# Test Report No. PB 1.5/23-100-1

24 August 2023 No. Copy 1

Contracting body: Scan Underlay

Ursusvej 16 8464 Galten Denmark

Task: Material tests on acoustic under screed isolation

material according to EN 16354

**Product:** Acoustic Silence 360

Samples delivery: 14.08.2023

**Testing period:** August 2023

Persons in charge: Stefan Laut, Head of Laboratory

Dr.-Ing. Stephan Reichel

This report consists of 4 pages.

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## MFPA Leipzig GmbH

Leipzig Institute for Materials Research and Testing

Testing, Inspection and Certification Authority for Construction Products and Constructions Types

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Testing laboratory accredited by DAkkS GmbH according to DIN EN ISO/IEC 17025. The accreditation only applies to the test methods listed in the certificate (in this document marked with \*) which can be seen on www.mfpa-leipzig.de





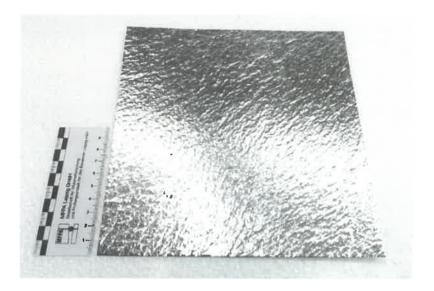


#### **Objectives** 1

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MFPA Leipzig GmbH was commissioned by co. Scan Underlay to test the compression behaviour according to DIN EN 16354, A.3.7 / DIN EN 826\* on the material "Acoustic Silence 360".

On 14 August 2023, five samples (approx. 200 mm x 200 mm x 1 mm) of the material were delivered to MFPA Leipzig GmbH. Further information on the material is not available.



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Figure 1: Material sample (Acoustic Silence 360)

#### 2 **Testing procedure**

DIN EN 16354 2019-01	Laminate floor coverings – Underlays – Specification, requirements and test methods; German version EN 16354:2018
DIN EN 826 2013-05	Thermal insulating products for building applications – Determination of compression behavior; German version EN 826:2013

Specimen: 5 samples with dimensions of 200 x 200 mm<sup>2</sup>

Conditioning: 6 hours storing at 23 °C and 50 % r.h.

Initial load: 600 Pa - 1200 Pa

Testing device: Universal testing machine TT2850, force sensor 20 kN

Parameter: Compressive stress  $\sigma_{0.5}$  at 0.5 mm deformation

Procedure: According to DIN EN 826, the compressive force is applied perpendicular

to the larger surfaces (with a loading plate 100 x 100 mm<sup>2</sup> as described

in DIN EN 16354) and increased at a constant feed rate.



### Results 3

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Table 1: Compression behaviour of Acoustic Silence 360

Date of testing: 21.08.2023				
No.	t	F <sub>0.5</sub>	O0.5	
[-]	[mm]	[kN]	[kPa]	
Α	1.00	4.06	406	
В	0.99	4.03	403	
С	0.99	4.32	432	
D	1.01	4.36	436	
E	1.01	4.38	438	
Mean	1.0	4.23	423	

t Thickness at initial load

 $F_{0.5}$ Compressive force at 0.5 mm

Compressive stress at 0.5 mm  $\sigma_{0.5}$ 

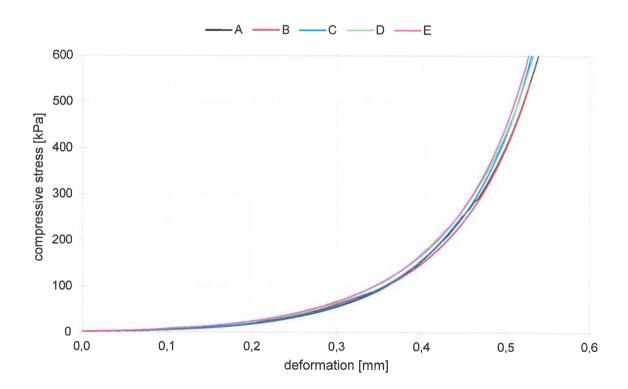


Figure 2: Deformation under compressive stress

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The results of the tests exclusively relate to the items tested. This document does not replace a certificate of conformity or suitability according to national and European building codes. The sampling stage/test item production has not been carried out by the laboratory. The results of the test apply to the sample as received.

Leipzig, 24 August 2023

Dipl.-Ing. Marko Orgass Head of Business Division Dr.-Ing. Stephan Reichel

Head of Work Group

Stefan Laut Head of Laboratory