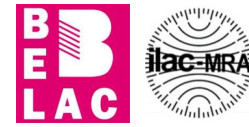


Daidalos Peutz bouwfysisch ingenieursbureau
 Vital Decosterstraat 67A – bus 1
 B-3000 Leuven
 Belgium
 VAT: BE 0454.276.239
www.daidalospeutz.be



N° 451-TEST
 NBN EN ISO 17025:2017
 EA MLA signatory

NOISE LAB
TEST REPORT Number A-2022LAB-106-14-23-45119_E

Customer : Texdecor
 Rue d'Hem, 2
 59780 Willems
 France

Contacts : Client : Max Olivier Loubert
 Noise lab : Els Meulemans

Tests : Measurement of sound absorption in the reverberation room

Product / series name : SlimWall Lines

Reference norm :
NBN EN ISO 354:2003 Acoustics - Measurement of sound absorption in a reverberation room

NBN EN ISO 11654:1997 Acoustics - Sound absorbers for use in buildings - Rating of sound absorption
 NBN ISO 9613-1:1996 Acoustics - Attenuation of sound during propagation outdoors -

part 1 : Calculation of the absorption of sound by the atmosphere

ISO 12999-2:2020 Acoustics - Determination and application of measurement uncertainties in building acoustics
 Part 2: Sound absorption

To perform the above measurements, the laboratory of Daidalos Peutz is accredited by BELAC, "The Belgian Accreditation Body", under the certificate nr N°451-TEST. The activities covered by this accreditation certificate are covered by the EA MLA.
 BELAC is a signatory of all existing multilateral agreements and recognition agreements of International Laboratory Accreditation Cooperation (ILAC).
 In this way, reports issued by BELAC accredited bodies are internationally accredited.

Date and reference of the request:	8/10/2023	2022LAB-106
Date of receipt of the specimen (s):	27/06/2023	SlimWall Lines
Date of construction:	27/06/2023	until 12/07/2023
Date of tests:	27/06/2023	until 12/07/2023
Date of preparation of the test report:	25/09/2023	

The measurements were carried out at Daidalos Peutz Laboratory for Acoustics at Hooglede, see appendix 1
 This test report together with its annexes contains 17 pages and must be multiplied only in its entirety.

Technical Manager,

Paul Mees

Laboratory Engineer,

Els Meulemans

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MEASURING EQUIPMENT

Sound Sources

Brüel & Kjaer - 4292 : Omni Power Sound Source (+ Behringer iNuke NU3000DSP power amplifier)

Microphones and recording

Brüel & Kjaer - 4189-L-001 : 1/2" free field microphone prepolarized, inclusive 2669L TEDS

Brüel & Kjaer - 4189 : 1/2" free field microphone, 6Hz to 20kHz, prepolarized

Brüel & Kjaer - 2669 : 1/2" microphone preamplifier

Brüel & Kjaer - 4231 : Sound calibrator 94&114dB SPL-1000Hz, Fulfil IEC 60942(2003)Class1

Number of source positions:	2	Different sound source positions at least 3m apart
Number of microphone positions for each source position:	8	The measurements shall be made with different microphone positions
Number of measured decays curves:	3	which are at least 1,5m apart, 2m from any sound source and 1m from
Total number of measurements with different positions for microphone & source:	16	any room surface and the test specimen.

Signal processing

Brüel & Kjaer - 2716C : Power amplifier

Brüel & Kjaer - 3050-A-6/0: Signal generator, 6-ch. Inputmodule LAN-XI

Brüel & Kjaer - 3160-A-042: Signal generator, 4/2-ch. Input/output module LAN-XI

Brüel & Kjaer : PULSE Labshop

A PC with all necessary software

Reverberation room

Dimensions of the room:	Volume :	298,31 m ³
	Length:	9,99 m
	Width:	4,97 m
	Height:	5,98 m
	Volume door opening:	1,32 m ³
	Total area:	279,9 m ²
	$I_{max} = 12,65 \text{ m} < 1,9 V^{0,5}$	

In order to improve the diffusivity, the use of diffusers is necessary

The test specimen shall have a maximum area of 15,62 m², which depends on the room volume

NOISE LAB
TEST REPORT Number A-2022LAB-106-14-23-45119_E

TEST METHOD

The tests were conducted in accordance with the provisions of the test method EN ISO354:2003. A detailed description of the test set up can be found in the standard.

The measurement method can be simply described as follows:

The reverberation time of the room is determined in 2 situations:

- an empty reflecting room
- a reflecting room with the test sample inside, which is mounted following the different prescriptions specified in the standard

By adding the test sample inside the room, the reverberation time will be shorter. The reduction of reverberation time is a reference for the amount of added absorption.

From these reverberation times, the equivalent sound absorption area of the test specimen, is calculated by using Sabine's equation. Measurement is carried out in ranges of 1/3 octave and interval from 100Hz to 5000Hz.

The equivalent sound absorption area of the empty reverberation room, A_1 , in square metres, shall be calculated using the formula (1) :

$$A_1 = 55,3 V / (c_1 T_1) - 4V m_1 \quad [m^2] \quad (1)$$

The equivalent sound absorption area of the reverberation room containing a test specimen, A_2 , in square metres, shall be calculated using the formula (2) :

$$A_2 = 55,3 V / (c_2 T_2) - 4V m_2 \quad [m^2] \quad (2)$$

The equivalent sound absorption area of the test specimen, A_T , in square metres, shall be calculated using the formula (3) :

$$A_T = A_2 - A_1 = 55,3 V (1/c_2 T_2 - 1/c_1 T_1) - 4V(m_2 - m_1) \quad [m^2] \quad (3)$$

The sound absorption coefficient of a plane absorber or a specified array of test objects shall be calculated using the formula (4):

$$\alpha_s = A_T / S \quad (4)$$

whereas: A_2, A_1 = the equivalent sound absorption area of respectively the empty reverberation room and the room containing a test specimen [m^2]
 V = volume, in cubic metres, of the empty reverberation room [m^3]
 c_1, c_2 = the propagation speed of sound in air, in [m/s], calculated using the formula
(in function of the temperature in the room during the test)
 $c = 331 + 0,6 t$ with $t =$ the air temperature in degrees Celsius
 for temperatures in the range of 15°C to 30°C
 T_1, T_2 = the reverberation time, in seconds, of the empty reverberation room resp. with test specimen in [s]
 m_1, m_2 = the power attenuation coefficient, in reciprocal metres, calculated according to ISO 9613-1:1993
 A_T = The equivalent sound absorption area of the test specimen in square metres
 S = the area, in square metres, covered by the test specimen
 α_s = the sound absorption coefficient

SPECIAL MEASUREMENT CONDITIONS

-
-
-
-
-

n/a

NOISE LAB
TEST REPORT Number A-2022LAB-106-14-23-45119_E

RATING OF SOUND ABSORPTION

α_p PRACTICAL SOUND ABSORPTION COEFFICIENT

Frequency-dependent value of the sound absorption coefficient which is based on measurements on one-third-octave bands in accordance with ISO 354 and which is calculated in octave bands in accordance with the standard ISO 11654:1997.

