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daidalos peutz
laboratory of acoustics

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

NOISE LAB
TEST REPORT Number A-2025LAB-015-L065-45925_E

Customer: Staenis BV
Nieuwlandstraat 33
9870 Olsene
Belgium

Contacts: Client: Tom Verstaen
Noise lab: Gert-Jan Loobuyck

Tests: Laboratory measurement of airborne sound insulation of building elements
Product Name: **CircoFloor 140 mm (4P) - Pearls Graphite EPS - OSB 18 mm**
Renewworks

Reference norm :

NBN EN ISO 10140-2:2021	Acoustics - Laboratory measurement of sound insulation of building elements - Part 2: Measurement of airborne sound insulation

Various other related norms:

NBN EN ISO 10140-1:2021	Acoustics - Laboratory measurement of sound insulation of building elements - Part 1: Application rules for specific products
NBN EN ISO 10140-4:2021	Acoustics - Laboratory measurement of sound insulation of building elements - Part 4: Measurement procedures and requirements
NBN EN ISO 10140-5:2021	Acoustics - Laboratory measurement of sound insulation of building elements - Part 5: Requirements for test facilities and equipment
NBN EN ISO 12999-1:2020	Acoustics - Determination and application of measurement uncertainties in building acoustics - - Part 1: Sound insulation
NBN EN ISO 717-1: 2021	Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation

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:	23/01/2025		2025LAB-015
Date of receipt of the specimen (s):	24/06/2025		SONL074 - SONL065
Date of tests:	26/06/2025	till	26/06/2025
Date of preparation of the test report:	25/09/2025		

The measurements were carried out at Daidalos Peutz Laboratory for Acoustics at Hooglede, see appendix 1
This test report together with its annexes contains : 12 pages and must be multiplies only in its entirety

Technical Manager

Paul Mees

Laboratory Engineer

Els Meulemans

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MEASURING EQUIPMENT

Signal
Brüel & Kjaer - 4292 : Omni Power Sound Source (+ Brüel & Kjaer - 2716 : Power amplifier)

Microphone system:
Brüel & Kjaer - 4189 : 1/2" free field microphone, 6Hz to 20kHz, prepolarized
Brüel & Kjaer - ZC-0032 : 1/2" microphone preamplifier
Brüel & Kjaer - JP 1041 : dual 10-pole adaptor JP-1041
Brüel & Kjear - 3923 : rotating microphone boom
Brüel & Kjaer - 4231 : Sound calibrator 94&114dB SPL-1000Hz, Fulfils IEC 60942 Class1
Brüel & Kjaer - 2270 : Sound level meter - dual channel instrument (measuring both channels simultaneously)
Conforms with IEC 61672-1 Class 1

Two microphone systems, one in the receiving room, one in the source room

Number of source positions:	3
Minimum 3m between the different source positions	
Number of microphone positions for each source position:	3
Microphone position with a rotating microphone	
Number of rotations:	3
Rotation speed:	16 s/tr
Minimum rotation time: 30 s	
No rotation angle <10 ° to the chamber surfaces	

Data processing
Brüel & Kjaer - BZ-5503 : utility software for hand-held analyzers
Brüel & Kjaer - BZ-7229 : dual-channel building acoustics software
Brüel & Kjaer - 7830 :Qualifier Software for reporting of results
A computer with proprietary software

Averaging Time per measurement:	48 sec
Number of reverberation time measurements (with graphic control):	27 measurements

Test chambers

Volume source room:	120,1	m³
Volume receiving room:	52,37	m³
Total partition wall area:	12,00	m²

There are diffusers and absorption material applied

Standard floor
The base floor used is a 140 mm thick solid reinforced concrete slab.
According to ISO 10140-5 Annex C this is the "heavyweight standard floor".

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STANDARD METHOD

Airborne sound insulation measurement

The measurements were carried out in accordance with EN ISO 10140-2 in the test rooms of Daidalos Peutz.
A detailed description of the measurement procedures can be found in the EN ISO 10140-2 standard.

The purpose of the test is to determine the vertical airborne sound reduction indices of two floor constructions:
1. the laboratory heavyweight concrete reference floor complying with ISO 10140-5 – Annex C, tested without lining, (referred to in this report as $R_{,without}$), and
2. the same reference floor tested with the lining that is the subject of this report, (referred to as $R_{,with}$).

