Textiles & Flooring Institute GmbH

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Test Report No. 411641-01

1 Procedure

Order ..... Determination of sound absorption according to EN ISO 354:2003
Determination of impact sound transmission according to EN ISO 10140:2010

Sample designation ..... BOGOLAN

Order by ..... Balsan S.A.

Date of order 06.10.2011

Your reference ..... Eric Delanne

TFI reference number 11-10-0020

Test official at TFI ..... Dipl.-Ing. Sophia Gelderblom, extension -134

2 Short sample description

Product type ..... textile floor covering

Type of manufacture ..... tufted

Type of surface ..... loop pile

Colouring / patterning ..... with tonal effect

Fibre composition of use surface ..... not determined

Colour ..... red, dark red, white

Type of backing ..... heavy backing with textile bottom

Notified Body No. 1658

Vom Deutschen Institut für Bautechnik (DIBt) anerkannte Prüf-, Überwachungs- und Zertifizierungsstelle

Deutscher Akkreditierungs Rat
DAP-PL-3457.00
kreditiert für die in der Anlage zur DAP-Urkunde genannten Prüfverfahren

Sparkasse Aachen
BIC 390 500 00 · AVC 1331222
IBAN DE22390500000001331222
SWIFT AACSDE33

HRB 8157Aachen
VAT No. DE209411312
Managing Director
Dr. Ernst Schröder

Textiles & Flooring Institute GmbH

3 Test results

According to EN ISO 354:2003 the tested specimen of the aforementioned product has a calculated sound absorption coefficient α_ω of 0,15 (- - H) (annex SA).

According to EN ISO 10140:2010 (all parts) (former EN ISO 140-8:1998) the tested specimen of the aforementioned product has an acoustical insulation from impact noise of 22 dB (annex TS).

4 Annexes

The individual results as well as type and extent of the tests can be found in the following annexes:

Sound Absorption	SA 411641-01
Impact Sound Insulation	TS 411641-01

The annexes marked [a] are based on tests accredited according to EN ISO/IEC 17025.

Aachen, 04.11.2011

Dr. Ernst Schröder

TEXTILES & FLOORING INSTITUTE GMBH AACHEN

The present document is provided with a qualified electronic signature and is valid without autograph signature.

The present test report is established to the best of our knowledge. Only the entire report shall be reproduced. Under no circumstances, extracts shall be used. Furthermore, we apply the “General Terms and Conditions for the Execution of Contracts” of the Textiles & Flooring Institute GmbH, also with regard to the order execution.

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Annex SA – Sound Absorption

1 Procedure

Sample designation.....BOGOLAN
TFI reference number.....11-10-0020
Testing period 02.11.2011

The product identification characteristics can be found on the first page of the test report, respectively in annex KM.

2 Test method

Sound absorption according to EN ISO 354:2003

The standard describes a method to measure the sound absorption level in a room.

3 Remarks

Additionally, the practical and the calculated sound absorption levels according to EN ISO 11654-2:1997-07 are indicated.

The test was carried out by a subcontractor.

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Sound absorption

ISO 354 : 2003

Measurement of sound absorption in a reverberation room

Tested material: **article: BOGOLAN**

Test room: reverberation room, Hauptstraße 133, 52 477 Alsdorf

Test area: 12,0 m²

Test method: method of reverberation room

Date of test: 02.11.2011

Description of the test material:

Total thickness: **5,4 mm**

Mass / area: **4,24 kg/m²**

laid loose on the floor of the reverberation room

Dimension of the test area:

length: 4,00 m

width: 3,00 m

Reverberation room:

Basic plan: trapezoid

Volume: 211 m³

Temperature: 20 °C

Humidity: 65 %

f / Hz	125	250	500	1000	2000	4000
α_s	**0,00**	**0,04**	**0,06**	**0,13**	**0,24**	**0,27**

Surface areas of reverberation room: 213 m²

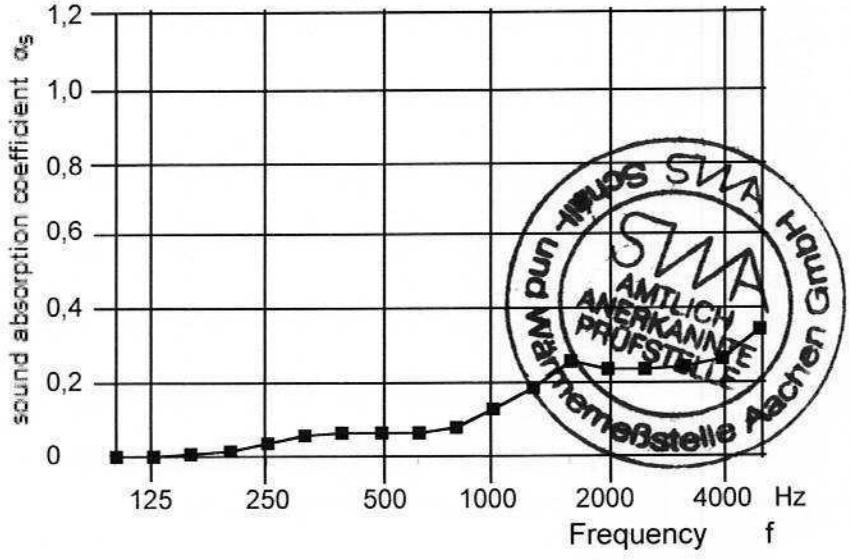
Surface areas of reflectors in reverberation room: 54,5 m²

Reflectors:

6 Alu panels of 1,0 m/ 2,0 m

7 Plywood panels of 1,5 m/ 1,3 m

1 Alu panels of 1,8 m/ 0,9 m



Test sound: third-octave noise

Reception filter: third-octave

Soundabsorber for the application in buildings - valuation of sound absorbtion
Sound absorption of DIN EN ISO 11654 : 1997- 07

Tested material: **article: BOGOLAN**
Test room: reverberation room, Hauptstraße 133, 52 477 Alsdorf
Test area: 12,0 m²
Test method: method of reverberation room
Date of test: 02.11.2011

Description of the test material:

Total thickness: **5,4 mm**

Mass / area: **4,24 kg/m²**

laid loose on the floor of the reverberation room

frequency - range of the "shapeindicators"

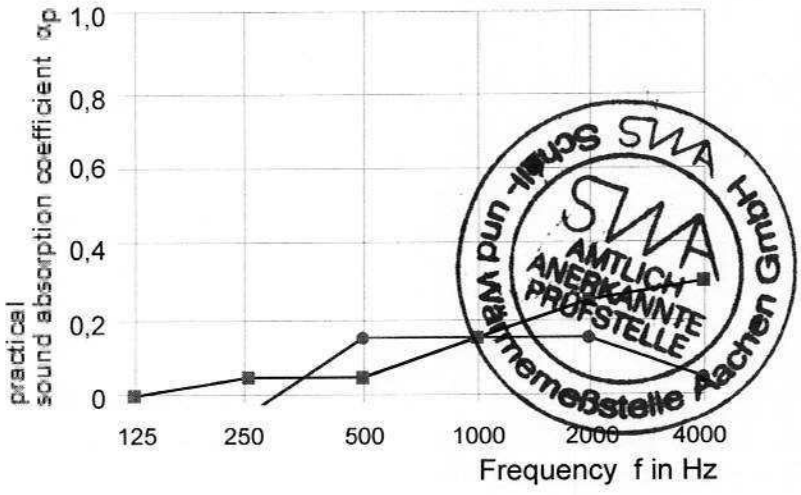
	Frequency in Hz	pactical sound absorption coefficient
	125	0,00
L	250	0,05
M	500	0,05
M	1000	0,15
H	2000	0,25
H	4000	0,30

Results:
Relation - curve:

Reverberation room:
Basic plan: trapezoid
Volume: 211 m³
Temperature: 20 °C
Humidity: 65 %

Surfaces areas of reverberation room: 213 m²

Surfaces areas of reflectors in reverberation room: 54,5 m²



Evaluated sound absorptions grade α_w

α_w : **0,15 (- - H)** *)

*) It is recommended insistently to use this singular valuation with complete curve of sound absorption garde.

Reverberation times

Measurement of sound absorption in a reverberation room

Tested material: **article: BOGOLAN**

Test room: reverberation room, Hauptstraße 133, 52 477 Alsdorf

Test area: 12,0 m²

Test method: method of reverberation room

Date of test: 02.11.2011

Description of the test material:

Total thickness: **5,4 mm**

Mass / area: **4,24 kg/m²**

laid loose on the floor of the reverberation room

Dimension of the test area:

length: 4,00 m

width: 3,00 m

Reverberation times:

f / Hz	To / s	T1 / s
100	8,07	8,04
125	7,10	7,08
160	6,58	6,48
200	7,58	7,28
250	7,07	6,52
315	6,45	5,76
400	6,96	6,08
500	7,48	6,45
630	7,28	6,25
800	6,85	5,82
1000	6,52	5,09
1250	6,33	4,51
1600	5,96	3,91
2000	5,56	3,83
2500	4,65	3,39
3150	3,86	2,94
4000	3,16	2,45
5000	2,55	1,97

Number of loudspeaker positions: 2 Test sound: third-octave noise

Number of microphone positions: 2 x 6 Reception filter: third-octave

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Annex TS – Impact Sound Insulation

1 Procedure

Sample designation.....BOGOLAN
TFI reference number.....11-10-0020
Testing period 03.11.2011

The product identification characteristics can be found on the first page of the test report, respectively in annex KM.

2 Test method

Impact sound transmission according to EN ISO 10140:2010 (all parts) (formerly EN ISO 140-8:1998)

The standard describes a method to measure the impact sound insulation of building products in a test stand.

3 Remarks

Additionally, the calculated value according to EN ISO 717-2:1997 is indicated.

The test was carried out by a subcontractor.

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Impact sound insulation according ISO 10140 (all parts)

Measurement of impact sound insulation by a floor covering
on a solid strings floor

Enclosure: TS

Product name **BOGOLAN**
Construction: textile floor covering
Date of test: 2011-11-03

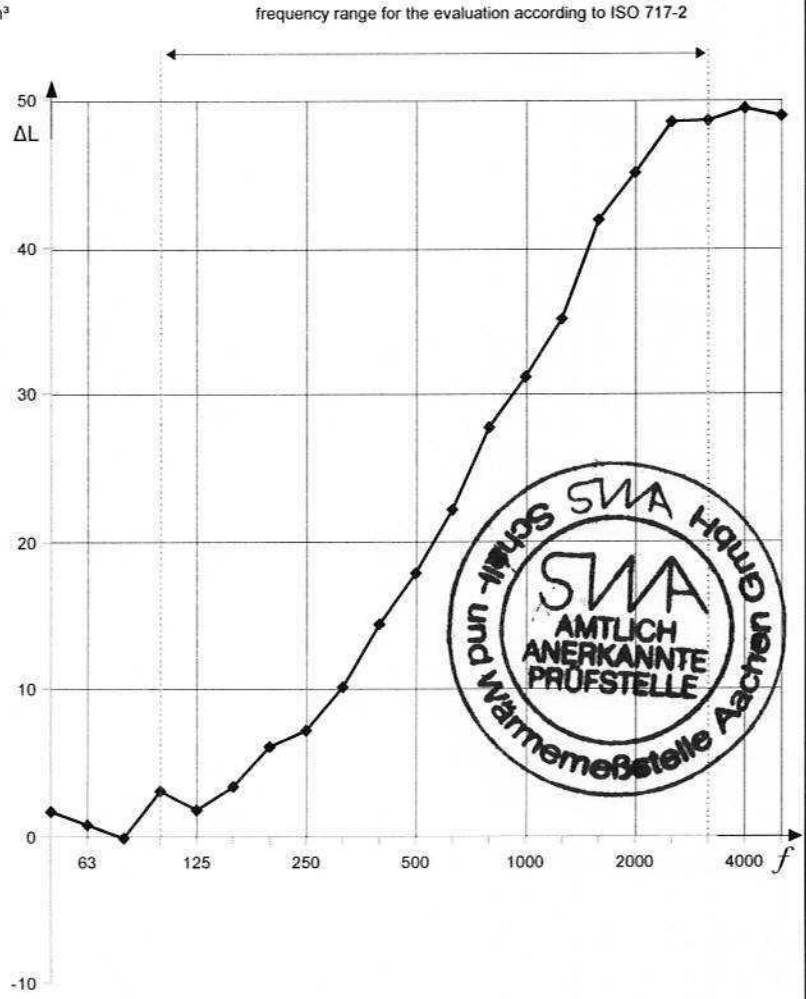
Classification: category I according to ISO 10140
installation: laid loose
setting time: - h
installed by: laboratory

Description of test material:
Total thickness: 5.4 mm
Mass / area: 4,24 kg/m²

Specifies during the test (imprint or damage at the sample)

Test room: 02 and K2, Haupstrasse 133, 52477 Alsdorf, Germany
Temperature in the sending room: 20.0 °C
Humidity in the sending room: 56.0 %
Volume of the receiving room: 58.9 m³

Frequency f Hz	$L_{n,0}$ third-octave dB	ΔL third-octave dB
50		1.7
63		0.8
80		-0.1
100	61.0	3.1
125	61.4	1.8
160	64.8	3.4
200	63.7	6.1
250	65.4	7.2
315	65.6	10.1
400	66.1	14.4
500	66.0	17.9
630	66.4	22.2
800	66.3	27.7
1 000	66.2	31.1
1 250	66.6	35.1
1 600	67.2	41.9
2 000	67.1	45.1
2 500	67.0	48.5
3 150	66.4	48.6
4 000		49.4
5 000		48.9



Legend:
ΔL impact sound protection, in dB
f Frequency in Hz

Calculation according to ISO 717-2

ΔI_w = 22 dB $C_{I,\Delta}$ = -11 dB $C_{I,r}$ = 0 dB $C_{I,r,50\text{-}2500}$ = 3 dB

The results base on tests, which were effected with on artificial source of sound under labratory conditions. (standard method)

Report No.: 411 641

Aachen, 2011-11-03

SWA Schall- und Wärmemessstelle Aachen GmbH

(Dipl.-Ing. A. Siebel)