

Fraunhofer-Institut für Bauphysik IBP

Forschung, Entwicklung,
Demonstration und Beratung auf
den Gebieten der Bauphysik

Zulassung neuer Baustoffe,
Bauteile und Bauarten

Bauaufsichtlich anerkannte Stelle für
Prüfung, Überwachung und Zertifizierung

Institutsleitung

Univ.-Prof. Dr.-Ing. Gerd Hauser

Univ.-Prof. Dr.-Ing. Klaus Sedlbauer

Test Report P1-265.1e/2012

Determination of the Thermal Resistance and the Thermal Conductivity According to DIN EN 12667 of Polyethylene Foam Floor Underlay »Warm Sand«

Client:

Fair Packaging SP. z o.o. SP. K

Gruszowa 21, Galowo

64-500 Szamotuly

Poland

Stuttgart, February 18, 2013

Prüflabor durch das DAP akkreditiert
nach DIN EN ISO/IEC 17025:2005



DEUTSCHES
AKKREDITIERUNGSSYSTEM
PROFESSEN GMBH **DAP**



DAP-PL-3743.27
Wärme-Kennwerte

Prüflabor Wärme-Kennwerte
Nobelstraße 12 | 70569 Stuttgart
Telefon +49 711 970-3333
Telefax +49 711 970-3340
www.ibp.fraunhofer.de/pruefstellen

Thermal resistance and thermal conductivity according to DIN EN 12667: 2001

Client:	Fair Packaging SP. Z o.o. SP. K.; Gruszowa 21; Galowo; 64-500 Szamotuly Poland
Test method/test equipment/ installation of test specimens:	two specimen guarded hot-plate apparatus, 150 mm test apparatus no. 9, horizontal installation of specimens, ambient temperature 20 °C, measurement in 4 layers, spacer between hot and cold plate to assure correct thickness of samples
Test period:	calendar week 48 in 2012

Specimens:

description of specimens:	Floor underlay »Warm Sand«		
material:	Foil of Polyethylene foam		
sampling:	delivered by the client on November 7, 2012		
pre-treatment:	Storage at standard conditions (23 °C 50 % rel. Humidity)		
measured specimen parameters:		sample 1	sample 2
density after pre-treatment	kg/m ³	15.6	15.9
relative mass change	kg/kg	-	-
length x width x thickness, before measurement	mm	300 x 300 x 9.3	300 x 300 x 9.1
length x width x thickness, after measurement	mm	300 x 300 x 9.3	300 x 300 x 9.1
relative mass change	kg/kg	0.0	0.0
density after measurement	kg/m ³	15.6	15.9
mass per unit area	kg/m ²	0.14	0.14
moisture content by mass	kg/kg	-	-

Results:

measure- ment no.	mean temperature of the sample surface		mean temperature difference	mean temperature of samples	thermal resistance R 1 layer (2 mm)	thermal conductivity λ
	hot plate side	cooling plate side				
	°C	°C				
1	15.0	5.0	10.0	10.0	0.050	0.040

Special note:

The measured value is no design value according to DIN 4108. Applications to assess design values must be submitted to: Deutsches Institut für Bautechnik DIBt, Kolonnenstraße 30, 10829 Berlin.

The results exclusively refer to the tested object.

The test was carried out in a test laboratory recognized by DIBt according to LBO/BRL with no. BWU-10 and according to BauPG as Notified Body No. 1004 and accredited according to DIN EN ISO/IEC 17025 by the DAP under the no. DAP-PL-3743.27.

This test report consists of 2 pages and replaces test report no. P1-265e/2012, dated December 5, 2012.

Stuttgart, February 18, 2013/JL

Deputy Head of the test laboratory

Responsible engineer

Any partial publication is subject to the written permission of Fraunhofer-Institut für Bauphysik.

Dipl.-Ing. (FH) Andreas Zegowitz

Dipl.-Ing. (FH) Nis Andresen

