استانداردهای تاثیر بر صدا Laboratory Standards and Certifications

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استاندارد تاثیر بر صدا



Mr. Upendra R. Oza STANDARD CARPETS IND LLC Industrial Area no.1 PO Box 27977 AE-SHARJAH VERENIGDE ARABISCHE EMIRATEN

your delivery of 2009-05-12

your reference

our reference PW/5484

date

Zwijnaarde, 2009-06-11

Analysis Report 68886

Required tests:

Determination of the electrical resistance Assessment of static electrical propensity - walking test Determination of sound absorption Determination of impact sound insulation Determination of thermal resistance by the guarded hot plate apparatus

Identification number	Information given by the client	Date of receipt
T905007	FRS Loon Pile Polypropylene Carnet Tile (Tetris)	2009-05-12

Petra Wittevrongel

For further information, please contact our sectorial adviser Jo Wynendaele

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استاندارد تاثیر بر صدا



Analysis Report 68886

our reference date PW/5484 2009-06-11 page 2/6

Reference: T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)

Determination of the electrical resistance

1. Method:

Applied standard : ISO 10965 (year: 1998)

Deviations of the standard :-

Testing atmosphere : 23°C and 25 % relative humidity

Applied voltage : 500 Volt

Number of specimens : 3

Number of measurements : 6 (2 measurements per specimen)

2. Results:

Date of ending the test: 25-05-2009

test specimen	surface resistance in Ω	vertical resistance in Ω		
1	1,67 x 10 ¹²	9,43 x 10 ¹¹		
2	5,00 x 10 ¹²	1,35 x 10 ¹²		
3	5,00 x 10 ¹²	1,28 x 10 ¹³		
4	$3,33 \times 10^{12}$	6,58 x 10 ¹¹		
5	4,55 x 10 ¹²	1,28 x 10 ¹²		
6	2,50 x 10 ¹²	1,25 x 10 ¹²		
geometrical mean value	3,41 x 10 ¹² Ω	1,61 x 10 ¹² Ω		

Performed in the physical lab under the responsibility of Petra Wittevrongel.

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Analysis Report 68886

our reference PW/5484

2009-06-11

page 3/6

Reference:

T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)

Assessment of static electrical propensity - walking test

1. Method:

Applied standard

: ISO 6356 (year: 2000)

method by walking

Deviations of the standard : dimensions of the carpet 200 cm x 100 cm (assembly of 8

pieces of 50 cm x 50 cm)

Atmosphere for conditioning : 23°C and 25% relative humidity

Conditioning time

: at least 7 days

Number of measurements

:3

2. Results:

Date of ending the test: 25-05-2009

	body voltage (kVolts)
measurement	with Neolite sole
1	0.0
2	0.1
3	0.2
average	0.1

Performed under accreditation in the physical lab under the responsibility of Philippe Lemaire.



استاندارد تاثیر بر صدا



Analysis Report 68886

PW/5484

2009-06-11

page

Reference: T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)

Determination of sound absorption

1. Method:

Performed in the external lab : Schall- und Wärmemeßstelle Aachen GmbH

2. Results:

Date of ending the test

: 27-05-2009

See analysis report enclosed.

Centexbel is not responsible for the test results.



استاندارد تاثیر بر صدا



Analysis Report 68886

our reference PW/5484 2009-06-11

page

Reference: T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)

Determination of impact sound insulation

1. Method:

Performed in the external lab : Schall- und Wärmemeßstelle Aachen GmbH

2. Results:

Date of ending the test

: 27-05-2009

See analysis report enclosed.

Centexbel is not responsible for the test results.



استاندارد تاثیر بر صدا



Analysis Report 68886

our reference PW/5484 2009-06-11

6/6

Reference: T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)

Determination of thermal resistance by the guarded hot plate apparatus

1. Method:

Performed in the external lab : Ghent University, Faculty of Engineering (Department of

Textiles)

2. Results:

Date of ending the test

: 29-05-2009

See analysis report enclosed.

Centexbel is not responsible for the test results.