The test element is installed between two measuring rooms. Both rooms are vibration-isolated using a so-called room-in-room construction.
In one of these rooms (the source room), broadband noise is generated by loudspeakers. The test rooms comply with the requirements of EN ISO 10140-5.
In the source room and simultaneously in the adjacent "receiving room," the resulting sound pressure level is measured using microphones,
following the measurement procedures of ISO 10140-4.
For each loudspeaker position, the energy-averaged sound pressure level in both rooms is calculated and corrected for background noise if necessary.

The reverberation time of the receiving room is also measured following the procedure given in ISO 10140-4, using the interrupted noise method.
The measured reverberation time allows the determination of the equivalent sound absorption area A (m²) in the receiving room, calculated as:

A = 0.16 V/T, where:
V = volume of the receiving room in cubic meter
T = reverberation time in the receiving room in sec

In ISO 10140-2 the airborne sound insulation of an object is defined as the "sound reduction index R" to be evaluated according to the formula:

$$R = L_1 - L_2 + 10 \log (S/A) \quad [dB]$$

where
L_1 = is the energy average sound pressure level in the source room, in dB (ref 20µPa)
L_2 = is the energy average sound pressure level in the receiving room, in dB (ref 20µPa)
S = area of the object to be tested, in square metre
A = is the equivalent absorption area in the receiving room, in square metres

The above parameters are determined in 1/3-octave bands from 50 Hz to 5000 Hz. Environmental conditions in the test rooms, are monitored throughout the tests.

Single-number quantity : R_w ($C;C_{tr}$)

Following the procedures in ISO 717-1, the single-number quantities are used for rating airborne sound insulation,
and are determined from the measured frequency-dependent R-values in 1/3-octave bands, presented graphically and numerically in tables in this test report.
Both the weighted sound reduction index R_w and the spectrum adaptation terms C and C_{tr} (by accounting for the characteristics of different noise sources),
are presented in this report. The main quantities are defined as follows:

R_w = the weighted sound reduction index, representing the overall airborne sound insulation of the test element
$R_w + C$ = adjusts R_w for sources primarily in the mid- to high-frequency range, based on A-weighted pink noise spectrum
$R_w + C_{tr}$ = adjusts R_w for sources dominated by low- to mid-frequency noise, based on A-weighted urban traffic noise spectrum

Additional spectrum adaptation values for frequency ranges below 100 Hz or above 3150 Hz are also reported in this test report,
for assessing sound insulation performance outside the standard frequency range.

Single number rating for improvement of sound reduction index by linings : $\Delta R_{w,heavy}$

The difference between the sound reduction indices of the laboratory base floor with lining ($R_{,with}$, dB) and the base floor without lining ($R_{,without}$, dB),
defines the sound reduction improvement indices (in one-third-octave bands), ΔR (dB), under the particular conditions of the measurement.
The same procedure applies to the direct difference of the weighted sound reduction index, $\Delta R_{w,direct} = R_{w,with} - R_{w,without}$,in decibels.
To enable comparison between laboratories, the values ΔR are added to the ISO 717-1 reference sound insulation index values, $R_{ref,without}$ (dB),
corresponding to the basic heavy reference floor defined in Annex E.3 of ISO 717-1 (standard floor with low critical frequency: " heavy floor").
This procedure results in the sound insulation index with the lining, $R_{ref,with} = R_{ref,without} + \Delta R$, in decibels.
The improvement of the weighted sound reduction index for the heavy reference floor, $\Delta R_{w,heavy}$ (dB), is then obtained as: $\Delta R_{w,heavy} = R_{w,ref,with} - R_{w,ref,without}$.
The A-weighted improvement of sound reduction indices $\Delta(R_w+C)_{heavy}$, respectively, $\Delta(R_w + C_{tr})_{heavy}$, are calculated in an equivalent way.

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SPECIAL MEASUREMENT CONDITIONS

/

ACCURACY

The accuracy of the airborne sound insulation as calculated can be expressed in terms of repeatability (tests within one laboratory) and reproducibility (between various laboratories)

Repeatability [r]
When: - two tests are performed on identical test material - within a short period of time - by the same person or team - using the same instrumentation - under unchanged environmental conditions - the probability will be 95% that the difference between the two test results will be less than or equal to r

Reproducibility [R]
When: - two tests are performed on identical test material - in different laboratories - by different person(s) - under different environmental conditions - the probability will be 95% that the difference between the two test results will be less than or equal to R

