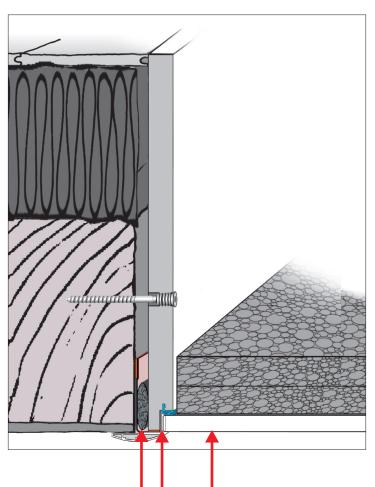
■ tested ■ DIN EN ■ Test institute

Only the test certificate proves that the value is reasonable.

Wellhöfer WärmeSchutz - With the honest U-value. Component tested.



# Wellhöfer attic stairs with WärmeSchutz. More than only insulation!



- **Double Insulation**
- + Twin-wall sealing
- + Sealing System
- = WärmeSchutz
  - = thermal protection



### **Certificated reliability!**

Be careful when comparing values! Look out for **test certificates from independent institutes.** Wellhöfer thermal protection stands for:

WärmeSchutz 4D: Insulation value U=0,78 W/(m²K) tested and certified, DIN EN ISO 12567-1: 2001-02, for Wigher expectations! IBP Fraunhofer Stuttgart, 22.10.2009, test report no. P5-185/2009

Sealing value attic stairs a=0,03 m³/hm(daPa²³) tested and certified, DIN EN 1026: 2000-09, ift Zentrum PTE Rosenheim, 06.06.2011, test certificate no. 11/03-A118-Z1

Sealing value sealing system  $a=0.02 \, \text{m}^3/\text{hm}(\text{daPa}^{23})$  tested and certified, based on DIN EN 1026: 2000-09, that is what is what is important! ift Zentrum PTE Rosenheim, 06.06.2011, test certificate no. 11/03-A118-Z3

Component tested and certificated values: Reliability for EnEV\* and blower-door-test.

\*(German Energy Conservation Regulation)





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