The practical sound absorption coefficient, α_{pi} , for each octave band i , is calculated from the arithmetic mean value of the three one-third octave sound absorption coefficients within the octave. The mean value is calculated to the second decimal and rounded in steps of 0,05 and maximized to 1,00 for rounded mean values > 1,00

α_w WEIGHTED SOUND ABSORPTION COEFFICIENT

The weighted sound absorption coefficient is determined as a single number value from the practical sound absorption coefficients from 250 Hz to 4000 Hz. The practical sound absorption coefficient is calculated according to ISO 11654:1997.

Single-number frequency-independent value which equals the value of the reference curve at 500 Hz after shifting is as specified in the standard ISO 11654:1997.

SHAPE INDICATORS, L,M,H

Whenever a practical sound absorption coefficient α_{pi} exceeds the value of the shifted reference curve by 0,25 or more, one or more shape indicators shall be added, in parentheses, to the α_w value.

If the excess absorption occurs at 250 Hz, use the notation L.

If the excess absorption occurs at 500 Hz or 1000 Hz, use the notation M.

If the excess absorption occurs at 2000 Hz or 4000 Hz, use the notation H.

NRC NOISE REDUCTION COEFFICIENT

The NRC is a single-number index determined in a lab test and used for rating how absorptive a particular material is. This industry standard ranges from zero (perfectly reflective) to 1 (perfectly absorptive). It is simply the average of the mid-frequency sound absorption coefficients (250, 500, 1000 and 2000 Hertz) rounded to the nearest 5%.

SAA SOUND ABSORPTION AVERAGE

NRC is being replaced by the Sound Absorption Average (SAA), which is described in the current ASTM C423-17. The SAA is a single-number rating of sound absorption properties of a material similar to NRC, except that the sound absorption values employed in the averaging are taken at the twelve one-third octave bands from 200 Hz to 2500 Hz, inclusive, and rounding is to the nearest multiple of 0.01.

The NRC and SAA results are not within the scope of the accreditation.

Test results related to tested object only. The test results should not be considered as material constants, the absorption depends not only on the material itself. The method of construction, the size of the material surface and its place in the room, affect the sound absorption characteristics of the test element.

ACCURACY

The accuracy of the absorption coefficients as calculated can be expressed in terms of repeatability of measured reverberation times (tests within one laboratory) and reproducibility (between various laboratories)

The expanded uncertainty under reproducibility conditions, U , is calculated in accordance to the standard ISO 12999-2 for the confidence level of 95%, used the coverage factor $k=2$

$$U = u \cdot k$$

with

u = uncertainty under reproducibility conditions

k = coverage factor ($k=2$ for a confidence level of 95%)

U = expanded uncertainty under reproducibility conditions

This standard specifies how to calculate :

- the uncertainty of sound absorption coefficients and equivalent sound absorption areas measured according to ISO 354

- the uncertainty of the practical and weighted sound absorption coefficients determined according to ISO 11654

The numbers given are derived from inter-laboratory measurements with different types of test specimens including suspended ceilings, mineral wool, foams.

NOISE LAB
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1. α_s

SOUND ABSORPTION COEFFICIENT

EN ISO 354:2003
 EN ISO 11654:1997
 ISO 12999-2:2020

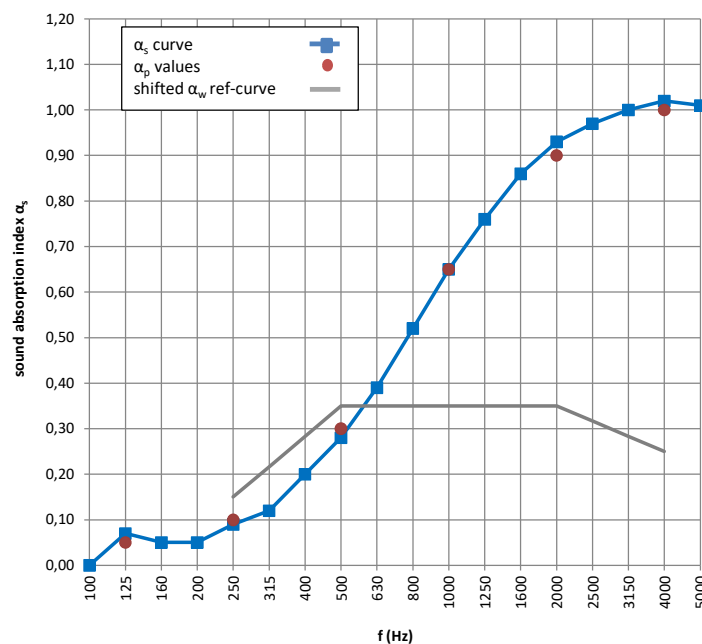
Acoustics - Measurement of sound absorption in a reverberation room
 Acoustics - Sound absorbers for use in buildings - Rating of sound absorption
 Acoustics - Determination and application of measurement uncertainties in building acoustics - Part 2: Sound absorption

Identification number of test element: **14** **Test date:** 27/06/2023
Name of test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Reverberation room: V = 298,3 m³ S_{tot} = 279,9 m²
Room conditions during measurements:
 Empty space With testelement
Temperature: T = 22,6 22,8 °C
Atmospheric pressure: p = 101,46 101,78 kPa
Relative humidity: h_r = 68,2 65,7 %