In the standard ISO 12999-1:2020 there is a statement on the reproducibility R to be expected, based on the results of various interlaboratory tests.
The table below gives the reproducibility of the single-number values of the airborne sound insulation according to ISO 717-1, as specified in Table 3 of ISO 12999-1:2

situation A: reproducibility (same test samples, measured in different laboratories)	R_w	$R_w + C$	$R_w + C_{tr}$
standard deviation under reproducibility conditions σ_R according to ISO 12999-1:2020 table 3	1,2 dB	1,3 dB	1,5 dB
expanded uncertainty U = σ_R * k, k=1,65, 90% confidence level (two-sided)	2,0 dB	2,1 dB	2,5 dB
expanded uncertainty U = σ_R * k, k=1,96, 95% confidence level (two-sided)	2,4 dB	2,5 dB	2,9 dB

A measurand, Y, shall then be stated as : Y = u ± U

The standard also contains a quantity, σ_{R95}. It is derived from the same round robin tests as σ_R for airborne sound insulation, and represents the average of the upper interval limits for the standard deviation of reproducibility with a coverage probability of 95%.
For R_w, the σ_{R95}, from table D2 of Annex D of the standard ISO 12999-1:2020 is 2,0 dB.
For $R_w + C_{100-3150}$, $C_{100-5000}$, $C_{50-3150}$, $C_{50-5000}$, the σ_{R95}, from table D2 of Annex D of the standard ISO 12999-1:2020 is 2,1 dB.
For $R_w + C_{tr100-3150}$, $C_{tr100-5000}$, $C_{tr50-3150}$, $C_{tr50-5000}$, the σ_{R95}, from table D2 of Annex D of the standard ISO 12999-1:2020 is 2,4 dB.

The specific value of uncertainty is available on request.

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Measurement and calculation details:

The results as presented here relate only to the tested items and laboratory conditions as described in this test report.
The measurement results for each test element are presented on the following pages (6–8):
- on page 6 : the measurement results of the laboratory heavyweight concrete reference floor, tested without lining, (referred to in this report as $R_{,without}$)
- on page 7 : the measurement results for reference floor tested with the lining (referred to as $R_{,with}$).
- on page 8 : The results of the improvement of the sound reduction index achieved by the lining on a heavyweight concrete reference floor.

The results are given at all frequencies of measurement, both in tabular form and in the form of a graph.

The next table present an overview of the measurements and calculations:

f (Hz)	$R_{,without}$ bare floor measured (dB)	$R_{,with}$ bare floor + floor covering measured (dB)	ΔR $R_{,with} - R_{,without}$ sound reduction improvement (dB)	$R_{,ref,without}$ ISO 717-1, Table E.1: reference values for sound reduction index for heavy floors (dB)	$R_{,ref,with}$ $R_{,ref,without} + \Delta R$ (dB)	
50	52,7	51,9	-0,8	34,0	33,2	
63	**39,3**	**37,9**	**-1,4**	**36,0**	**34,6**	
80	30,6	25,0	-5,6	38,1	32,5	
100	34,6	33,6	-1,0	40,0	39,0	
125	**36,8**	**39,5**	**2,7**	**40,0**	**42,7**	
160	38,5	44,1	5,6	40,0	45,6	
200	39,0	48,3	9,3	40,0	49,3	
250	**41,9**	**54,0**	**12,1**	**40,0**	**52,1**	
315	48,5	56,0	7,5	41,8	49,3	
400	51,5	60,3	8,8	44,4	53,2	
500	**54,9**	**63,0**	**8,1**	**46,8**	**54,9**	
630	56,2	66,2	10,0	49,3	59,3	
800	56,8	69,7	12,9	51,9	64,8	
1000	**58,9**	**71,6**	**12,7**	**54,4**	**67,1**	
1250	60,9	73,5	12,6	56,8	69,4	
1600	62,3	73,7	11,4	59,5	70,9	
2000	**63,8**	**72,9**	**9,1**	**61,9**	**71,0**	
2500	65,6	72,6	7,0	64,3	71,3	
3150	67,8	74,0	6,2	65,0	71,2	
4000	**68,6**	**74,6**	**6,0**	**65,0**	**71,0**	
5000	69,5	75,1	5,6	65,0	70,6	
ISO 717-1	$R_{w,without}$	$R_{w,with}$	$\Delta R_{w,direct}$	$R_{w,ref,without}$	$R_{w,ref,with}$	$\Delta R_{w,heavy}$ = $R_{w,ref,with} - R_{w,ref,without}$
	55	**62**	**7**	**52**	**60**	**8**
	55,7	62,5	6,8	52,0	60,7	8,7

