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### Testreport

Project number: 89210247  
Report number: 89210247.48en

Date  
30/06/2017

Project number  
89210247

Received:  
An underlay system, marked as: “**Heat-Pak 7.0 mm**”;  
TÜV-reference: MT17-117021.47

Report number  
89210247.48en

Phone number client  
+31 (0) 570 85 55 33

#### Sampling procedure:

The samples are selected by the applicant. The test house has had no influence on the sampling procedure.

Fax number client  
+31 (0) 570 85 55 44

The samples have been received on 14/06/2017.

#### Order:

To determine the Thermal resistance, according to ISO 8302:1991 & EN 126d7:2001

Article  
Heat-Pak 7.0 mm

#### Results:

See page three.

Appendix  
- none -

#### Appendix:

None.

TRN applies General Terms & Conditions which are filed at the office of the Clerk for civil affairs at the Court in Zutghen (the Netherlands) under number 35/2010, dated November 17th 2010.

## PRODUCT IDENTIFICATION

Applicant

Productname

*\* Applicant's declaration*

Unifloor Underlay Systems

: Heat-Pak/ Jumpax Basic

7.0 mm\*

Date  
30/06/2017

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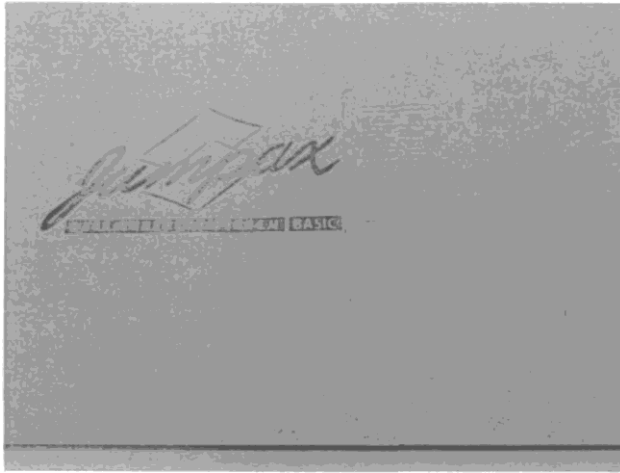


Figure 1. Picture of the received sample (surface)

**Date**  
 30/06/2017

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**Article**  
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**TEST RESULTS**
**Thermal resistance (Thermal conductivity)**

Method ISO 8302:1991 and EN 12667:2001

**Method**                      A sample is placed between a cold and a warm plate. The cold and the warm plate are kept at constant temperature. The amount of energy needed to keep the temperature of the warm and cold plate constant is an indication for the heat transmission. The thermal resistance (R) of floor coverings its common to declare the value at 23 °C as R23 in m<sup>2</sup>. K/W. Alternatively, the value of the thermal conductivity (Z) can be declared at 23°C, expressed as k23 in mW/(m K).

k : Thermal conductivity

R: Thermal Resistance

**Test conditions**        : 20 -± 2°C and 65 -± 4% relative humidity

**Week of testing**        : 25 / 2017

**Thermal resistance**

Temperature	Temperature difference	Resistance to heat transmission R in m <sup>2</sup> . K/W
Rif 18 °C	10 K	0.0746
R23 23 °C	10 K	0.0724
Res 28 °C	10 K	0.0702

**Thermal conductivity**

Temperature	Temperature difference	Thermal conductivity k in mW/m.K
kis 18°C	10 K	111.42
k,, 23°C	10 K	114.82
28 28°C	10 K	118.40

**Author:**  
 Mr. M.A. van de Vlekkert


**Review:**  
 Mr. J. de Wolff


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(End of report)