Type of test element: Plane absorber
Construction characteristics: Mounting type in line with ISO354 Annex B: Type A mounting (directly against a room surface)
 Area of test element: 11,13 m²
 Total thickness: 18 mm
 Number of layers, including air spaces: 1
 Connection of layers: The SlimWall Lines panels were placed, side by side, directly on the floor of the reverberation room

f(Hz)	T ₁ (s)	T ₂ (s)	α_s	$\pm U$ (k=2)
50				
63				
80				
100	9,75	9,85		$\pm 0,03$
125	9,54	8,27	0,07	$\pm 0,06$
160	8,44	7,74	0,05	$\pm 0,04$
200	9,05	8,11	0,05	$\pm 0,04$
250	9,27	7,79	0,09	$\pm 0,05$
315	9,12	7,28	0,12	$\pm 0,05$
400	8,83	6,28	0,20	$\pm 0,05$
500	8,47	5,44	0,28	$\pm 0,06$
630	8,39	4,74	0,39	$\pm 0,07$
800	7,90	4,04	0,52	$\pm 0,07$
1000	8,00	3,63	0,65	$\pm 0,08$
1250	7,72	3,25	0,76	$\pm 0,09$
1600	7,00	2,91	0,86	$\pm 0,09$
2000	6,32	2,66	0,93	$\pm 0,10$
2500	5,51	2,45	0,97	$\pm 0,09$
3150	4,73	2,25	1,00	$\pm 0,09$
4000	3,92	2,03	1,02	$\pm 0,09$
5000	3,24	1,83	1,01	$\pm 0,08$

f(Hz)	α_p	$\pm U$ (k=2)
125	0,05	
250	0,10	$\pm 0,04$
500	0,30	$\pm 0,08$
1000	0,65	$\pm 0,08$
2000	0,90	$\pm 0,08$
4000	1,00	$\pm 0,10$



$\alpha_w = 0,35$ (MH)* $\pm 0,07$ (k=2)
 Sound absorption class: D

NRC = 0,5 **
 SAA = 0,49 **

* It is strongly recommended to use this single-number rating in combination with the complete sound absorption coefficient curve
 ** These results are not within the scope of the accreditation

Requested by: Texdecor, Rue d'Hem, 2,59780 Willems

TESTELEMEN:

(short description by the manufacturer, details: see Annex 1)

SlimWall Lines wall-mounted - type A-mounting

NOISE LAB
TEST REPORT Number A-2022LAB-106-14-23-45119_E

2. α_s

SOUND ABSORPTION COEFFICIENT

EN ISO 354:2003
 EN ISO 11654:1997
 ISO 12999-2:2020

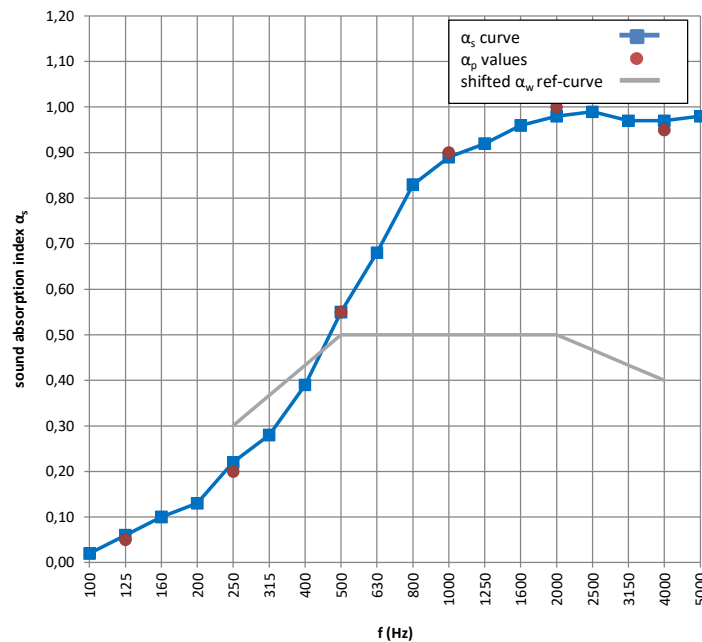
Acoustics - Measurement of sound absorption in a reverberation room
 Acoustics - Sound absorbers for use in buildings - Rating of sound absorption
 Acoustics - Determination and application of measurement uncertainties in building acoustics - Part 2: Sound absorption

Identification number of test element: 23 **Test date:** 12/07/2023
Name of test institute : Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Reverberation room: V = 298,3 m³ S_{tot} = 279,9 m²
Room conditions during measurements:
 Empty space With testelement
Temperature: T = 22,9 22,9 °C
Atmospheric pressure: p = 101,09 101,08 kPa
Relative humidity : h_r = 61,3 61 %

Type of test element: Plane absorber
Construction characteristics: Mounting type in line with ISO354 Annex B: Type E mounting (with an airspace)
 Area of test element: 10,92 m²
 Total thickness: 40 mm
 Number of layers, including air spaces: 2
 Connection of layers: The 'SlimWall Lines' panels, with a thickness of 18 mm, were placed loose against each other on a wooden frame, with a height of 22 mm, to form an empty airgap of 22 mm behind the panels.

f(Hz)	T ₁ (s)	T ₂ (s)	α_s	$\pm U (k=2)$
50				
63				
80				
100	9,73	9,37	0,02	$\pm 0,04$
125	9,17	8,08	0,06	$\pm 0,05$
160	8,35	7,03	0,10	$\pm 0,06$
200	8,98	7,05	0,13	$\pm 0,06$
250	9,12	6,29	0,22	$\pm 0,07$
315	9,05	5,77	0,28	$\pm 0,07$
400	8,74	4,89	0,39	$\pm 0,08$
500	8,46	4,12	0,55	$\pm 0,09$
630	8,55	3,66	0,68	$\pm 0,09$
800	8,23	3,22	0,83	$\pm 0,10$
1000	8,29	3,08	0,89	$\pm 0,10$
1250	7,75	2,94	0,92	$\pm 0,10$
1600	6,98	2,76	0,96	$\pm 0,10$
2000	6,24	2,61	0,98	$\pm 0,10$
2500	5,47	2,45	0,99	$\pm 0,09$
3150	4,60	2,28	0,97	$\pm 0,09$
4000	3,77	2,05	0,97	$\pm 0,09$
5000	3,10	1,83	0,98	$\pm 0,08$

f(Hz)	α_p	$\pm U (k=2)$
125	0,05	
250	0,20	$\pm 0,06$
500	0,55	$\pm 0,08$
1000	0,90	$\pm 0,08$
2000	1,00	$\pm 0,08$
4000	0,95	$\pm 0,10$



$\alpha_w = 0,50$ (MH)* $\pm 0,07$ (k=2)
 Sound absorption class: D

NRC = 0,65 **
 SAA = 0,65 **

* It is strongly recommended to use this single-number rating in combination with the complete sound absorption coefficient curve
 ** These results are not within the scope of the accreditation

Requested by: Texdecor, Rue d'Hem, 2,59780 Willems

TESTELEMANT:

(short description by the manufacturer, details: see Annex 1)