استاندارد تاثیر بر صدا



Schall- und Wärmemeßstelle Aachen GmbH

Institut für schalltechnische und wärmetechnische Prüfungen - Beratung - Planung

SWA GmbH

Irri Grüntai 22 52 066 Aachen Telefon (0241) 970 220 Telefox (0241) 572 956 Geschäftsführung. Dipl.-Ing Bernd Gebing Dr.-Ing Lothar Siebei

Amtsgericht Aachen HRB 2708

Labor Hauptstr 133 52 477 Alsdorf

VMPA Schallschutzprüfstelle DIN 4109 Staatlich anerkannte Sachverständige für den Schall-u-Warmeschutz IK-Bau NRW

Bankverbindung Sparkasse Aachen (BLZ 390 500 00) Kto.-Nr. 11 011 194

27.05.2009

TEST REPORT NO.: CT190509B

TS

Impact sound insulation of ISO 140-8: 1998 - 03

Date of test:

19.05.2009

Customer:

CENTEXBEL

Tested material:

T905007

laid loose on a 140 mm thick reinforced concrete floor slab



استاندارد تاثیر بر صدا استاندارد تاثیر بر صدا

Test results Impact sound insulation of ISO 140-8: 1998 - 03 Measurement of impact sound insulation by a floor covering - on a solid strings-floor							
Cust	omer:	CENTEXB	EL				
Teste	ed material:	T905007					
Test	rooms:	02 u. K2, H	auptstraß	e 133, 5	477 Alsdorf		
Test	area:	4,24 m x 4,	15 m Tes	t area of	ab		
Date	of test:	19.05.2009					
		Description	on of the	test n	terial:		
		T	otal thickn	ess:	- mm		
		M	lass / area	1:	- kg/m²		
					inforced concrete floor slab		
Der	nkina men				e results are based on tests, which were effected	with on artificial	
	eiving room: lume:	58,9 m	.3	50	urce of sound by labratory conditions.	1	
	STATE OF THE PARTY.	20 °C				*	
	mperature:	65 %		dB		4	
Hu	midity:			4			
	Frequency		ΔL	₹ 40			
		Bare floor		oit			
	Hz	dB	dB	A 30 Sound proteotion Al			
	50		4,9	pro l			
	63		2,3	5 30			
	80		1,8 2,5	So	X		
	100 125	61,0 61,4	2,5	a do			
	160	64,8	4,9	E 20			
	200	63,7	8,0	5 20			
	250 315	65,4 65,6	10,7 16,0	ment in in	SVA		
	400	66,1	22,4	(0)	1 / / 63	4	
	500	66,0	27,3	10 10	13/11	1611	
	630	66,4	29,8	Ē	1 / F/SVV	CH C	
	800 1000	66,3 66,2	36,4 43,4		ANTLIC ANERKAL	INTE 5	
	1250		46,0		PROFST	ELLE/3/	
	1600	67,2	45,3	0	1 12	10/	
	2000 2500		47,9 53,7		Memel	3919	
	3150		54,2				
	4000			152	frequency-range for the evaluation of	SO 717-2	
	5000		444	-10	63 125 250 500 1000	2000 4000	
	COLUMN TO THE REAL PROPERTY.	filter: third- according		1	63 125 250 500 1000 Freque		
	Impact sou	nd improveme	nt index	non rated	fuction of impact sound insulation $C_{i,\Delta} = -12$	dB	
	ΔL _W	= 24 d				dB	
	(VM	= 24 d	B)	ΔΙ	= 12 dB C1 (60-2500 = 4	dB	
Test	report no.:				VA Schall- und Wärmemeßstelle Aach	nen GmbH	
, wat		190509B T	s	1	(5)	111	
	chen	27.05.2009		12	In Alsey	Morting Language	



استاندارد تاثیر بر صدا

Schall- und Wärmemeßstelle Aachen GmbH

Institut für schalltechnische und wärmetechnische Prüfungen - Beratung - Planung

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tm Gruntal 22 52 066 Aachen Telefon (0241) 970 220 Telefax (0241) 572 955 Geschäftsführung Dipt.-Ing. Bernd Gebing Dr.-Ing. Lothar Siebel

Amtsgericht Aachen HRB 2708

Labor: Hauptstr. 133 - 52 477 Alsdorf

VMPA Schallschutzprüfstelle DIN 4108 Staatlich anerkannte Sachverständige für den Schall-u. Wärmeschutz K-Bau NRW

