

Fraunhofer-Institut für Bauphysik IBP

Bauaufsichtlich anerkannte Stelle für
Prüfung, Überwachung und Zertifizierung

Institutsleitung

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Test Report P1-122e/2018

**Determination of the Thermal Resistance and the
Thermal Conductivity According to DIN EN 12667
of PET Foam "Kerdyn Green FR 180"**

Client:

Gurit Italy S.r.l.

Via Torino 105

10088 Volpiano (TO)

Italy

Stuttgart, May 22, 2018



Deutsche
Akkreditierungsstelle
D-PL-11140-11-04

Prüflabor Wärme-Kennwerte
durch DAkKS GmbH akkreditiert nach
DIN EN ISO/IEC 17025:2005

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Thermal resistance and thermal conductivity according to DIN EN 12667: 2001-05

Client	Gurit Italy S.r.l., Via Torino 105, 10088 Volpiano (TO), Italy
Test method/test equipment/ installation of test specimens	Double hot-plate method, 500 mm test apparatus no. 10 with protective ring, horizontal installation of test specimens, ambient temperature 20 °C
Test period	Calendar week 11 in 2018

Test Specimens:

Description of test specimens	"Kerdyn Green FR 180", No. 07181180, P180214N		
IBP QM no.	18-054		
Material	PET-Foam		
Sampling	Delivered on March 13, 2018 by the client		
Pre-treatment	Storing in laboratory		
Measured specimen parameters		Sample 1	Sample 2
Density after pre-treatment	kg/m ³	181.4	180.8
Relative mass change after pre-treatment	kg/kg	-	-
Length x width x thickness. before measurement	mm	898 x 600 x 20.1	898 x 600 x 20.1
Length x width x thickness. after measurement	mm	898 x 600 x 20.1	898 x 600 x 20.1
Relative mass change	kg/kg	0.000	0.000
Density after measurement	kg/m ³	181.4	180.8

Results:

Measurement no.	Mean temperature of the sample surface		Mean temperature difference	Mean temperature of samples	Heat flux density	Thermal resistance R	Thermal conductivity λ
	Hot plate side	Cold plate side					
	°C	°C					
1	19.8	0.0	19.8	9.9	39.7	0.498	0.0403

Special note:

The results exclusively refer to the tested object.

The test laboratory is recognized by the Deutsches Institut für Bautechnik (DIBt) as a testing facility under applicable building regulations LBO as "PÜZ-Stelle" No. BWU-10 and as a Notified Body No. 1004 to the terms of the Regulation of Construction Products (EU-BauPVO). It has been granted flexible accreditation under DIN EN ISO/IEC 17025 by the Deutsche Akkreditierungsstelle GmbH (DAKKS) under accreditation No. D-PL-11140-11-04.

This test report consists of 2 pages.

Stuttgart, May 22, 2018/JL

Head of the test laboratory

Dipl.-Ing. (FH) Andreas Zegowitz

Responsible engineer

Dipl.-Ing. (FH) Nis Andresen

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