

Fraunhofer Institute for Building Physics IBP

Body recognized by the building authorities
for testing, monitoring and certification

Director

Prof. Dr. Philip Leistner

Test Report P1-302e/2024

Determination of the Thermal Resistance and the Thermal Conductivity According to EN 12664 of Floor Covering “Allura click Flexcore”

Client:

Forbo-Novilon B.V.
Parallelweg 45
7741 KA Coevorden
The Netherlands

Stuttgart, 23. September 2024



Testing laboratory
accredited by DAkkS GmbH according to
DIN EN ISO/IEC 17025:2018

Test laboratory for thermal characteristics
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Thermal resistance and thermal conductivity according to DIN EN 12664: 2001-05

Test method/test equipment/ installation of test specimens	Double Guarded-hot-plate method, 150 mm test apparatus no. 9 with heated protective ring, horizontal installation of test specimens, stack of 5 layers of the floor cover
Test period	Calendar week 38 in 2024

Test specimens manufacturer information:

Description of test specimens	"Allura click Flexcore"
Material	Floor covering with sound insulation layer

Test specimens laboratory data:

IBP-QM-no.	24-199		
Sampling	Delivered on September 13, 2024 by the client		
Pre-treatment	Storing > 24 h at 23 °C/ 50 RH		
Measured specimen parameters		Sample 1	Sample 2
Density after pre-treatment	kg/m³	1237.3	1266.7
Relative mass change after pre-treatment	kg/kg	0.000	0.000
Length x width x thickness before measurement	mm	300 x 300 x 31.5*	300 x 300 x 31.0*
Length x width x thickness after measurement	mm	300 x 300 x 31.5*	300 x 300 x 31.0*
Relative mass change	kg/kg	0.000	0.000
Density after measurement	kg/m³	1237.6	1266.7

*Value for a stack of 5 layers of the floor cover

Results:

Measure- ment no.	Mean temperature of the sample surface		Mean temperatur e difference dT	Mean temperature of samples MT	Heat flux density q	Thermal resistance R	Thermal conductivity λ
	Hot plate side	Cold plate side					
	°C	°C					
1	20.0	0.0	20.0	10.0	77.4	0.050**	0.126
2	34.0	14.0	20.0	24.0	79.7	0.048**	0.130

Estimated measurement uncertainty 3 % according to DIN EN 12664.

**Value for a single layer of the floor cover

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-11140-11-00.

This test report consists of 2 pages.

Stuttgart, September 23, 2024/JL

Head of the Test Laboratory

**Andreas
Zegowitz**

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