SlimWall Lines on empty plenum of 22mm

NOISE LAB
TEST REPORT Number A-2022LAB-106-14-23-45119_E

3. α_s

SOUND ABSORPTION COEFFICIENT

EN ISO 354:2003
EN ISO 11654:1997
ISO 12999-2:2020

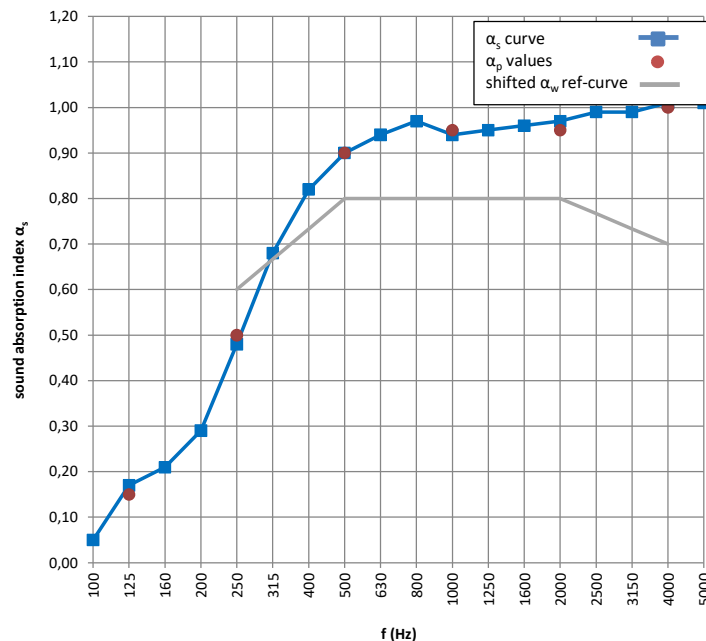
Acoustics - Measurement of sound absorption in a reverberation room
Acoustics - Sound absorbers for use in buildings - Rating of sound absorption
Acoustics - Determination and application of measurement uncertainties in building acoustics - Part 2: Sound absorption

Identification number of test element: **22** **Test date:** 12/07/2023
Name of test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Reverberation room: V = 298,3 m³ S_{tot} = 279,9 m²
Room conditions during measurements:
Temperature: T = Empty space: 22,9 °C With testelement: 22,7 °C
Atmospheric pressure: p = 101,09 kPa
Relative humidity: h_r = 61,3 %

Type of test element: Plane absorber
Construction characteristics: Mounting type in line with ISO354 Annex B: Type E mounting (with an airspace)
Area of test element: 10,92 m²
Total thickness: 40 mm
Number of layers, including air spaces: 3
Connection of layers: The 'SlimWall Lines' panels, with a thickness of 18 mm, were placed loose against each other on a wooden frame, with a height of 22 mm and filled with 20 mm rockwool, to form an empty airgap of 2 mm between the panels and the rockwool.

f(Hz)	T ₁ (s)	T ₂ (s)	α_s	$\pm U (k=2)$
50				
63				
80				
100	9,73	8,81	0,05	$\pm 0,05$
125	9,17	6,77	0,17	$\pm 0,09$
160	8,35	5,98	0,21	$\pm 0,09$
200	8,98	5,65	0,29	$\pm 0,09$
250	9,12	4,55	0,48	$\pm 0,12$
315	9,05	3,78	0,68	$\pm 0,13$
400	8,74	3,33	0,82	$\pm 0,13$
500	8,46	3,10	0,90	$\pm 0,12$
630	8,55	3,01	0,94	$\pm 0,11$
800	8,23	2,93	0,97	$\pm 0,11$
1000	8,29	2,98	0,94	$\pm 0,11$
1250	7,75	2,90	0,95	$\pm 0,11$
1600	6,98	2,75	0,96	$\pm 0,10$
2000	6,24	2,61	0,97	$\pm 0,10$
2500	5,47	2,45	0,99	$\pm 0,09$
3150	4,60	2,24	0,99	$\pm 0,09$
4000	3,77	2,01	1,01	$\pm 0,09$
5000	3,10	1,79	1,01	$\pm 0,08$

f(Hz)	α_p	$\pm U (k=2)$
125	0,15	
250	0,50	$\pm 0,09$
500	0,90	$\pm 0,08$
1000	0,95	$\pm 0,08$
2000	0,95	$\pm 0,08$
4000	1,00	$\pm 0,10$



$\alpha_w = 0,80$ (H)* $\pm 0,07$ (k=2)
Sound absorption class: B

NRC = 0,85 **
SAA = 0,82 **

* It is strongly recommended to use this single-number rating in combination with the complete sound absorption coefficient curve
** These results are not within the scope of the accreditation

Requested by: Texdecor, Rue d'Hem, 2,59780 Willems

TESTELEMENT:

(short description by the manufacturer, details: see Annex 1)

SlimWall Lines on plenum of 22 mm, filled with 20 mm rock wool

NOISE LAB
TEST REPORT Number A-2022LAB-106-14-23-45119_E

4. α_s

SOUND ABSORPTION COEFFICIENT

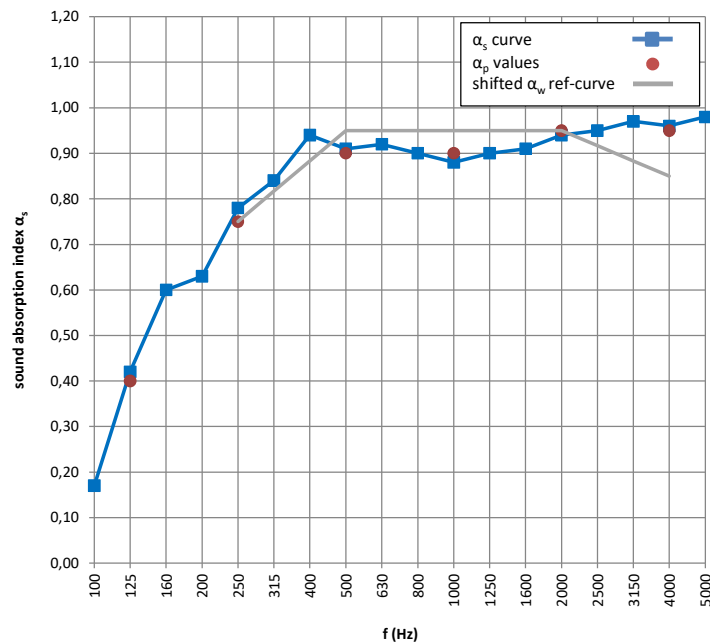
EN ISO 354:2003
 EN ISO 11654:1997
 ISO 12999-2:2020

Acoustics - Measurement of sound absorption in a reverberation room
 Acoustics - Sound absorbers for use in buildings - Rating of sound absorption
 Acoustics - Determination and application of measurement uncertainties in building acoustics - Part 2: Sound absorption