Bankverbindung: Sparkasse Aachen (BLZ 390 500 00) Klo.-Nr. 11 011 194

27.05.2009

TEST REPORT NO.: CT190509B SA

Sound absorption of DIN EN ISO 354: 2003 - 12

Date of test: 19.05.2009

Customer: CENTEXBEL

Tested material: T905007

laid loose on the floor of the reverberation room



استاندارد تاثیر بر صدا استاندارد تاثیر بر صدا

4. Test resu			NAI PALS	20.254	2022	2		Enclosure S
Sound abs Measurement of s Customer:		on in a rev			2003 - 1	2		Page 2 of 4
Tested material: Test room: Test area: Test method: Date of test;	reverberation 12,0 m² method of re 19,05,2009 Description Total	everberat	test ma	ße 133, 5	- n			
	laid loose of Dimension (A STATE OF THE PARTY OF THE PAR	t area:		4,00 п			
Reverberation	n room:							
Basic plan:		-						
Volume:	211 m³	f / Hz	125	250	500	1000	2000	4000
Temperature: Humidity:	20 °C 65 %	αs	0,00	0,01	0,06	0,13	0,32	0,39
Surface areas reverberation room: Surface areas reflectors in revroom: Reflectors: 6 Alu pane 1,0 m/ 2, 7 Plywood 1,5 m/ 1, 1 Alu pane 1,8 m/ 0,	213 m² of verberation 54,5 m² els of 0 m panels of 3 m	1.2 - 0.0 sound absorption coefficient as	125		500 est sound		nird-octave	1000 Hz OSVERKANNTE PROFSTELLF



استاندارد تاثیر بر صدا استاندارد تاثیر بر صدا

TI FUILUUI	of test results					_	-	End	closure SA
Soundabsorber for the application in buildings - valuation of sound absorbtion Sound absorption of DIN EN ISO 11654: 1997- 07 Customer: CENTEXBEL								ge 3 of 4	
Tested material:	article:			T9050	07				
Test room:	reverberation room	Haupts	traße	15.55					
Test area:	12,0 m²			100, 02 11	7 000011				
Test method:	method of reverber		m						
Date of test:	19.05.2009								
	Description of th	e test i	nate	rial:					
	Total thickness:				mm				
	Mass / area:				kg/m	2			
	laid loose on the flo	or of the	rever	beration ro	120				
				frequen	cy - range		Frequency	pactical so	und
				77.75	shapeindi-		requency	absorption	
				cators"	anapetra:		in Hz	coefficient	
						Į.		12.15	
						L	125 250	0,00	6
							271.00	264.00	
						M	500	0,0	5
						M	1000	0,15	
						H	2000 4000	0,30	
Results:									
Relation - curve:	• •								
Reverberation ro	oom:	9	1,0			-		-	-
Basic plan:	trapezoid								
Volume: Temperature:	211 m³ 20 °C	cient	0,8	-			-		
Humidity:	65 %	coeffi							
		8	0,6						-1
Surfaces areas	of	practical sound absorption							
reverberation	OI.	orp	0,4						
room:	213 m²	a de	0,2				/		
Surfaces areas	of	to pe	J,6		1		/	-	_
reflectors in rev		pra	0		1				-
room:	54,5 m²			125 25	0 50	0	1000	2000	4000
							Frequ	uency f	n Hz
							100		Alsi
				Evaluat	ed sound	ab	sorptions o		
				Ohu: 04	5 (H 1	1 3 4	NERKAN	
	*) If is	recomme	ended	- CF			lar valuation	with como	ete =
				orption gard		94	130	W	101
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استاندارد تاثیر بر صدا

4.2 Test resu	lts				Enclosure SA
Reverberat Measurement of s Customer:	cion times	verberation room			Page 4 of 4
	CONTRACTOR OF THE PARTY OF THE				
Tested material: Test room: Test area:	article: reverberation room, 12,0 m ³		T905007 33, 52 477 Alsdo	orf	
Test method: Date of test:	method of reverbers 19.05.2009 Description of th	ation room	al:		
	Total thickness:			m	
	Mass / area:		- kç	g/m²	
	laid loose on the flo		eration room		
	Dimension of the te		4.00		
		length; width;	4,00 m 3,00 m		
Reverberation tir	mes:				
		f / Hz	T1/s	T2/s	
		100 125 160 200 250 315 400 500 630 800 1000 1250 1600 2000 2500 3150 4000 5000	9,96 7,82 6,73 7,29 7,20 6,22 6,57 6,89 6,93 6,55 6,48 6,31 5,93 5,42 4,65 3,99 3,24 2,59	9,91 7,79 6,48 7,10 6,98 5,95 6,02 6,00 5,87 5,39 5,00 4,34 3,79 3,38 3,05 2,68 2,26 1,86	
	peaker positions: phone positions:	2 2 x 6 SWA Schall	Test sound: Reception filte	third-octave noise	Bstene
Aachen	CT190509B SA 27.05.2009	100474040100000000000000000000000000000		4	4-



استاندارد تاثیر بر صدا





FACULTEIT INGENIEURSWETENSCHAPPEN

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T.a.v. Hilde Depypere Centexbel Technologiepark 7 9052 Zwijnaarde

contact Didier Van Daele

e-mail didier.vandaele@UGent.be

date 29/05/2009

TEST REPORT 09-297 B

Samples received:

Order 7489: T905007 Received on 12/05/09

Aim of the test:

determination of applicability with floorheating

Test conditions:

Applicability with floorheating by means of TECOSY: one plate method

Standard:

DIN 52 612 part 1 (1979)" in accordance with ISO 8302 (1991)"

Method:

A sample is placed between a cold and a warm plate. The cold and the warm plate are kept at the same temperature. The quantity of energy needed to keep the warm and cold plate on temperature, is an indication for the heat transmission

Number of tests: 2 samples (3 measurements per sample) Test conditions:

20 ± 2°C and 65 ± 4 % relative humidity

The tests were ended in week 22/2009

The test results only apply to materials that correspond to the tested sample. Forgery will be legally prosecuted, just like partial reproduction without prior written permission. Tests that are marked *are accredited, those marked " are not accredited. Advices and interpretations are not covered by the accreditation.

p. 1/2 09-297 B

The department of Textiles is Notified laboratory n°1611 for the European Products directive 89/106/EC.



استاندارد ای اس تی ام تاثیر بر صدا



REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 103787338 Date: January 7, 2019

REPORT NO. 103787338CRT-001a

IMPACT SOUND TRANSMISSION TEST ON ITTS TEST NUMBER 182893 STANDARD CARPETS IND. L. L. C. OVER A SIX INCH CONCRETE SLAB

RENDERED TO

INDEPENDENT TEXTILE TESTING PO BOX 1948 1503 MURRAY AVENUE DALTON, GA 30722-1948

INTRODUCTION

This report gives the result of an Impact Sound Transmission test on flooring. The sample was selected and supplied by the client and received at the laboratories on January 4, 2019. The material appeared to be in new, unused condition upon arrival.

AUTHORIZATION

Signed Intertek Quotation No. Qu-00932024

TEST METHOD

The floor system was tested in general accordance with the American Society for Testing and Materials designation ASTM E492-09 (Reapproved 2016), "Standard Test Method for Laboratory Measurement of Impact Sound Transmission through Floor-Ceiling Assemblies Using the Tapping Machine". It was classified in accordance with ASTM E989-06 (Reapproved 2012), entitled, "Standard Classification for Determination of Impact Insulation Class (IIC)".

the report in the the explicative see of interfee's Client and is provided pursuant to the pursuant between interfee and the Client interfee's responsibility are institut are initiated to the terms and conditions of the surrented. Interfee assumes no flability to any party, other than to the Client in accordance with the greenfeet, for any loss, expense or damage occasioned by the use of this report. Only the Client is sufficient to only one can be a condition of the client in the condition of the client is sufficient. So you are of the leasted interfeet and their only in the interfeet, the client sufficient is product of the client in the approved in writing by start does not provide the client in this report is only their does not imply that the flatterial product of the condition of the client in the condition of the conditi



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GENERAL

The test method is designed to measure the impact sound transmission performance of a floor-ceiling assembly, in a controlled laboratory environment. A standard tapping machine (Bruel & Kjaer Type 3207) was placed at four positions on the test floor that forms the horizontal separation between two rooms, one directly above the other. The data obtained was normalized to a reference room absorption of 10 square meters in accordance with the test method.

