Textiles & Flooring Institute GmbH

TFI Report 452039-15

Thermal Resistance

Customer

LG Hausys Ltd.
One IFC, 20 Yeouido-gong, Yeongdeungpo-gu
150-876 Seoul
SOUTH KOREA

Product

resilient floor covering

Medistep Allroad

Responsible at TFI

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This report includes 2 pages and 1 annex(es)

This report is a transcription of test report no. 452039-01.

Aachen, 14.01.2016

Dr. Ernst Schröder

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Textiles & Flooring Institute GmbH

1 Transaction

Test order	thermal resistance according to EN 12667
Order date	18.11.2015
Your reference	Dan Bi
Product designation	Medistep Allroad
TFI sample number	15-11-0188

2 Product Specification

Use surface	PVC*
Construction	homogeneous
Structure	flat
Pattern	tonal effect without pattern
Colour of the use surface	beige, light beige
View	 
Thickness [mm]	2.0*
Area density [g/m²]	2950*
Type of delivery	broadloom
	*customer information

3 Results

Thermal resistance	R = 0,0113 [m²K/W]

4 Annexes

Thermal resistance	WD 452039-15[a]

The annexes marked [a] are based on tests accredited in accordance with EN ISO/IEC 17025.

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Annex WD - Thermal Resistance

1 Transaction

Product designation	Medistep Allroad
TFI sample number	15-11-0188
Testing period	18.12.2015 - 19.12.2015

2 Test Method / Requirements

Test method	EN 12667:2001
	Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Dry and moist products with medium and low thermal resistance
Test device	One-specimen apparatus, horizontal
Conditioning	24 h storage according to EN ISO 139:2011
	(23°C and 50% rel. humidity)
Thickness buit-in [m]	0,0059
Number of Layer	3
Density [kg/m³]	1475

3 Results

Test	T_1 [°C]	T_2 [°C]	ΔT [K]	T_m [K]	R [m²*K/W]
1	17.3	27.4	10.1	22.4	0.03165
2	27.1	37.1	10.0	32.1	0.02949
3	37.0	46.9	9.9	41.9	0.02795
Calculated thermal resistance $1/\Lambda_{10}$ one layer at a mean temperature of 10 °C [m²k/W]					**0.0113**

T_1: temperature of the cold surface of the specimen

T_2: temperature of the warm surface of the specimen

ΔT: temperature difference; $\Delta T = T_1 - T_2$, T_m

T_m: average temperature of the specimen; $T_m = T_1 + T_2$

R: Increment of thermal resistance

Comments: none