Identification number of test element: 17 **Test date:** 6/07/2023
Name of test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Reverberation room: V = 298,3 m³ S_{tot} = 279,9 m²
Room conditions during measurements:
 Temperature: T = 22,6 °C (Empty space) / 21,3 °C (With testelement)
 Atmospheric pressure: p = 101,46 kPa (Empty space) / 101,48 kPa (With testelement)
 Relative humidity: h_r = 68,2 % (Empty space) / 64,9 % (With testelement)

Type of test element: Plane absorber
Construction characteristics: Mounting type in line with ISO354 Annex B: Type A mounting (directly against a room surface)
 Area of test element: 10,94 m²
 Total thickness: 83 mm
 Number of layers, including air spaces: 3
 Connection of layers: The 20mm-thick rockwool panels were placed loosely one against the other on a wooden frame, with a height of 45 mm. On top of these rockwool panels, the 'SlimWall Lines' panels, with a thickness of 18 mm, were laid loosely against each other.

f(Hz)	T1 (s)	T2 (s)	α_s	$\pm U (k=2)$
50				
63				
80				
100	9,75	7,08	0,17	$\pm 0,11$
125	9,54	5,02	0,42	$\pm 0,18$
160	8,44	3,92	0,60	$\pm 0,20$
200	9,05	3,94	0,63	$\pm 0,17$
250	9,27	3,50	0,78	$\pm 0,17$
315	9,12	3,32	0,84	$\pm 0,16$
400	8,83	3,05	0,94	$\pm 0,14$
500	8,47	3,08	0,91	$\pm 0,12$
630	8,39	3,03	0,92	$\pm 0,11$
800	7,90	3,02	0,90	$\pm 0,10$
1000	8,00	3,07	0,88	$\pm 0,10$
1250	7,72	2,97	0,90	$\pm 0,10$
1600	7,00	2,84	0,91	$\pm 0,10$
2000	6,32	2,68	0,94	$\pm 0,10$
2500	5,51	2,49	0,95	$\pm 0,09$
3150	4,73	2,29	0,97	$\pm 0,09$
4000	3,92	2,07	0,96	$\pm 0,09$
5000	3,24	1,83	0,98	$\pm 0,08$



f(Hz)	α_p	$\pm U (k=2)$
125	0,40	
250	0,75	$\pm 0,12$
500	0,90	$\pm 0,08$
1000	0,90	$\pm 0,08$
2000	0,95	$\pm 0,08$
4000	0,95	$\pm 0,10$

$\alpha_w = 0,95$ * $\pm 0,07 (k=2)$
 Sound absorption class: A

NRC = 0,9 **
 SAA = 0,88 **

Requested by: Texdecor, Rue d'Hem, 2,59780 Willems

TESTELEMEN:

(short description by the manufacturer, details: see Annex 1)

SlimWall Lines + rock wool pannel of 20mm on a plenum of 45 mm

* It is strongly recommended to use this single-number rating in combination with the complete sound absorption coefficient curve
 ** These results are not within the scope of the accreditation

NOISE LAB
TEST REPORT Number A-2022LAB-106-14-23-45119_E

5. α_s

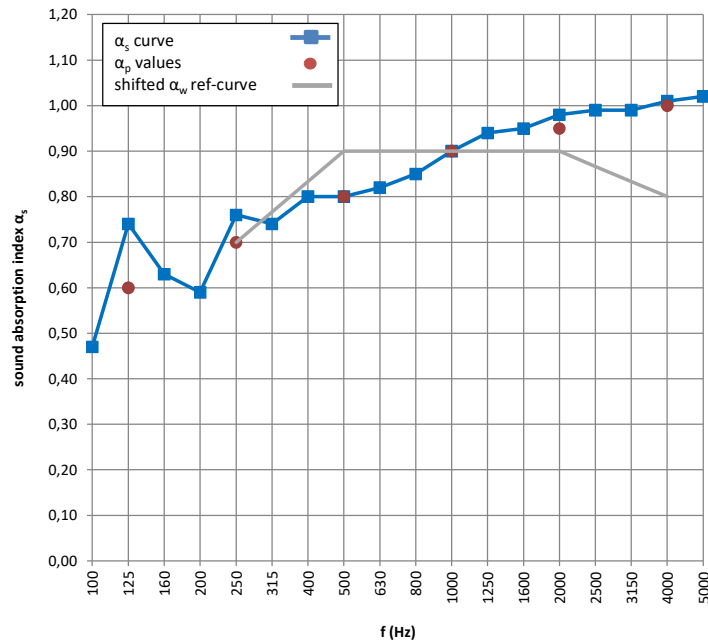
SOUND ABSORPTION COEFFICIENT

EN ISO 354:2003 Acoustics - Measurement of sound absorption in a reverberation room
EN ISO 11654:1997 Acoustics - Sound absorbers for use in buildings - Rating of sound absorption
ISO 12999-2:2020 Acoustics - Determination and application of measurement uncertainties in building acoustics - Part 2: Sound absorption

Identification number of test element: 21 **Test date:** 10/07/2023
Name of test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Reverberation room: V = 298,3 m³ S_{tot} = 279,9 m²
Room conditions during measurements:
Temperature: T = 22,6 °C (Empty space) / 22,7 °C (With testelement)
Atmospheric pressure: p = 101,46 kPa
Relative humidity: h_r = 68,2 %

Type of test element: Plane absorber
Construction characteristics: Mounting type in line with ISO354 Annex B: Type E mounting (with an airspace)
Area of test element: 10,96 m²
Total thickness: 308 mm
Number of layers, including air spaces: 3
Connection of layers: The 20mm-thick rockwool panels were placed loosely one against the other on a wooden frame, with a height of 270 mm. On top of these rockwool panels, the 'SlimWall Lines' panels, with a thickness of 18 mm, were laid loosely against each other.

f(Hz)	T ₁ (s)	T ₂ (s)	α_s	$\pm U$ (k=2)
50				
63				
80				
100	9,75	4,77	0,47	$\pm 0,26$
125	9,54	3,64	0,74	$\pm 0,30$
160	8,44	3,81	0,63	$\pm 0,21$
200	9,05	4,07	0,59	$\pm 0,16$
250	9,27	3,55	0,76	$\pm 0,17$
315	9,12	3,59	0,74	$\pm 0,14$
400	8,83	3,37	0,80	$\pm 0,13$
500	8,47	3,31	0,80	$\pm 0,11$
630	8,39	3,24	0,82	$\pm 0,10$
800	7,90	3,12	0,85	$\pm 0,10$
1000	8,00	3,02	0,90	$\pm 0,10$
1250	7,72	2,90	0,94	$\pm 0,11$
1600	7,00	2,77	0,95	$\pm 0,10$
2000	6,32	2,61	0,98	$\pm 0,10$
2500	5,51	2,44	0,99	$\pm 0,09$
3150	4,73	2,26	0,99	$\pm 0,09$
4000	3,92	2,04	1,01	$\pm 0,09$
5000	3,24	1,82	1,02	$\pm 0,08$



f(Hz)	α_p	$\pm U$ (k=2)
125	0,60	
250	0,70	$\pm 0,11$
500	0,80	$\pm 0,08$
1000	0,90	$\pm 0,08$
2000	0,95	$\pm 0,08$
4000	1,00	$\pm 0,10$