The standard also prescribes a single-figure classification rating called "Impact Insulation Class, IIC" which can be used by architects, builders and code authorities for acoustical design purposes in building construction.

The IIC is obtained by matching a standard reference contour to the plotted normalized one-third octave band sound pressure levels at each test frequency. The greater the IIC rating, the lower the impact sound transmission through the floor-ceiling assembly.

DESCRIPTION OF THE FLOOR/CEILING ASSEMBLY

The floor system consisted of a six inch thick concrete slab that forms the horizontal separation between two rooms. The slab is not isolated from the receiving room walls.

DESCRIPTION OF TEST SPECIMEN

ITTS Test No. 182893 Standard Carpets Ind. L. L. C.

Style: Nylon Broadloom with SBR Latex Backing

Construction: Level Cut Loop (LCL) The flooring weighed 0.437 lbs./ft².

Report No.103787338CRT-001a

Page 2 of 5

Date: January 7, 2019



استاندارد ای اس تی ام تاثیر بر صدا



RESULTS OF TEST

The data obtained in the room below the panel normalized to A_o = 10 square meters, is as follows:

1/3 Octave Band	ITTS TEST NUMBER 182893 STANDARD CARPETS IND. L. L. C.
Center	STANDARD CARPETS IND. L. L. C.
Frequency	1/3 Octave Band Sound Pressure
<u>Hertz</u>	Level dB re 0.0002 Microbar
100	58
125	57
160	57
200	53
250	49
315	46
400	39
500	35
630	30
800	25
1000	21
1250	19
1600	17
2000	18
2500	16
3150	15
Impact	62
Insulation Class	
(IIC)	

PRECISION

The 95% uncertainty level for each tapping machine location is less than 3 dB for the 1/3 octave bands centered in the range from 100 to 400 Hz and less than 2.5 dB for the bands centered in the range from 500 to 3150 Hz.

For the floor/ceiling construction, the 95% uncertainty limits ($\triangle L_n$) for the normalized sound pressure levels were determined to be less than 2 dB for the 1/3 octave bands centered in the range from 100 to 3150 Hz.

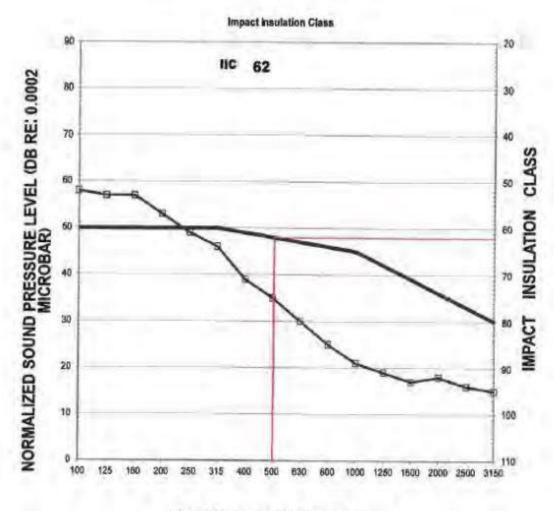
Report No.103787338CRT-001a Page 3 of 5 Date: January 7, 2019



استاندارد ای اس تی ام تاثیر بر صدا



ITTS TEST NUMBER 182893 STANDARD CARPETS IND. L. L. C. OVER A SIX INCH CONCRETE SLAB



One-Third Octave Band Center Frequency (Hz)

INDEPENDENT TEXTILE TESTING

Report No.103787338CRT-001a

Page 4 of 5

Date: January 7, 2019



استاندارد ای اس تی ام تاثیر بر صدا



REMARKS

1. Ambient Temperature: 68°F

2. Relative Humidity: 35%

CONCLUSION

The test method employed for this test has no pass-fail criteria; therefore, the evaluation of the test results is left to the discretion of the client.

Date of Test: January 7, 2019

Report Approved by:

Brian Cyr

Engineer Acoustical Testing Report Reviewed By:

Jama R. Kline

James R. Kline

Engineer/Quality Supervisor

Acoustical Testing

Attachments: None

Report No.103787338CRT-001a

Page 5 of 5

Date: January 7, 2019



استاندارد ای اس تی ام تاثیر بر صدا



REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 103787338

Date: January 7, 2019

REPORT NO. 103787338CRT-001b

IMPACT SOUND TRANSMISSION TEST ON ITTS TEST NUMBER 182893 STANDARD CARPETS IND. L. L. C. OVER A SIX INCH CONCRETE SLAB

RENDERED TO

INDEPENDENT TEXTILE TESTING PO BOX 1948 1503 MURRAY AVENUE DALTON, GA 30722-1948

INTRODUCTION

This report gives the result of an Impact Sound Transmission test on flooring. The sample was selected and supplied by the client and received at the laboratories on January 4, 2019. The material appeared to be in new, unused condition upon arrival.

AUTHORIZATION

Signed Intertek Quotation No. Qu-00932024

TEST METHOD

The specimen was tested in general accordance with the American Society for Testing and Materials designation ASTM E2179-09 (Reapproved 2016), "Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission Through Concrete Floors".

This report is for the optimization was of interface's Close and is provided pursuant to the agreement between interface and its Clore, interface responsibility and instant, other than its the Clore in accordance with the agreement, for any lose, capense or damage occasioned by the use of this report. Only the Clore's extended to copy or distribute this report and then only in the distribute the copy or distribute this report and then only in the distribute the copy or distribute the approved is writing by interface. The observations and fast results in this report are relevant only to the sample tested material, product of service must first be approved in writing by interface. This observations and fast results in this report are relevant only to the sample tested material, and only the fast of the copy of th



استاندارد ای اس تی ام تاثیر بر صدا



TEST METHOD - Cont'd

Two vertically adjacent rooms are used: the upper one being designated the source room and the lower one the receiving room (10,000 ft³). A standard concrete floor is installed in an opening between them. The rooms and the floor installation are designed so the only significant sound radiation into the receiving room is from the standard concrete floor.

A standard tapping machine is placed and activated on the standard concrete floor and the impact sound pressure levels are measured in the room below. The floor covering to be evaluated is then placed on the standard concrete floor and the impact sound pressure levels measured again.

The differences in impact sound pressure level are used to calculate two single number ratings. The first is an IIC rating calculated for the covering installed on the reference concrete floor. The second rating, \triangle IIC, represents the calculated reduction in IIC when the covering is placed on the reference concrete floor, that is the improvement in IIC due to the covering.

DESCRIPTION OF THE FLOOR/CEILING ASSEMBLY

The floor system consisted of a six inch thick concrete slab that forms the horizontal separation between two rooms. The slab is not isolated from the receiving room walls.

DESCRIPTION OF TEST SPECIMEN

ITTS Test No. 182893
Standard Carpets Ind. L. L. C.
Style: Nylon Broadloom with SBR Latex Backing
Construction: Level Cut Loop (LCL)
The flooring weighed 0.437 lbs./ft².

Report No. 103787338CRT-001b Page 2 of 4 Date: January 7, 2019





RESULTS OF TESTS

ITTS TEST NUMBER 182893 STANDARD CARPETS IND. L. L. C

1/3 Octave Band Sound Pressure Level dB re 0,0002 Microbar

		201010	D 10 0.0002 1	riiciobai	
1/3 Octave Band	320				
Center Frequency	Bare		Difference	Reference	
<u>Hertz</u>	Concrete	Floor Tested	in dB	Floor	Final Array
100	64.9	58.0	6.9	67.0	60.1
125	68.1	56.9	11.2	67.5	56.3
160	71.1	57.3	13.8	68.0	54.2
200	71.6	52.8	18.8	68.5	49.7
250	72.5	48.5	24.0	69.0	45.0
315	74.3	45.6	28.7	69.5	40.8
400	73.9	39.1	34.8	70.0	35.2
500	74.8	34.8	40.0	70.5	30.5
630	74.9	29.6	45.3	71.0	25.7
800	75.7	26.5	49.2	71.5	22.3
1000	77.1	24.0	53.1	72.0	18.9
1250	79.2	22.6	56.6	72.0	15.4
1600	81.1	21.2	59.9	72.0	12.1
2000	83.0	21.9	61.1	72.0	10.9
2500	82.3	20.1	62.2	72.0	9.8
3150	81.5	19.6	61.9	72.0	10.1
Impact insulation C	lass (IIC)*				60

Calculated improvement in Impact Insulation Class: IIC 60 - IIC 28 = △IIC 32

*Classified in accordance with ASTM E989-06 (Reapproved 2012), entitled, "Standard Classification for Determination of Impact Insulation Class (IIC)".

The uncertainty limit of the impact noise test data is less than 3 dB for the 1/3 octave bands centered in the range from 100 to 400 Hz and less than 2.5 dB for the bands centered on the range from 500 to 3150 Hz.

Report No. 103787338CRT-001b

Page 3 of 4 Date: January 7, 2019



استاندارد ای اس تی ام تاثیر بر صدا



REMARKS

1. Ambient Temperature: 68°F

2. Relative Humidity: 35%

CONCLUSION

The test method employed for this test has no pass-fail criteria; therefore, the evaluation of the test results is left to the discretion of the client.

Date of Test: January 7, 2019

Report Approved by:

Brian Cyr Engineer

Brian Cy

Acoustical Testing

Report Reviewed By:

James R. Kline
James R. Kline

Engineer/Quality Supervisor

Acoustical Testing

Attachments: None

Report No. 103787338CRT-001b

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Date: January 7, 2019



استاندارد ای ایزو ۸–۱۴۰ تاثیر بر صدا



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Bankverbindung Sparkasse Auchen (BLZ 590 500 00) Kto -Nr. 11 011 194

01.06.2010

TEST REPORT NO.: CT310510

TS

Impact sound insulation of ISO 140-8: 1998 - 03

Date of test

31.05.2010

Customer

CENTEXBEL

Tested material:

T004993 (non glued)

laid loose on a 140 mm thick reinforced concrete floor slab



استاندارد ای ایزو ۸-۱۴۰ تاثیر بر صدا

Test results				Enclosure TS
Impact sou Measurement of in Customer:	ind ins	d insulation	of ISO	0 140-8 : 1998 - 03 overing - on a solid strings-floor
Tested material:	T004993	(non glue	ed)	
Test rooms:	02 u. K2	Hauptstra	ße 133, 5	477 Alsdorf
Test area:	4,24 m x	4,15 m Te	est area of	slab
Date of test	31.05.20	10		
	Descrip	otion of th	ne test m	aterial:
		Total thic	kness:	- mm
		Mass / ar	ea	- kg/m²
	laid loos			reinforced concrete floor slab
		0.011.0		The results are based on tests, which were effected with on artificial
Receiving room		- N	50	source of sound by labratory conditions.
Volume:		m³		/
Temperature			dB	
Humidity:	00	· %	-	
Frequency	t.n	ΔL	H 40	
	Bare floo	ir.	B protection	
Ha	z dE	d d	B a	
50)	0.		
63	3	3,		1
80		4.	1 2	
100				
160			4 E 20	
200			.0	
250 315				1 / SMA
400			6 0	TO TOPE
500	66,	0 24		ANSI-
630			, E	E ANTLICH E
100				ANITLICH ANERKANNTE PROFSTELLE
125	0 66,	6 43	4	PROFSTELLE O
160				Mornessielle !
200 250				- Menarc
315				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
400	0	54	10.744	▶ friequency-range for the evaluation of ISO 717-2 ◀
500	0	54	.5 -10	63 125 250 500 1000 2000 40
Receptio	n filter: t	hird-octave		Frequency f / F
		ling ISO 71		
Impact s	ound improv	ement index	non rate	reduction of impact sound insulation C _{L, v} = -12 dB
ΔL _v	v = 2	7 dB	1	$L_{lin} = \Delta L_w + C_{l,\lambda} \qquad \qquad C_{l,r} = 1 \text{ dB}$
(VM		7 dB)	1	$L_{lin} = 15 \text{ dB}$ $C_{(r,50,2500} = 6 \text{ dB}$

Test report no.:

CT310510 TS

SWA Schall- und Wärmemeßstelle Aachen GmbH