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$R_{without}$

SOUND REDUCTION INDEX according to ISO 10140-2

Laboratory measurement of airborne sound insulation between rooms

Client: **Staenis BV** Date of test: 30/06/2025

Description of the test setup:

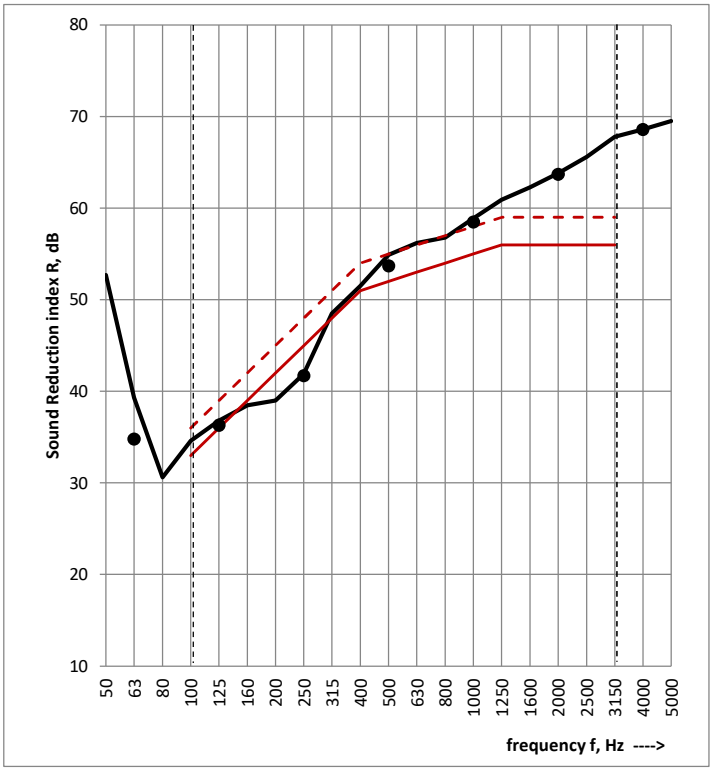
140 mm solid reinforced concrete slab 140 mm (heavyweight standard floor ISO 10140-5 Annex C)
without lining

	source room	receiving room	
Temperature :	23,8	20,5	°C
Atmospheric pressure :	1014,1	1015,1	hPa
Relative humidity :	66,2	71,4	%

Area S of test specimen: 12,00 m²
Receiving room volume: 53,34 m³
Source room volume: 120,10 m³

1/3 oct. — Shifted reference values (according ISO 717-1)
1/1 oct. — reference values (according ISO 717-1)

frequency Hz	R 1/3 octave dB	R 1/1 octave dB	(*)	(**)
50	52,7			
63	**39,3**	34,8		
80	30,6			
100	34,6			
125	**36,8**	**36,3**		
160	38,5			
200	39,0			
250	**41,9**	**41,7**		
315	48,5			
400	51,5			
500	**54,9**	**53,7**		
630	56,2			
800	56,8			
1000	**58,9**	**58,5**		
1250	60,9			
1600	62,3			
2000	**63,8**	**63,7**		
2500	65,6			
3150	67,8			
4000	**68,6**	**68,6**	b	
5000	69,5		b	



B or M : R >= value shown

(*) b : background noise correction used
B : Maximum background noise correction used
(**) m : flanking transmission correction used
M : Maximum flanking transmission correction used

Rating in accordance with ISO 717-1: *Evaluation based on laboratory measurement results obtained by an engineering method:*

R_w (C;Ctr) = **55** **(-2 ; -7)** **dB**

$C_{50\text{-}3150}$= -2 dB; $C_{50\text{-}5000}$= -1 dB; $C_{100\text{-}5000}$= -1 dB

$C_{tr,50\text{-}3150}$= -9 dB; $C_{tr,50\text{-}5000}$= -9 dB; $C_{tr,100\text{-}5000}$= -7 dB

Measurement uncertainty according to ISO12999-1:2020

R_w = 55,7 ± 2,4 dB
R_w+C = 53,1 ± 2,5 dB
R_w+C_{tr} = 48,2 ± 2,9 dB

Measurement no.: SONL074
Date of test report: 25/09/2025
Test institute : Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Lab-engineer : Gert-Jan Loobuyck

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R_{with}

SOUND REDUCTION INDEX according to ISO 10140-2

Laboratory measurement of airborne sound insulation between rooms

Client: **Staenis BV** Date of test: 26/06/2025

Description of the test setup:

18	mm	AGEPAN OSB 3 Ecoboard, 18 mm: ±11.3 kg/m²
122	mm	CircoFloor system 122 mm: 4-point support (4P)
		infill material: Pearls Graphite EPS, ±13.4 kg/m³ Renewworks
140	mm	solid reinforced concrete slab 140 mm (heavyweight standard floor ISO 10140-5 Annex C)

Tested floor area :	12,00	m²
Receiving room volume:	53,34	m³
Source room volume:	118,42	m³

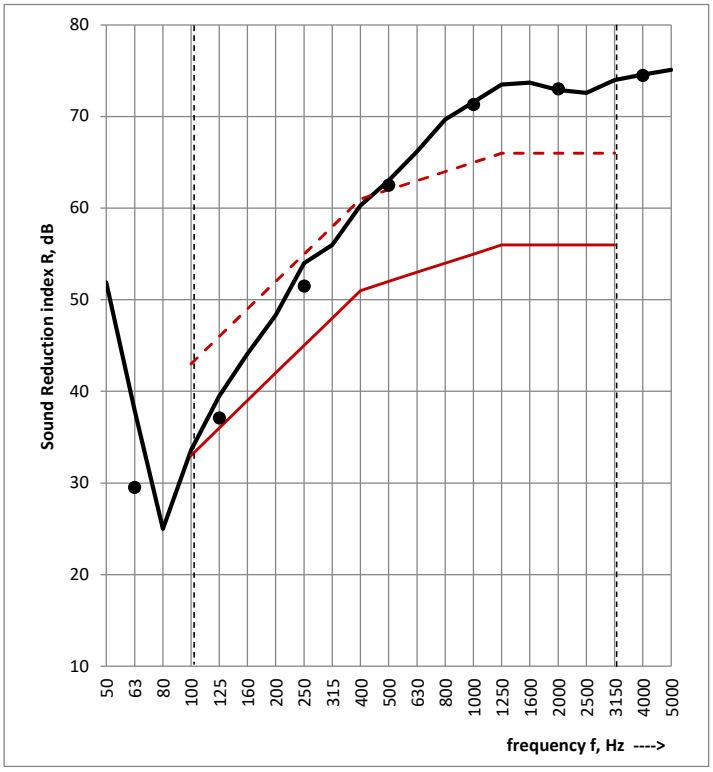
	source room	receiving room	
Temperature :	22,6	20,5	°C
Atmospheric pressure :	1009,1	1008,6	hPa
Relative humidity :	60,2	71,3	%

1/3 oct. — Shifted reference values (according ISO 717-1)
1/1 oct. — reference values (according ISO 717-1)

frequency Hz	R 1/3 octave dB	R 1/1 octave dB	(*)	(**)
50	51,9			
63	**37,9**	29,5		
80	25,0			
100	33,6			
125	**39,5**	**37,1**		
160	44,1			
200	48,3			
250	**54,0**	**51,5**		
315	56,0			
400	60,3			
500	**63,0**	**62,5**		
630	66,2			
800	69,7		b	
1000	**71,6**	**71,3**	B	
1250	73,5			
1600	73,7			
2000	**72,9**	**73,0**	b	
2500	72,6		b	
3150	74,0		b	
4000	**74,6**	**74,5**	b	
5000	75,1		B	

B or M : R >= value shown

(*) b : background noise correction used
B : Maximum background noise correction used
(**) m : flanking transmission correction used
M : Maximum flanking transmission correction used



Rating in accordance with ISO 717-1: *Evaluation based on laboratory measurement results obtained by an engineering method:*

R_w (C;Ctr) = **62** **(-3 ; -10)** **dB**

$C_{50\text{-}3150}$= -7 dB; $C_{50\text{-}5000}$= -6 dB; $C_{100\text{-}5000}$= -2 dB

$C_{tr,50\text{-}3150}$= -17 dB; $C_{tr,50\text{-}5000}$= -17 dB; $C_{tr,100\text{-}5000}$= -10 dB

Measurement uncertainty according to ISO12999-1:2020

R_w =	62,5 ± 2,4 dB
R_w+C =	58,7 ± 2,5 dB
R_w+C_{tr} =	51,6 ± 2,9 dB

Measurement no.: SONL065
Date of test report: 25/09/2025
Test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Lab-engineer: Gert-Jan Loobuyck