$\alpha_w = 0,90$ * $\pm 0,07$ (k=2)
Sound absorption class: A

NRC = 0,85 **
SAA = 0,84 **

Requested by: Texdecor, Rue d'Hern, 2,59780 Willems

TESTELEMET:

(short description by the manufacturer, details: see Annex 1)

SlimWall Lines + rock wool pannel of 20mm on a plenum of 270 mm

* It is strongly recommended to use this single-number rating in combination with the complete sound absorption coefficient curve
** These results are not within the scope of the accreditation

Daidalos Peutz bouwfysisch ingenieursbureau
 Vital Decosterstraat 67A – bus 1
 B-3000 Leuven
 Belgium
 VAT: BE 0454.276.239
www.daidalospeutz.be



N° 451-TEST
NBN EN ISO 17025:2017
EA MLA signatory

NOISE LAB
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ANNEX 1: Description test items by manufacturer

*The test sample description given by manufacturer is checked visually as good as possible by the laboratory.
 The correspondence between the test element and the commercialized product is the sole responsibility of the manufacturer*

Texdecor - SlimWall Lines
 The acoustic panels are made from 9 mm thick recycled PET compact felt sheets.
 These wall panels create structure patterns of different thicknesses , 9 - 18 mm

Manufacturer : Texdecor
type: wall and ceiling covering
application : wall / ceiling
composition : the panels contains 50% polyester fibers from recycled plastic bottles
Felt density : 2 kg/m²
Total thickness: 18 mm (see sketch below)
 On the walls, they can be glued directly onto wall surfaces or installed using rails or magnets, as islands they can be hung using slings or fixed on the ceiling on rails.

Rockwool panels
 dimensions : 595 mm x 595 mm - thickness 20 mm - density 100 kg/m³



photo : cross-section of a SlimWall Line panel



photo : cross-section of a SlimWall Line panel on the rockwool panel

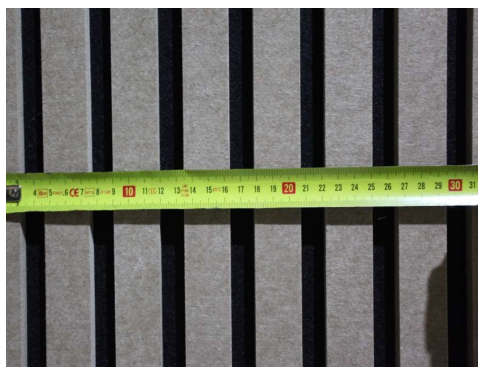
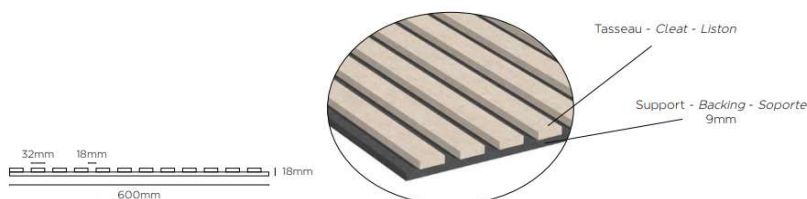


photo : top face of a SlimWall Lines panel



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ANNEX 2: Technical datasheets

*The test sample description given by manufacturer is checked visually as good as possible by the laboratory.
The correspondence between the test element and the commercialized product is the sole responsibility of the manufacturer*

Further information can be obtained directly from the manufacturer.

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ANNEX 3a : Photographs of the test elements and/or the test arrangements

Description of the assembly and/or drawing and/or image

The SlimWall Lines panels were mounted in 5 different ways (see annex 3a to 3e):

1/ test n° 14: SlimWall Lines wall-mounted

The SlimWall Lines panels, with a thickness of 18 mm, were placed directly against each other on the floor of the reverberation room.

Type A mounting without air cavity according to ISO 354.

To prevent sound absorption at the sides of the sample, the perimeter of the sample was covered with adhesive tape.

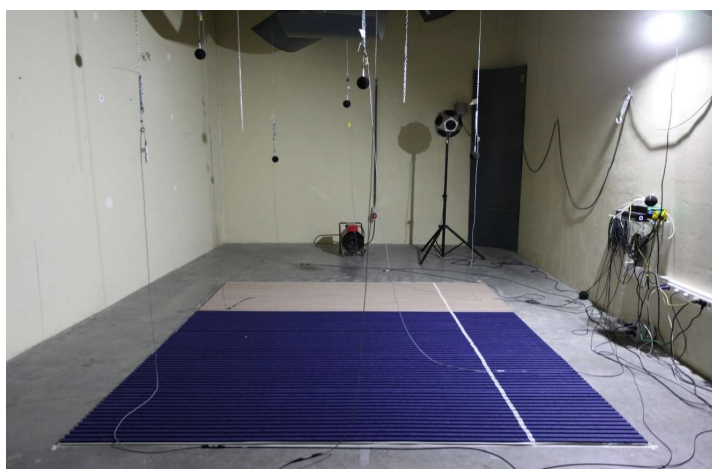


photo : total test set-up

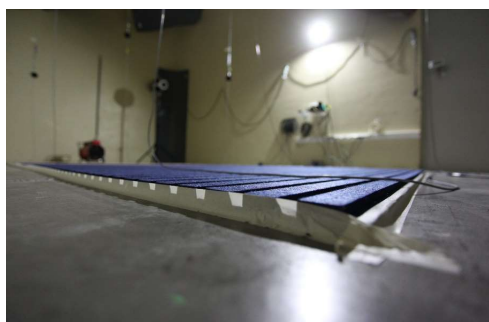


Photo : detail of the perimeter of the test set-up

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ANNEX 3b : Photographs of the test elements and/or the test arrangements

Description of the assembly and/or drawing and/or image

2/ test n° 23: SlimWall Lines on empty plenum of 22 mm

The SlimWall Lines panels, with a thickness of 18 mm, were placed directly against each other on a wooden frame of 22 mm.

The test panels were mounted with an air gap behind them, type E-40 mounting according to ISO 354

The joints between the wooden frame and the surface of the reverberation room and between the wooden frame and the test sample were sealed with adhesive tape to prevent air leakage between the enclosure space and the outside.

The total construction height was 40 mm, the distance between the exposed face of the test specimen and the surface of the room.

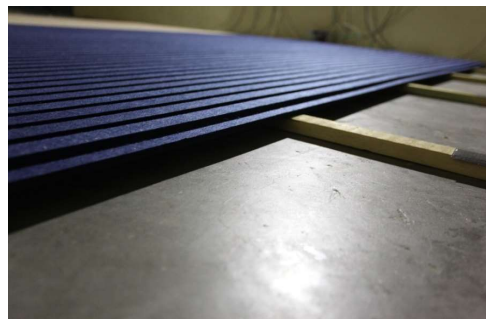
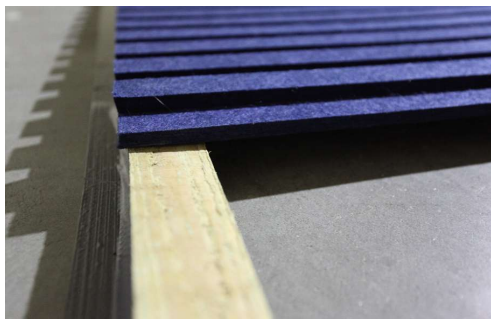


photo : Test n° 23 : detail of the placement of the SlimWall Lines panels on the empty frame with a height of 22 mm



photo : Test n° 23 : during placement of the panels on the empty frame

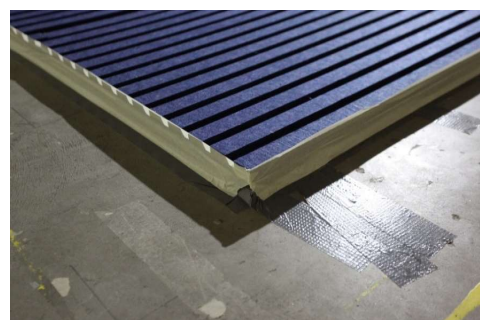


photo : Test n° 23 : detail of the perimeter of the test set-up

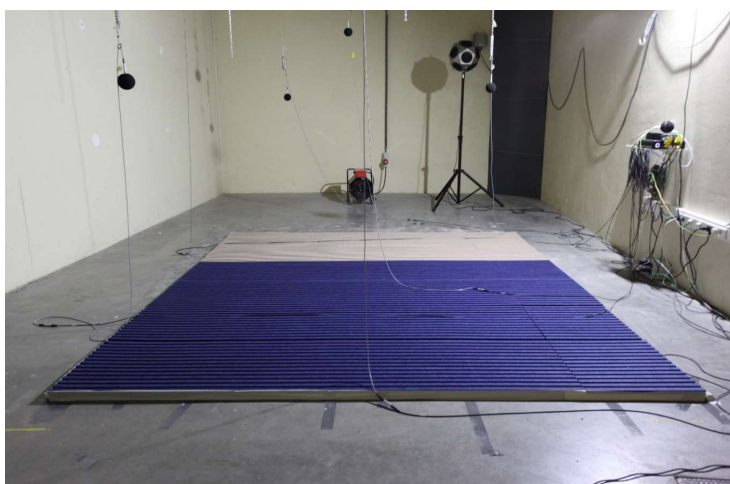


photo: Test n° 23 : total test set-up

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ANNEX 3c : Photographs of the test elements and/or the test arrangements

Description of the assembly and/or drawing and/or image

3/ test n° 22: SlimWall Lines on a plenum of 22 mm filled with rockwool

The SlimWall Lines panels, with a thickness of 18 mm, were placed loosely against each other on a wooden frame of 22 mm.

Here, a wooden frame with a height of 22 mm, was installed on the floor of the reverberation room and filled with rockwool panels with a thickness of 20 mm. An air space of 2 mm was left between the SlimWall Lines panels and the rockwool panels.

The joints between the wooden frame and the surface of the reverberation room and between the wooden frame and the test sample were sealed with adhesive tape to prevent air leakage between the enclosure space and the outside.

The total construction height was 40 mm, the distance between the exposed face of the test specimen and the surface of the room. Type E-40 mounting according to ISO 354

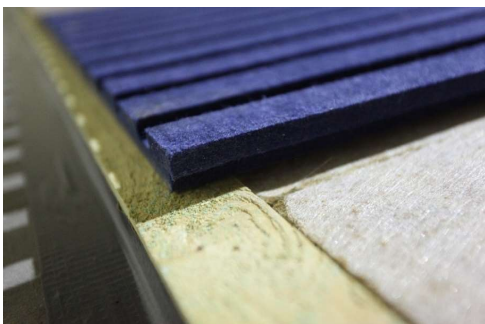


photo : Test n° 22 : details during placement of the SlimWall Lines panels on the wooden frame with a height of 22mm and filled with 20 mm rockwool.



photo : Test n° 22 : during placement of the panels on the frame filled with rockwool



photo : Test n° 22 : detail of the perimeter of the test set-up

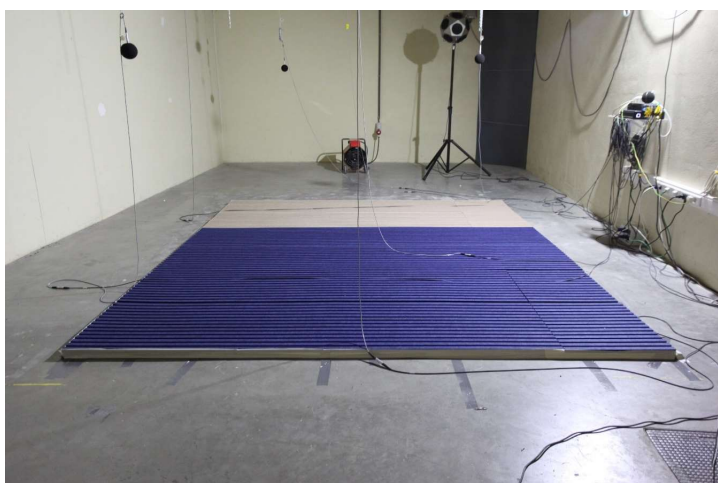


photo : Test n° 22 : Total test set-up

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ANNEX 3d : Photographs of the test elements and/or the test arrangements

Description of the assembly and/or drawing and/or image

4/ Test n° 17: SlimWall Lines on plenum of 45 mm

Here, a wooden frame with a height of 45 mm, was installed on the floor of the reverberation room.