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ΔR

SOUND REDUCTION IMPROVEMENT INDEX, according to ISO 10140-1, annex G
which is defined as the difference between the sound reduction indices of the laboratory concrete floor with and without the lining,
and calculated according to NBN EN ISO 717-1:2021, annex D (Single-number rating for improvement of sound reduction index by linings)

Client: **Staenis BV** Date of test: 26/06/2025

Description of the test setup:

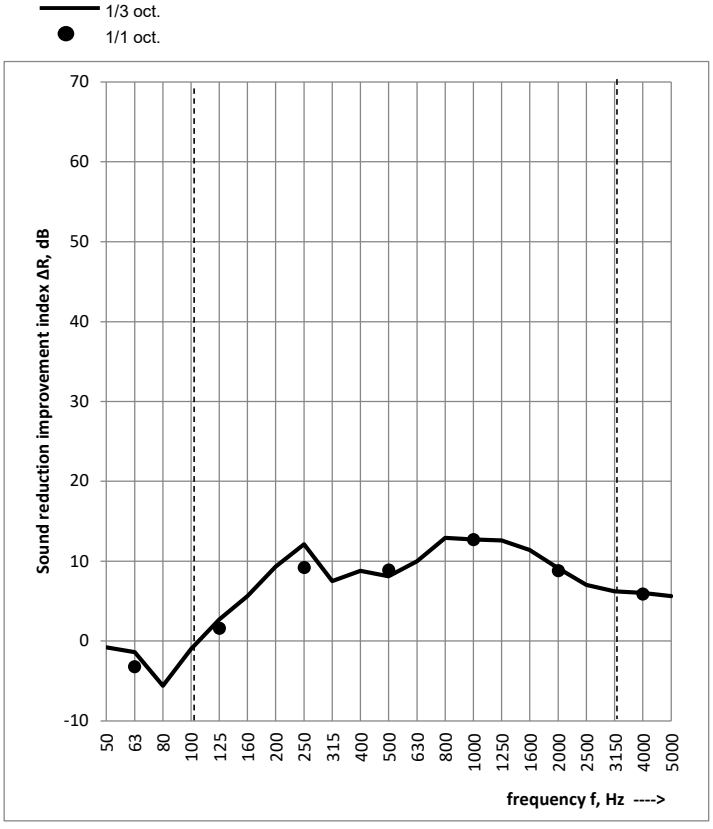
18	mm	AGEPAN OSB 3 Ecoboard, 18 mm: ±11.3 kg/m²
122	mm	CircoFloor system 122 mm: 4-point support (4P)
		infill material: Pearls Graphite EPS, ±13.4 kg/m³ Renewworks
140	mm	solid reinforced concrete slab 140 mm (heavyweight standard floor ISO 10140-5 Annex C)

Tested floor area : 12,00 m²
Receiving room volume: 53,34 m³
Source room volume: 118,42 m³

frequency Hz	ΔR 1/3 octave dB	ΔR 1/1 octave dB	(*)	(**)
50	-0,8			
63	**-1,4**	**-3,2**		
80	-5,6			
100	-1,0			
125	**2,7**	**1,6**		
160	5,6			
200	9,3			
250	**12,1**	**9,2**		
315	7,5			
400	8,8			
500	**8,1**	**8,9**		
630	10,0			
800	12,9		b	
1000	**12,7**	**12,7**	B	
1250	12,6			
1600	11,4			
2000	**9,1**	**8,8**	b	
2500	7,0		b	
3150	6,2		b	
4000	**6,0**	**5,9**	b	
5000	5,6		B	

B or M : R >= value shown

(*) b : background noise correction applied to R_{with} and/or $R_{without}$
B : maximum background correction applied to R_{with} and/or $R_{without}$
(**) m : flanking transmission correction applied to R_{with} and/or $R_{without}$
M : maximum flanking transmission correction applied to R_{with} and/or $R_{without}$



Calculation of the difference of the weighted sound reduction of the lining, $\Delta R_{w,heavy}$ as specified in ISO 717-1, annex D:

$\Delta R_{w,heavy}$ = 8 dB

$\Delta(R_w+C)_{heavy}$ = 8 dB
$\Delta(R_w+C_{tr})_{heavy}$ = 7 dB
$\Delta(R_w+C_{50-3150})_{heavy}$ = 7 dB
$\Delta(R_w+C_{tr50-3150})_{heavy}$ = 2 dB
$\Delta(R_w+C_{50-5000})_{heavy}$ = 7 dB
$\Delta(R_w+C_{tr50-5000})_{heavy}$ = 2 dB
$\Delta(R_w+C_{100-5000})_{heavy}$ = 8 dB
$\Delta(R_w+C_{tr100-5000})_{heavy}$ = 7 dB

results given to one decimal place as specified in ISO 717-1:

$\Delta R_{w,heavy}$ = 8,7 dB
$\Delta(R_w+C)_{heavy}$ = 8,2 dB
$\Delta(R_w+C_{tr})_{heavy}$ = 6,7 dB

Measurement no.: SONL065
Date of test report: 25/09/2025
Test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Lab-engineer: Gert-Jan Loobuyck

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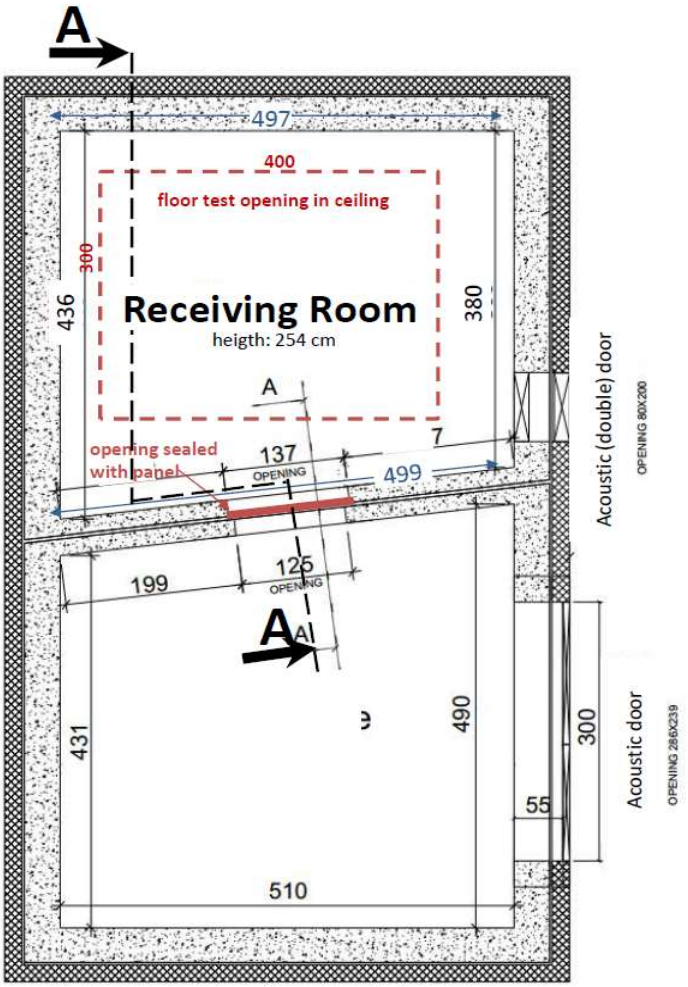
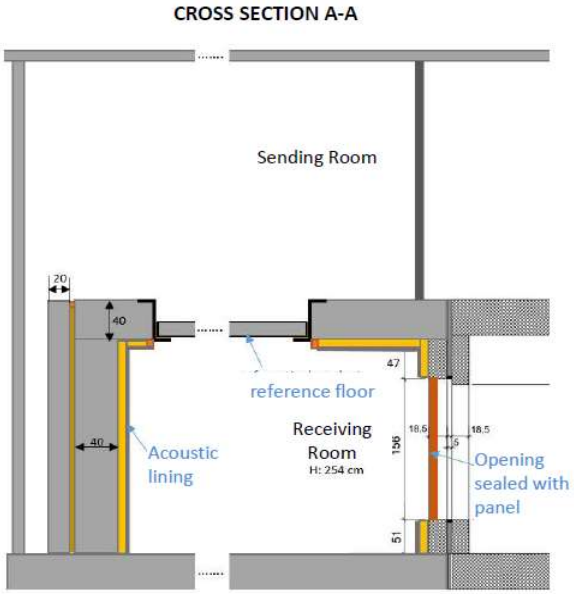
ANNEX 1 : Sound insulation test facilities at Daidalos Peutz Laboratory of Acoustics

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

The test rooms meet the requirements of ISO 10140-5
Both rooms are isolated for vibrations by using a so called room-in-room construction.





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daidalos peutz
laboratory of acoustics

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

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ANNEX 2: Description test items by manufacturer

The test sample description given by the manufacturer is checked visually as good as possible by the laboratory.
Sampling was not carried out by the laboratory; therefore, the results in this report apply solely to the sample as received.
Responsibility for ensuring that the tested product is equivalent to the commercialized product rests entirely with the applicant.