The rockwool panels, with a thickness of 20 mm and a density of $\pm 100 \text{ kg/m}^3$, were placed loosely against each other on the wooden frame.

The Slimwall Lines panels, with a thickness of 18 mm, were laid loosely on top of these rockwool panels.

A wooden plywood frame, with a thickness of 18mm, covers the perimeter of the edges of the test sample and encloses the air space behind the sample.

The joint between the frame and the surface of the reverberation room and between the frame and the test sample were sealed with adhesive tape.

The total construction height was 83 mm, the distance between the exposed face of the test specimen and the surface of the room. Type E-85 mounting according to ISO 354



photo : Test n° 17 : details during placement of the rockwool panels on the wooden frame with a height of 45mm.

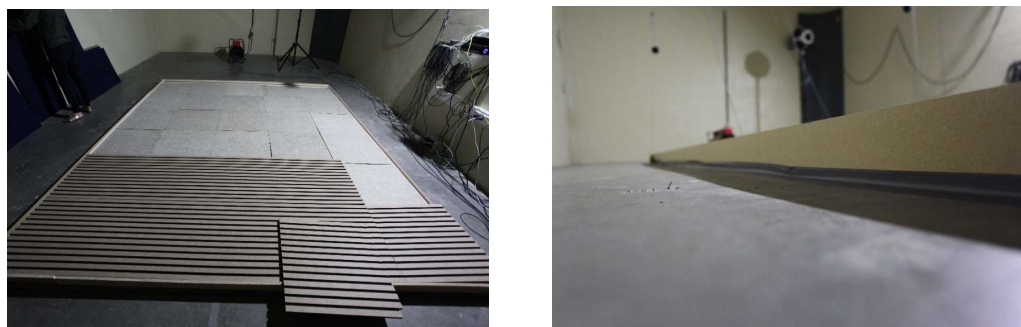


photo: Test n° 17 : during placement of the SlimLine panels on the layer of rockwool panels

photo: Test n° 17 : detail of the perimeter of the test set-up

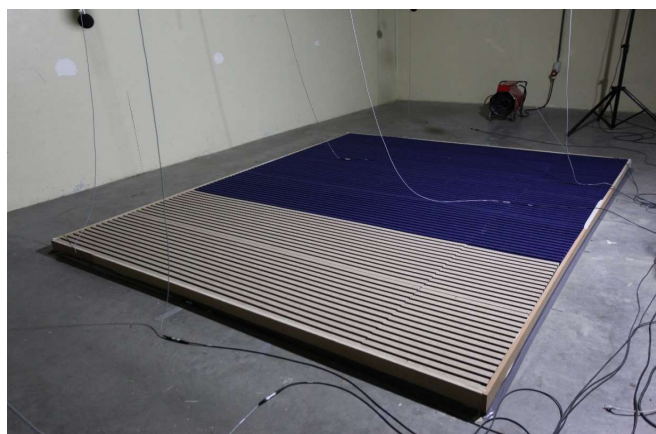


photo: Test n°17 : total test set-up

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ANNEX 3e : Photographs of the test elements and/or the test arrangements

Description of the assembly and/or drawing and/or image

5/ Test n° 21 : SlimWall Lines ceiling

Here, a wooden frame with a height of 270 mm, was installed on the floor of the reverberation room.

The rockwool panels, with a thickness of 20 mm and a density of $\pm 100 \text{ kg/m}^3$, were placed loosely against each other on the wooden frame.

The SlimWall Lines panels, with a thickness of 18 mm, were laid loosely on top of these rockwool panels.

A wooden plywood frame, with a thickness of 18mm, and a MDF panel of 15 mm covers the perimeter of the edges of the test sample and encloses the air space behind the sample.

The joint between the frame and the surface of the reverberation room and between the frame and the test sample were sealed with adhesive tape.

The total construction height was 308 mm, the distance between the exposed face of the test specimen and the surface of the room.

Type E-310 mounting according to ISO 354



photo: Test n° 21 : during placement of the rockwool panels on the empty frame of 270 mm

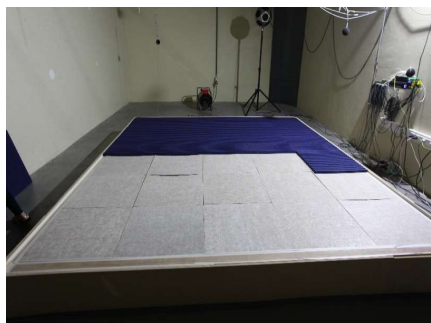


photo: Test n° 21 : during placement of the SlimLine panels on the layer of rockwool panels

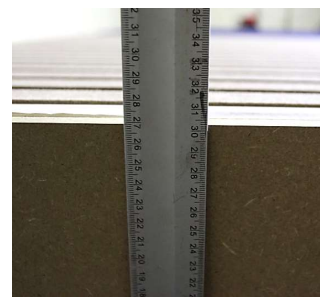
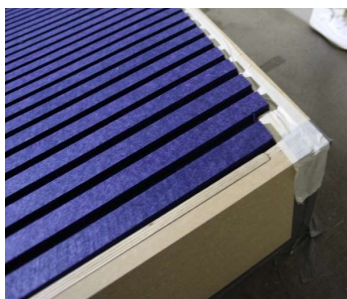


photo: Test n° 21 : detail of the perimeter of the test set-up

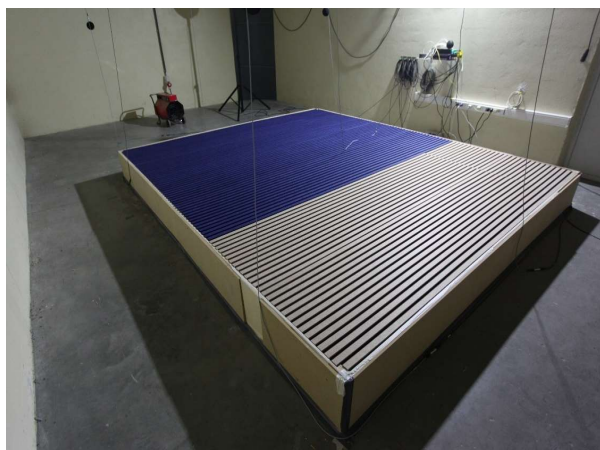


photo : Test n° 21: total test set-up



photo: Test n°21: detail of the cross section of the SlimWall panels of 18 mm on the rockwool panels of 20 mm

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ANNEX 4: Sketch of the test room

Daidalos Peutz Laboratory of Acoustics, Diksmuidesteenweg 17B/1, B-8830 Hooglede, Belgium

The test room was built and finished according ISO 354.

Reverberation Room (according EN ISO 354)