Description of the test element as a layered structure

Layer	Thickness (mm)	ρ (kg/m³)	m'' (kg/m²)	Description of the layer
1	18	625,6*	±11,3*	AGEPAN OSB 3 Ecoboard, 18 mm: ±11.3 kg/m²
2a	122		10	CircoFloor system 122 mm: 4-point support (4P)
2b		13,4*		infill material: Pearls Graphite EPS, ±13.4 kg/m³ Renewworks
3	140	2300	322	solid reinforced concrete slab 140 mm (heavyweight standard floor ISO 10140-5 Annex C)

Height of the Staenis floor assembly: 140 mm
Total height inluding 140 mm concrete base floor: 280 mm

**Indicative measurement in the laboratory*

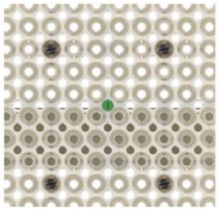
CircoFloor 140 mm (4P) - Pearls Graphite EPS - OSB 18 mm

Layer 1:
OSB 18 mm : Indicative surface mass density (laboratory measurement): ±11.3 kg/m²
Type: AGEPAN OSB 3 Ecoboard (mechanically fixed to the CircoFloor system using ≈ 13 screws/ m²)
Layer 2a:
CircoFloor System 122 mm:
Composed of cup-shaped panels interlocked in opposing orientations, forming a single structural panel with a total height of 88 mm.
Material: Polypropylene (PP)
The CircoFloor system was leveled using the 87 mm height-adjustable (PP) supports ⌀28 mm,
screwed in the structural panels, to achieve a total system height of 122 mm.
The supports are arranged in a 4-point support configuration, positioned at the square intersections (39 cm c/c).
All adjustment supports are in direct mechanical contact with the laboratory base floor.
Total contact point connections with the test floor (3000 mm x 4000 mm): 98
This corresponds to 88 primary support points at the square intersections (≈7 supports/m²)
plus 10 additional supports along one longitudinal side of the test floor to provide extra support on that side.
Locking PP screw 42 mm (green): to secure the interlocked cup-shaped panels. This screw does not make contact with the base floor.
Layer 2b:
Infill material: Pearls Graphite EPS Renewworks
Type: Graphite recycled EPS beads
Pearl diameter: ± 5 mm
Indicative bulk density (laboratory measurement): ±13.4 kg/m³
Decoupling (contact with structural elements):
A resilient edge strip (5 mm thick, 200 mm high) was bonded to the vertical edges of the test opening,
to prevent the Staenis floor assembly making rigid contact with the surrounding structure.
Sealing:
A flexible sealant (Perennator) was used to seal the perimeter joint (±5 mm) between the 18 mm OSB top plate and the surrounding structure.

More detailed information regarding the installation method of the CircoFloor system can be obtained from Staenis.

structural interlocking panel 39 cm x 39 cm

4-point support configuration



example/section of the CircoFloor system

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ANNEX 3: Technical sheet

The test sample description given by the manufacturer is checked visually as good as possible by the laboratory.
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Further product information can be obtained from ***Staenis BV***

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ANNEX 4: photographs of the test element or the test arrangement

Description of the assembly or drawing or photo

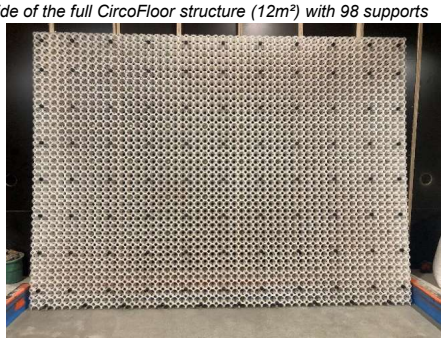
The assembly was carried out by the manufacturer, Staenis, fully in accordance with the manufacturer's instructions.
The correct height of the CircoFloor system was set using a line laser and a reference point to ensure proper adjustment.
The laboratory verified whether the specified floor build-up height was correctly applied.

Installation of the CircoFloor interlocking panels

87 mm (PP) supports screwed in the structural panels, to achieve a total system height of 122 mm + (18 mm OSB)

Infill material: Pearls Graphite EPS Renewworks

Backside of the full CircoFloor structure (12m²) with 98 supports



Heavyweight reference floor

without lining:

with lining: