





SOUND INSULATION TEST REPORT

Sound Insulation testing in accordance with Test Standards BS EN ISO 140-4 & BS EN ISO 140-7

Report Reference Number: 30670

Report Date: 02/10/2023

Abstract

Sound Insulation Testing is the process of measuring how much noise a building element, normally a wall or a floor, stops from travelling through to a neighbouring property.

This report describes the process taken and the results obtained from the sound insulation testing at 141-147 High Street, Brentwood, Essex, CM14 4SA.

Competent Tester

Testing was conducted by Shams Ahmadi who is a member of the SITMA Sound Insulation Testing Registered Testers Scheme, Registration Number: 7143

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The SITMA Registered Testers' Scheme

This report was conducted by a tester that is registered with the SITMA Registered Testers' Scheme for Sound Insulation Testers. More information on the scheme, the lodgement system, quality control and auditing are discussed below.

Scheme Member Conducting this test

The tester that conducted your testing was:	Shams Ahmadi	
Linked to:	Eecobuild Ltd, C/O Project H Ltd Beadle House, Bull Plain, Hertford, SG14 1DT.	

Entry Requirements

In order to enter the SITMA Registered Testers' Scheme, testers are required to either:

- Have completed the Institute of Acoustics Certificate of Competence in Building Acoustics Measurements (CCBAM), or
- \cdot Have been assessed by SITMA to hold suitable, demonstrable evidence of competence in sound insulation testing

Audit Requirements

Each tester is audited at least once per year, which may be unannounced in accordance with SITMA Document PUS012. This is achieved by the tester logging their job onto the SITMA portal **in advance** of testing taking place.

Audits are carried out by independent SITMA employees who have been trained in accordance with BS EN ISO 19011:2018 and have extensive background in Sound Insulation Testing. Each tester will be able to issue you with their SITMA audit documentation from their last audit alongside this report, if requested.

SITMA Portal

The SITMA Portal, besides logging every job for every tester, is used to generate reports, just like this one. The portal does not take pre-calculated information, it takes the raw data from the sound level meter and calculates each individual test itself, before producing this report. This ensures that no test data has been amended by any tester prior to the information being uploaded.

SITMA Accreditation

SITMA will shortly have achieved BS EN ISO/IEC 17024:2012 accreditation from UKAS (Application number 10579). SITMA has completed the Initial Audit and is awaiting final confirmation.

Calibration Requirements

SITMA holds some of the strictest calibration requirements in the world for sound insulation testing, with each sound level meter and tapping machine requiring UKAS calibration every 2 years and the microphone calibrator requiring calibration every 12 months. If the tester does not hold correctly calibrated equipment, the SITMA portal will not let them produce this report.

Complaints

You should speak directly with the tester if you wish to make a complaint. If your complaint is not handled to your satisfaction, you are then welcome to make a complaint directly to the SITMA registered testers' scheme in line with our complaints process PUS013.



TO CHECK THIS REPORT IS VALID

- Head to this site: 1. https://sitma.bcta.group/
- 2. Use these credentials:
 - a. Report Reference Number:
 - i. 30670 b.
 - Job Postcode:
 - i. CM14 4SA



Simplified Test Results

Certificate	Plot &	Plot &	Target	Result	Pass / Fail
Number	Source	Receive Room	$D_{n\tau,w}+C_{tr}$	$D_{nT,w}+C_{tr}$	1 455 / 1 41
Ramoor	Room		or L'nT,w(dB)	or L'nT,w(dB)	
130155	Flat 5	Flat 4 Kitchen /	>= 45	56	PASS
	Kitchen /	Dining Room			
	Dining Room	5			
130156	Flat 16	Flat 17	>= 45	57	PASS
	Kitchen /	Bedroom 2			
	Dining Room				
130157	Flat 3	Flat 4 Bedroom	>= 45	54	PASS
	Kitchen /	1			
	Dining Room				
130158	Flat 15	Flat 16	>= 45	57	PASS
	Bedroom 2	Bedroom 2			
130159	Flat 16	Flat 12 Kitchen	>= 45	56	PASS
	Kitchen /	/ Dining Room			
	Dining Room				
130160	Flat 17	Flat 13 Kitchen	>= 45	60	PASS
	Kitchen /	/ Dining Room			
	Dining Room				
130161	Flat 8	Flat 3 Kitchen /	>= 45	57	PASS
	Kitchen /	Dining Room			
	Dining Room				
130162	Flat Room	Flat 3 Kitchen /	>= 45	56	PASS
	Commercial	Dining Room			
	Space				
130163	Flat 17	Flat 13 Kitchen	<= 62	42	PASS
	Kitchen /	/ Dining Room			
	Dining Room				
130164	Flat 9	Flat 4 Kitchen /	<= 62	45	PASS
	Kitchen /	Dining Room			
100107	Dining Room				
130165	Flat 16	Flat 12 Kitchen	<= 62	41	PASS
	Kitchen /	/ Dining Room			
100100	Dining Room				5100
130166	Flat 8	Flat 3 Kitchen /	<= 62	41	PASS
	Kitchen /	Dining Room			
400407	Dining Room		45		D 400
130167	Flat Room	Flat 4 Kitchen /	>= 45	55	PASS
	Commercial	Dining Room			
400470	Space				DAGO
130170	Flat 9	Flat 4 Kitchen /	>= 45	54	PASS
	Kitchen /	Dining Room			
	Dining Room				

Testing Methodology

Airborne Sound Insulation Tests

Measurements of Standardised Level Difference $(D_n r)$ were conducted in accordance with BS EN ISO 140-4:1998.

Level measurements in the Source & Receive Rooms (L1 & L2)

The noise was generated in the source room by placing an active loudspeaker, which produces a steady spectrum of pink noise, in an external corner of the room but at least 0.5m away from any reflective surface.



The noise level was measured in both the source room and receive room, sampling as much of the room as possible. The sound level meter was always kept 0.7m away from any reflective surface as to not artificially increase or decrease noise levels into the microphone.

The measurements were taken at one-third octave band intervals from 100 to 3150 Hertz using an average time of 30 seconds The speaker was then moved to a corner junction on two internal walls and the measurements were repeated. The measurements in each room were arithmetically averaged. For separating walls the speaker should be in a corner opposite the test wall.

Background Measurements in Receive Room (L_b)

Where noise levels were measured in the receive room, the background noise level was also measured with the source room speaker turned off to ensure the background noise level did not influence the result. The background noise level is measured over a time period that accurately reflects the background noise measurement at the time of the test. This is normally between 6 & 30 seconds and can vary between the first and second background measurements.

Reverberation Time Measurements (T2, T20)

A minimum of 6 reverberation time measurements were also taken in the receive room to accurately define the level of influence the diffuse field has on the microphone, ensuring that an increase in soft or hard surfaces does not impact the overall test result.

A minimum of 6 reverberation times were measured in each room using a minimum of 3 microphone positions at each of 2 loudspeaker positions in accordance with BS EN ISO 354:2003 (also complies with BS EN 20354:1993)

Impact Sound Insulation Tests

Impact Sound Insulation was conducted to BS EN ISO 140-7:1998

Measurements of standardised impact Sound Pressure Level (L_{nT}) were conducted in accordance with BS EN ISO 140-7:1998.

Level Measurements in the Receive Room

Level measurements were acquired in the receive room using a tapping machine, which has a set of 5 steel hammers to produce impact noise on the separating floor surface.

The tapping machine was orientated at 45 degrees to the main floor axis.

The noise level was measured in the receive room at 2 microphone positions at one-third octave band intervals from 100 to 3150 Hertz using an average time of at least 6 seconds for each of 4 tapping machine positions, creating 8 individual measurement readings.

Measurements were always taken at least 0.7m away from any reflective or absorptive surfaces.

Background Measurements in Receive Room (L_b)

Where noise levels were measured in the receive room, the background noise level was also measured with the tapping machine turned off. This is to ensure the background noise level did not influence the result. The background noise level is measured over a time period that accurately reflects the background noise measurement at the time of the test. This is normally between 6 & 30 seconds and can vary between the first and second background measurements.

Reverberation Time Measurements (T2, T20)

A minimum of 6 reverberation times were measured in each room using a minimum of 3 microphone positions at each of 2 loudspeaker positions in accordance with BS EN ISO 354:2003 (also complies with BS EN 20354:1993)

These measurements are often the same readings as the airborne test when measured in the same group of tests where the receive room is the same and the test(s) carried out on the same day.



Calculation Methodology

Airborne Sound Insulation Tests

Background Noise Correction ('Corrected L₂')

Any receive room noise measurements (L2) that are within 6dB of the background measurements (Lb) are corrected by adding 1.3 to receive room noise measurement.

Where the background measurement is less than 6dB but greater than 10dB of the receive room noise measurement, a correction is applied as per BS EN ISO 140-4:1998 section 6.6 for airborne tests and/or BS EN ISO-7:1998 Section 5.6 for impact tests.

Level Difference ('D')

The difference between the source and 'corrected' receive room measurement is calculated for each speaker position and 2 differences averaged to obtain '*D*' for each frequency measured. These are calculated separately for Speaker Position 1 and Speaker Position 2

Standardised Level Difference ('*D*_n*r*')

The result is standardised by adding 10 times the logarithm of the reverberation time at each frequency, divided by 0.5 (reference reverberation time), to give the standardized level difference (DnT) at each frequency. These are calculated separately for Speaker Position 1 and Speaker Position 2 and are arithmetically averaged to produce the final DnT.

Weighted Standardized Level Difference ('*D*_{n*T*,w}')

The individual D_{nT} are then compared to the standard reference curve, with the sum of unfavourable deviations measured and adjusted, as defined in BS EN ISO 717-1:1997 to give a single figure result of $D_{nT,w}$.

Weighted Standardized Level Difference with Spectrum Adaption ('D_{n7,w} + C;C_w')

The spectrum adaptation terms (C;C_{ir}) are then calculated in accordance with BS EN ISO 717-1:1997.

Precision

All measurements are taken to 0.1dB precision, except reverberation times which are taken to 0.01 seconds precision.

Impact Sound Insulation Tests

Background Noise Correction ('Corrected L₂')

Any receive room noise measurements (L 2) that are within 6dB of the background measurements (Lb) are corrected by adding 1.3 to receive room noise measurement. The correction is applied up to 10dB, where a maximum correction of 1.6dB is applied. Any background noise level greater than 10dB over the L_2 measurement will appear to reduce the sound insulation at that frequency.

Standardized Impact Sound Pressure Level ('*L*'_{nT}')

The result is standardized by adding 10 times the logarithm the reverberation time at each frequency, divided by 0.5 to the 'corrected' L2 to give the Standardized Impact Sound Pressure Level (L'_{nT}) at each frequency.

Weighted Standardized Impact Sound Pressure Level ('L'_{n7}')

The L'_{n7} are then compared to the standard reference curve as defined in BS EN ISO 717-2:1997 to give a single figure result.

Precision

All measurements are taken to 0.1dB precision, except reverberation times which are taken to 0.01 seconds precision.



Sampling Regime

Testing was conducted using a sampling regime in accordance with Approved Document E 2003 [as amended] (ADE), ensuring each construction type was tested on the project, not necessarily each plot.

It is assumed that each construction type is constructed consistently. If this is not the case, and deviations of the construction type occur, further testing will be required to comply with the requirements of Approved Document E 2003 [as amended] to the Building Regulations.

ADE requires that sets of tests are carried out on one in ten of each construction type or sub-group. Each set of tests on houses is made up of two airborne sound insulation tests (Two Tests). Each set of tests on flats is made up of two airborne tests on walls and two airborne and two impact tests on floors (Six Tests).

The location of the sets of tests are selected at random by the tester except where specifically requested the Approved Inspector or specialist input from Robust Details.

Rooms were tested unfurnished unless testing is specifically requested in a furnished room. Testing is conducted using the larger room as the source room, with a tolerance of 10% of volume being acceptable either way. Doors, windows and trickle vents must be closed and kitchen units, cupboard doors, wardrobes etc shall be open for the duration of the test when they have been installed against the separating wall under test.

For impact testing, the tests are always conducted on the separating floor that has received Building Control Approval.

It is only ever acceptable to test on a soft floor covering where that covering is an integral part of a Type 1 concrete floor as defined by ADE and cannot physically be lifted by the testers own hands.

Occasionally, rooms may have an awkward layout, such as a stagger, be significant in length (>10m) or contain internal barriers. These requirements are defined in EN ISO 140-14:2004 which all testers hold a copy of as a mandatory entry requirement into the SITMA scheme. Where a test has an awkward layout, the testing method from BS EN ISO 140-14:2004 will be defined in the report and sketches held internally.

Deviations

Background Noise Levels

Background noise levels are often an unavoidable part of testing as testing must take place on a live building site. Though a correction is applied within the calculation, high background noise levels may result in the wall/floor under test not achieving its full potential. Situations can occur where background noise levels are not high but the sound insulation performance of the separating floor or wall is so good that the measured levels are close to the prevailing background levels. The equipment used cannot distinguish between background noise levels and the noise from the speaker.

Deviations Related to the test

If any deviation from the testing method was necessary, details of the deviation are indicated on each individual test certificate (appended to this report). Where deviations were avoidable, or tests have been conducted on a 'trial' basis, these will be highlighted at the bottom of each certificate.

Calibration

Calibration

The calibration certificates are appended to this report under Appendix B. The summary of calibrated equipment used is shown below:

Item	Calibration from	Calibration expiry	Certificate Number
Kit 2.2	20 Apr 2022	19 Apr 2024	U40756
Kit 2.22	02 Mar 2023	02 Mar 2024	UCRT23/1275
Kit 2.2	19 Apr 2022	18 Apr 2024	U40752



Test Results

Airborne Wall Tests – New Build by Shams Ahmadi

Certificate Number	Plot & Source Room	Source Room Volume	Plot & Receive Room	Receive Room Volume	Target Dո⊤,ա+Cւ	Result D _{n7,w} +Ctr	Pass / Fail				
130155	Flat 5 Kitchen / Dining Room	55.0m ³	Flat 4 Kitchen / Dining Room	55.0m³	>= 45 dB	56 dB	Pass				
	Construction: Generic Masonary Block: WB0001** : Generic Masonary Block Deviations:										
130156	6dB Rule no Flat 16 Kitchen / Dining Room	55.0m ³	Flat 17 Bedroom 2	27.0m ³	>= 45 dB	57 dB	Pass				
	Construction: Generic Masonary Block: WB0001** : Generic Masonary Block Deviations:										
130157	Flat 3 Kitchen / Dining Room	55.0m³	Flat 4 Bedroom 1	27.0m ³	>= 45 dB	54 dB	Pass				
	Construction: Generic Masonary Block: WB0001** : Generic Masonary Block										
	Deviations: 6dB Rule not met										
130158	Flat 15 Bedroom 2	29.0m ³	Flat 16 Bedroom 2	29.0m ³	>= 45 dB	57 dB	Pass				
	Construction Generic Ma	sonary Block	: WB0001**	: Generic Ma	sonary Block						
	6dB Rule no										



Airborne floor Tests – New Build by Shams Ahmadi

Certificate Number	Plot & Source Room	Source Room Volume	Plot & Receive Room	Receive Room Volume	Target Dn7,w+Ctr	Result D₀ _{7,w} +Ctr	Pass / Fail					
130159	Flat 16 Kitchen / Dining Room	55.0m³	Flat 12 Kitchen / Dining Room	55.0m ³	>= 45 dB	56 dB	Pass					
	Construction:											
	Generic Concrete: FC0001** : Generic Concrete Deviations:											
130160	Flat 17 Kitchen / Dining Room	55.0m³	Flat 13 Kitchen / Dining Room	55.0m³	>= 45 dB	60 dB	Pass					
	Construction:											
	Generic Concrete: FC0001** : Generic Concrete Deviations:											
	Deviations:											
130161	Flat 8 Kitchen / Dining Room	55.0m³	Flat 3 Kitchen / Dining Room	55.0m ³	>= 45 dB	57 dB	Pass					
	Constructio	on:		1								
			01** : Gener	ic Concrete								
	Deviations:											
130162	Flat Room Commercia		Flat 3 Kitchen / Dining	55.0m ³	>= 45 dB	56 dB	Pass					
	Space		Room									
	Construction: Generic Concrete: FC0001** : Generic Concrete											
	Deviations:											
130167		820.0m ³	Flat 4 Kitchen /	55.0m ³	>= 45 dB	55 dB	Pass					
	Commercia		Dining									
	Space Room Construction:											
			01** : Gener	ic Concrete								
	Generic Concrete: FC0001** : Generic Concrete Deviations:											
130170	Flat 9 Kitchen / Dining	55.0m ³	Flat 4 Kitchen / Dining	55.0m ³	>= 45 dB	54 dB	Pass					
	Room Constructio	n.	Room									
			01** : Gener	ic Concrete								
	Deviations:											



Impact floor Tests – New Build by Shams Ahmadi

Certificate Number	Plot & Source Room	Source Room Volume	Plot & Receive Room	Receive Room Volume	Target <i>L</i> ΄ _{nτ,w}	Result L′ոτ,w	Pass / Fail				
130163	Flat 17 Kitchen / Dining Room	55.0m³	Flat 13 Kitchen / Dining Room	55.0m³	<= 62 dB	42 dB	Pass				
	Constructi Generic Co Deviations	ncrete: FC00)01** : Gener	ic Concrete							
	Deviations	•									
130164	Flat 9 Kitchen / Dining Room	55.0m ³	Flat 4 Kitchen / Dining Room	55.0m ³	<= 62 dB	45 dB	Pass				
	Constructi	-					·				
		Generic Concrete: FC0001** : Generic Concrete Deviations:									
130165	Flat 16 Kitchen / Dining Room	55.0m ³	Flat 12 Kitchen / Dining Room	55.0m ³	<= 62 dB	41 dB	Pass				
	Construction: Generic Concrete: FC0001** : Generic Concrete										
	Deviations	:									
130166	Flat 8 Kitchen / Dining Room	55.0m³	Flat 3 Kitchen / Dining Room	55.0m³	<= 62 dB	41 dB	Pass				
	Constructi	-		!		-!					
			01** : Gener	ic Concrete							
	Deviations	:									



Appendix A – Individual Certificates

Test Type	Source Room	Partition	Receiver Room
Airborne sound insulation	Flat 5 Kitchen / Dining Room	WB0001**	Flat 4 Kitchen / Dining Room
Airborne sound insulation	Flat 16 Kitchen / Dining Room	WB0001**	Flat 17 Bedroom 2
Airborne sound insulation	Flat 3 Kitchen / Dining Room	WB0001**	Flat 4 Bedroom 1
Airborne sound insulation	Flat 15 Bedroom 2	WB0001**	Flat 16 Bedroom 2
Airborne sound insulation	Flat 16 Kitchen / Dining Room	FC0001**	Flat 12 Kitchen / Dining Room
Airborne sound insulation	Flat 17 Kitchen / Dining Room	FC0001**	Flat 13 Kitchen / Dining Room
Airborne sound insulation	Flat 8 Kitchen / Dining Room	FC0001**	Flat 3 Kitchen / Dining Room
Airborne sound insulation	Flat Room Commercial Space	FC0001**	Flat 3 Kitchen / Dining Room
Airborne sound insulation	Flat Room Commercial Space	FC0001**	Flat 4 Kitchen / Dining Room
Airborne sound insulation	Flat 9 Kitchen / Dining Room	FC0001**	Flat 4 Kitchen / Dining Room
Impact sound insulation	Flat 17 Kitchen / Dining Room	FC0001**	Flat 13 Kitchen / Dining Room
Impact sound insulation	Flat 9 Kitchen / Dining Room	FC0001**	Flat 4 Kitchen / Dining Room
Impact sound insulation	Flat 16 Kitchen / Dining Room	FC0001**	Flat 12 Kitchen / Dining Room
Impact sound insulation	Flat 8 Kitchen / Dining Room	FC0001**	Flat 3 Kitchen / Dining Room

SITNA

Registered Sound Insulation Test Certificate

Test No:	13015		Test J	ob Ref:	30670			rg Name:	Eecobu	
Customer:	YSJ01						Test Ty		Airborne (Wall)	
Address:		ne Gate,	Job Ad	ddress:	141-147	High	Test Da		30/09/2	
	Pinne	gh Street, r			Street, Brentwo Essex	od,	Tester: Site ty		Shams New Bu	
Postcode:	HA5 5	δQA	Postco	ode:	CM14 45	SA	Site Bu	uild:	Dwelling- House/Flat	
		Source	Room:		Parti	ition:		Receiv	er Room:	iat
Description:	Fla	at 5 Kitchen	/ Dinin	g Room	WBOO	001**	Flat	t 4 Kitcher	n / Dining	Room
Volume / Area			Dm ³	0	7.0)m²			.0m ³	
Frequency	D_{nT}	Correction	85			1				
(Hz) 50	22.6	х	- 80	1						i
63	35.9		00							
80	35.4		75						~	
100	40.7		_							
125	42.2		70			-				
160	46.9		_							
200	48.2		65				1			
250	52.9		(dB)				1			
315	56.9		8 60							-
400	62.3		eren			11				
500	67.2		Difference		1					
630	70.1	Х	- Level 20		1					
800	71.8	Х	<mark>ع</mark> 50							
1	73.4	Х	sed	i.,						
1.25	73.5	Х	Standardised L							
1.6	76	Х	nda		1					
2	75.3	Х	_ pj 40	j j						i
2.5	71.6	Х								i
3.15	72	Х	35							
4	73.9	Х	_							
5	72.5	Х	- 30							
Evaluatio measurem obtained by ar		results	- 30	1	25Hz 2	250Hz	500Hz	1 KHz	2 K	Ήz
					1/3rd O	ctave B	and Freat	uency (Hz)	
*0	utside sco	pe of accred	itation		Above g	raph sh	ows frequ	uency rang es within l	ge accordi	
		C; Ctr) [dB]:				P	ASS			~ 1 1 7 - 1
Minin		w+ Ctr [dB]: Level [dB]:	56 dB 45 dB		Advers		egated De]: 27.9	eviations		

Test Exceptions (if any): 6dB Rule not met

Registered Sound Insulation Test Certificate

Test No:	1301		Test J	ob Ref:	30670		Test Org Name	
Customer:	YSJ0		lak A		1 4 1 4 4 7	L Li auto	Test Type:	Airborne (Wall)
Address:		rne Gate, igh Street,	OA GUL	dress:	141-147 Street,	нıgn	Test Date: Tester:	30/09/2023 Shams Ahmadi
	Pinne				Brentwoo Essex	od,	Site type:	New Build
Postcode:	HA5	5QA	Postco	ode:	CM14 4S	A	Site Build:	Dwelling- House/Flat
		Source	Room:		Partit	ion:	Rece	eiver Room:
Description:	Fla	at 16 Kitchen		ng Room	WB00			7 Bedroom 2
Volume / Area		55.0		14 M 20	8.5	m²		27.0m ³
Frequency	D_{nT}	Correction	85					
(Hz)	16.2	Х		1				i
50			- 80					
63	28.9		_	1				
80	42.7		75			-		
100	44.5		_	i (
125	45.6		70					
160	45.1		E and A and					
200	48.9		- 65			4		
250	51.4		dB)				-1-	
315	53.2		Difference (dB)			1		
400	60.4	Х	rend	ļ.		11	<i>.</i>	
500	65.7	Х	- JI 55	i				i
630	67.1	Х			1			
800	66.6	Х	evel 20		11			
1	67.1	Х	Standardised L		11			
1.25	69.5	Х						
1.6	70.8	Х	lda					
2	70.6	Х		<u> </u>				i
2.5	72.7	Х	-	11				
3.15	71.9	Х	- 35					
4	72.9	Х	-					
5	70.6	Х	264	/ i				
Evaluatio			30					
measurem				i				i
obtained by ar	n enginee	ring method	25					
			25	1.	25Hz 2	50Hz	500Hz 1 H	KHz 2 KHz
					1/3rd Oc	tave Ba	nd Frequency (I	Hz)
*0	utside sco	ope of accred	itation					ange according to th in BS EN ISO 717-1
	D.τ	C; Ctr) [dB]:	64 (-2	7) dB			ASS	
		;w+ Ctr [dB]:	57 dB	, ,,	Advore		gated Deviations	\$
Minin		Level [dB]:	45 dB		Auvels		: 28.9	د

Partition Detail: WB0001** : Generic Masonary Block

Test Exceptions (if any):

Registered Sound Insulation Test Certificate

Test No:	1301		Test J	ob Ref:	306	70			Org Nam			Id Ltd
Customer:		1 Ltd	1-1-0	.1		4 4 7 1	P		Type:			e (Wall
Address:		rne Gate, igh Street,	Job Ad	ddress:	141 Stre	-147 H	ligh	Test Test	Date:		/09/2	.023 Ahmad
	Pinne					ntwood	, k		type:		ew Bu	
Postcode:	HA5	5QA	Postco	ode:		4 4SA	۱.	Site	Build:		velling ouse/F	
		Source	Room:			Partiti				eiver Ro		
Description:		lat 3 Kitchen		g Room	١	VB000			Flat	4 Bedro		
Volume / Area			<u>کھ 2</u> کھ			8.5m	ן ²			27.0m ³	3	
Frequency (Hz) 50	D ητ 16.5	Correction X										
63	25.5		- 80	Í								İ
80	41.2		75	1								
100	38		_ /5	1								1
125	41.3		- 70	į								
160	41.5		- 7570									
200	50.3		- 65	1							_	
250	52.9		(dB)						and the second			
315	58.4) ප_ 60									
400	61		Difference	1			F					
500	62.3		JII 55				1					
630	62.6		- level 20	1		11	1					1
800	62.5		⁵⁰ کے		1	1						
1	64.2		lise	1	1							
1.25	64.1		- Standardised L		1	\$	-					
1.6	64.9	Х	tan									
2	64.7	Х	v 40	N	/							
2.5	65.7	Х		11								
3.15	67.3	Х	35									
4	67.3	Х	2564									
5	65.2	Х	30							-		
Evaluatio				/ i								i
measurem			25	. !	_							
obtained by ar	n enginee	ering method	25		125Hz	25	0Hz	500H	lz 1	KHz	2 K	Hz
									and the second second	11_N		
					252				equency (22684		
*Outside scope of accreditation									equency r alues with			
		[C; Ctr) [dB]:					P	ASS				
Minin		r,w+ Ctr [dB]: S Level [dB]:	54 dB 45 dB		A	dverse	Aggre	egated]: 28.3	Deviatior	IS		
							LaD	∠U.J				

Test Exceptions (if any): 6dB Rule not met

Registered Sound Insulation Test Certificate

Test No:	13015		Test Jo	b Ref:	30670		Test Org Nam		
Customer:	YSJ01		1.01-0-1	alma c -	1 / 1 / 1 / -	1.111-	Test Type:	Airborne (Wall)	
Address:		ne Gate,	Job Ad	dress:	141-147 Street,	High	Test Date: Tester:	30/09/2023 Shams Ahmadi	
	Pinne	gh Street, r			Brentwoo Essex	od,	Site type:	New Build	
Postcode:	HA5 5	δQA	Postco	de:	CM14 4S	A	Site Build:	Dwelling- House/Flat	
		Source	Room:		Parti	tion:	Rece	eiver Room:	
Description:		Flat 15 Be	edroom	2	WB00	01**	Flat 1	6 Bedroom 2	
Volume / Area		29.0)m³		9.0	m²		29.0m ³	
Frequency	D_{nT}	Correction	85						
(Hz)	28.7	Х							
50			- 80	1	2			1	
63	25			i					
80	26.1		75						
100	38								
125	51.3		70		10				
160	49.7								
200	53.4		- 65	<u> </u>					
250	55.9		(dB)			1			
315	59		9 60			11			
400	64.1	Х	Difference (1				
500	66.5	Х	JU 55			4			
630	68.1	Х	e	. <u>i</u>	11				
800	68.8	Х	Level 1		\sim				
1	70.2	Х	ed	- Y					
1.25	70.5	Х							
1.6	72.7	Х	dai	i/					
2	73.9	Х	Standardised I	- i/					
2.5	72.8	Х	0) 40	1					
3.15	70.9	Х	25	k					
4	71.9	Х	35	1					
5	69.4	Х		/1					
	on based o		30						
measurem				/ i					
obtained by ar	n engineer	ing method	25						
				12	5Hz 2	50Hz	500Hz 1	KHz 2 KHz	
					1/3rd Oc	tave Ba	and Frequency (Hz)	
*0	utside sco	pe of accred	itation					ange according to th in BS EN ISO 717-1	
	Dn <i>t.w</i> ((C; Ctr) [dB]:	67 (-4	, -10) dB			ASS		
		w+ Ctr [dB]:	57 dB	,	Advers			s	
Minin		Level [dB]:	45 dB		Adverse Aggregated Deviations [dB]: 29.2				

Partition Detail: WB0001** : Generic Masonary Block

Test Exceptions (if any): 6dB Rule not met

Registered Sound Insulation Test Certificate

Test No:	1301		Test J	ob Ref:	30670		Test Org		Eecobu	
Customer:	YSJ0		lat 1	-	1 4 4 4 4 7	116-01-	Test Typ		Airborn	
Address:		rne Gate, gh Street,	OA QUL	dress:	141-147 Street,	нign	Test Dat Tester:	e:	30/09/ Shams	
	Pinne				Brentwo	od,	Site type	:	New Bu	
Postcode:	HA5 !	δQA	Postco	ode:	CM14 45	ŝA	Site Build:		Dwelling- House/Flat	
		Source	Room:		Parti	tion:		Receiv	eiver Room:	
Description: Volume / Area		at 16 Kitchen 55.()m³	ng Room	FC00 28.0	01** Om²	Flat 1		n / Dining .0m³	g Room
Frequency	D_{nT}	Correction	85					Ĩ		Ĩ
(Hz) 50	22.8	Х	- 80							
63	38.9	Х	- 00							
80	42.2	Х	-							
100	43.4	Х	- 75							
125	40.5		-				-		1	
160	44.9		- 70							
200	51		- 65				1			
250	52.2									
315	58		9 60		_	1				
400	66		enc			11				
500	69.3		Difference (dB)		1					
630	70.9				100	1				
800	70.9	Х	Fevel 20		IF					
1	69.8	Х	ed							
1.25	70.8	Х	- PL 45							
1.6	72.8	Х	lda							
2	72.7	Х	Standardised I		V					
2.5	70.7	Х	-							
3.15	68.3	Х	- 35							
4	68.2	Х								
5	67.1	Х	- 255	<u>i</u>						
	on based o		30							
measurem obtained by ar										
	. s. ginou		25	1	25Hz 2	250Hz	500Hz	1 KHz	21	(Hz
					1/3rd 0	ctave Ba	and Freque	ncy (Hz)	
*0	utside sco	pe of accred	itation		Above g	raph sh	ows freque	ncy rang	je accord	
	Dn <i>T</i> ,w (C; Ctr) [dB]: 65 (-3, -9) dB Dn <i>T</i> ,w+ Ctr [dB]: 56 dB Minimum Pass Level [dB]: 45 dB					curve of reference values within BS EN ISO 717- PASS Adverse Aggregated Deviations				

Partition Detail: FC0001** : Generic Concrete

Test Exceptions (if any):

Registered Sound Insulation Test Certificate

Test No:	130		Test J	ob Ref:	30670		Test Org Name:	Eecobuild Ltd
Customer:		01 Ltd					Test Type:	Airborne (Floor)
Address:		orne Gate, ligh Street	Job Ac	ldress:	141-147 ⊦ Street,	ligh	Test Date: Tester:	30/09/2023 Shams Ahmadi
	Pinn	ligh Street, er			Brentwood Essex	, k	Site type:	New Build
Postcode:	HA5	5QA	Postco	de:	CM14 4SA		Site Build:	Dwelling- House/Flat
		Source	Room:		Partiti	on:	Receiv	ver Room:
Description:	FI	at 17 Kitchen	/ Dinir	ng Room	FC000	1**	Flat 13 Kitche	en / Dining Room
Volume / Area		55.0			24.0r	n²	55	5.0m ³
Frequency	D_{nT}	Correction	85					
(Hz) 50	22.7	Х	- 80	i.				
63	28.4	Х	00					
80	40.4	Х	-					
100	43.5	Х	- 75					
125	48	Х	-				[
160	48.6		70					
200	57	Х	-			1	7	
250	60.2	Х	65			1		
315	61.2		(dB	1		1		
400	65.7		00 GO		11			
500	70.2		Level Difference (dB)		11			
630	72.9	Х	- <u>J</u> 55					
800	73.5	Х	vel					
1	75.4	Х						
1.25	73.9	Х	ised					
1.6	74		pre 45	- i/		-		
2	75.5		Standardised	<u></u>				
2.5	73.3		រី 40					
3.15	71.6							
4	70.9		- 35					
5	68.2		240					
Evaluatio	n based	on field	- 30					
measurem		0		1				
obtained by ar	n enginee	ering method	25	10	547 25		500Hz 1.1/1	7 2 1/1/7
				12	5Hz 25	OHz	500Hz 1 KH	z 2 KHz
					1/3rd Oct	ave Ba	and Frequency (Hz	:)
*0	utside sc	ope of accred	itation				ows frequency rangence values within	
	Dn <i>t</i> ,w	(C; Ctr) [dB]:	69 (-3	, -9) dB			ASS	
	Dn	τ,w+ Ctr [dB]:	60 dB		Adverse		gated Deviations	
Minin	num Pas	s Level [dB]:	45 dB				: 30.2	

Partition Detail: FC0001** : Generic Concrete

Test Exceptions (if any):

Registered Sound Insulation Test Certificate

Test No:	1301		Test J	ob Ref:	30670		Test Org		Eecobuil	
Customer:	YSJ0	rne Gate,		draca.	1 1 1 1 1	7 1 1 1 0 0	Test Typ		Airborne 30/09/2	
Address:		igh Street,	JOD AC	dress:	141-14 Street,	7 High	Test Da Tester:	te:		
	Pinne	0			Brentw Essex	ood,	Site typ	e:	New Bui	
Postcode:	HA5	5QA	Postco	ode:	CM14 4	SA	Site Bui	ld:	Dwelling House/F	
		Source	Room:		Par	tition:		Receiv	er Room:	
Description:	F	lat 8 Kitchen	/ Dinin	g Room	FCO	001**	Flat	3 Kitcher	n / Dining	Room
Volume / Area		55.0)m³		28	.0m²		55	.0m³	
Frequency	D_{nT}	Correction	85				1	Î		
(Hz) 50	19.6	Х	- 80	1						
63	29.1	Х	- 80							
80	40.7	Х	-							
100	37.7		- 75							
125	47.4	Х	1346	i (1-1-1-1		i i
160	50.5		- 70				for the state			
200	54.7	Х		1						- i
250	59.6		- 65 - (gp)						2	
315	63.7		- <mark>9</mark> 60			1				
400	69.1	Х	enc	1						1
500	72.1	Х	fer		1.1					
630	72.5	Х	Difference (11					
800	74.4	Х	- For the state of	. i.e						1
1	74.1	Х	- <u>9</u> 50		1			1		
1.25	72.5	Х	Standardised L		1					
1.6	73.8	Х	P16 45		\vdash					-
2	75.4	Х	pu	i/						
2.5	73.9	Х	- to 40		-					
3.15	72.9	Х	-							
4	71.7	Х	- 35	11						
5	68.8	Х	-	/ 1						
Evaluatio measurem obtained by ar	nent using	g results	- 30							
			25	1	25Hz 1/3rd (250Hz Octave Ba	500Hz and Freque	1 KH2		łz
*0	utside sco	ope of accred	itation		Above	graph sh	ows freque	ency rang	ge accordir	
			(0 (5	10) -15	curve			s within	BS EN ISO	717-1
N dire in	Dn7	C; Ctr) [dB]: ,w+ Ctr [dB]: Level [dB]:	69 (-5 57 dB 45 dB	, -12) dB	Adve	rse Aggre	ASS egated Dev]: 32.0	viations		

Partition Detail: FC0001** : Generic Concrete

Test Exceptions (if any):

Registered Sound Insulation Test Certificate

Test No:	1301		Test J	ob Ref:		30670			t Org Nam		obuild Lt	
Customer: Address:	YSJ0	rne Gate,	Job Ar	dress:		1 1 1 1 1 7 1	liab		t Type: t Date:		orne (Fl 09/2023	
Address:		gh Street,	JOD AC	iuress:		141-147 H Street,	lign	Tes			ms Ahm	
	Pinne					Brentwood Essex	d,		e type:		v Build	
Postcode:	HA5 !	5QA	Postco	de:		CM14 4SA	A	Site	e Build:		elling- ise/Flat	
		Source	Room:			Partiti	on:			eiver Roo	er Room:	
Description:	Fla	at Room Com		I Space		FC0001**		Flat 3 Kitcher			ning Roo	m
Volume / Area		820.	0m ³ کە			28.0r	m²	2		55.0m ³	22	
Frequency	D_{nT}	Correction	05	i								i
(Hz) 50	24	Х			1							
63	37.3	Х	- 80	1			-			-8	945- 945-	1
			-	4								
80	42.7	Х	- 75	i							4	-j
100	44.2		_							_	1	4
125	45.2		- 70		1							F
160	42.6		- 70	į					/			Į.
200	46.1		- 65						<u> </u>			••
250	52.6		-					A				į.
315	56.1		9 60		:		1	-				
400	58.9		enc	1			1					
500	65		Difference (dB)				11					
630	67.7	Х				1						
800	69.3	Х	Fevel 20									
1	69.4	Х	Standardised I			/ /						
1.25	69.9	Х		1			-				72	1
1.6	71.3	Х	Ida			\sim						
2	73.5	Х		/ i		242						i
2.5	73.9	Х	-	/ ¦							10	1
3.15	72.6	Х	- 25									
4	71.1	Х	- 35									
5	69.4	Х										i
Evaluatio	n based o	on field	30									
measurem				1								i
obtained by ar	n enginee	ring method	25									1
			25		125	Hz 25	OHz	500	Hz 1	KHz	2 KHz	
						1/3rd Oct	tave Ba	and Fr	equency (Hz)		
*0	utside sco	ope of accred	itation			Above gra	aph sh	ows fr	equency r	ange acc		
	((2)(2)			curve o			alues with	in BS EN	150 71	/-1
		C; Ctr) [dB]:		, -7) dB		A .!		ASS				
Dnt,w+ Ctr [dB]: 56 dB Minimum Pass Level [dB]: 45 dB						Adverse		egatec]: 25.	l Deviation	S		

Partition Detail: FC0001** : Generic Concrete

Test Exceptions (if any):

Registered Sound Insulation Test Certificate

Test No:	13016		Test J	ob Ref:	30670			t Org Nam		uild Lto	
Customer:	YSJ01		م اما		1 4 4 4 4 7	Link		st Type:		ne (Flo	or)
Address:		ne Gate, jh Street,	Job Ac	dress:	141-147 Street,	High		st Date:		<u>/2023</u> s Ahma	di
	Pinner				Brentwo Essex	od,		e type:	New E		
Postcode:	HA5 5	QA	Postco	ode:	CM14 45	SA	Site	e Build:	Dwelli House		
		Source	Room:		Parti	tion:		Rece	eiver Room		
Description:	Fla	t Room Con	nmercia	al Space	FC00	01**		Flat 4 Kitch	nen / Dinin	g Roon	n
Volume / Area		820.	0m³		20.0	0m²			55.0m³		
Frequency (Hz)	D n⊤ 21.5	Correction	85					<u>`</u>			1
50			- 80	i							i
63	36.1										1
80	39.5		75								
100	44.3										
125	43.2		- 70							5	
160	42.1		- 25656					-	\checkmark		7
200	45.4		- 65					/			
250	51.6		(dB)				1				
315	54.9		- <u>e</u> 60	i			-1				i
400	57.3		rend			1					i.
500	63.9		Difference (11	<u>.</u>	-		1	-
630	66				1.						į.
800	68.1	Х	- Level 2			\wedge				1	÷
1	68	Х	sed	1	1	6. 					i.
1.25	66.8		ipue								÷
1.6	69.4		Standardised L								
2	70.2		ี่ 5 40							45	t
2.5	71.2		-								į.
3.15	68.9		35						1-	-	
4	67.1										
5	65.9		- 30								1
Evaluatio	n based or	n field	-								
	nent using		25		.25Hz 2	250Hz	500)Hz 1	KHz 2	KHz	-
obtained by ar	n engineer	ing method		5	20112 2	-50112	500	///L 11	N12 2		
					1/3rd O	ctave B	and F	requency (I	Hz)		
*0	utside scor	be of accred	itation		Above g	raph sh	ows f	requency ra	ange accor		
	DnT,w (C	; Ctr) [dB]:	62 (-2	, -7) dB			ASS				1
		v+ Ctr [dB]:	55 dB		Adver			d Deviations	5		
Minin		Level [dB]:	45 dB]: 26.		-		

Test Exceptions (if any):

Registered Sound Insulation Test Certificate

Test No:	1301		Test J	ob Ref:		30670			t Org Name		uild Ltd	
Customer:		1 Ltd							t Type:		ne (Floo	r)
Address:		orne Gate,	Job Ad	dress:		141-147 H	ligh		t Date:	30/09		1:
	64 H Pinne	igh Street, ar				Street, Brentwood	4	-	ster: e type:	New B	s Ahmad	11
	r ii ii k	51				Essex	,					
Postcode:	HA5		Postco			CM14 4SA		Site	e Build:	Dwelli House	/Flat	
		Source				Partiti		Receiver Room:				
Description:		lat 9 Kitchen		g Room		FC0001**			Flat 4 Kitche		g Room	
Volume / Area		55.0	<u>)m³</u> 85	24 2 2		20.0r	<u>n²</u>		5	5.0m ³		-
Frequency	D_{nT}	Correction	60									ſ
(Hz) 50	21.4	Х										į.
			- 80				-					-
63	28	X	-	1								
80	37.6	X	75									Ĺ
100	37.6	X	-									
125	46	Х	70									
160	40.8			i						<u> </u>	<u> </u>	
200	51.2								1			
250	56.1		- 65									
315	58.8		g				1	1				
400	59.8		- OOU				1	/				Γ
500	65.7		Difference (dB)	ļ			1					İ.
630	67.4	Х				11						
800	72.2	Х	Fevel 50			11						ĺ.
1	72.5	Х	- 9 50	1		/ /						
1.25	69	Х	dise	i (1							i.
1.6	68.3	Х	Jap 45		7							
2	69.1	Х	Standardised L			V						
2.5	66.4		ún 40	ý			6					
3.15	65.3		2.1									
4	63.4		35	11	-							
5	61.9			/ !								
Evaluatio	n based	on field	- 30									
measurem				1							i	ĺ.
obtained by ar	n enginee	ering method	25		1.5							
					125	Hz 25	0Hz	500	Hz 1 KI	Hz 2	KHz	
						1/3rd Oct	ave Ba	and F	requency (H	7)		
*0	utsida so	ope of accred	itation						requency rar	1854	lina to t	h
									values within			
	Dn <i>t</i> ,w (C; Ctr) [dB]: 64 (-4, -10) dB							٩SS				
	Dn	r,w+ Ctr [dB]:	54 dB			Adverse			d Deviations			
Minin	num Pass	Level [dB]:	45 dB					: 32.				_

Partition Detail: FC0001** : Generic Concrete

Test Exceptions (if any):



Test No: Customer:	<u>13016</u> YSJ01		Test J	ob Ref:		30670			Org Nam Type:		build Lt	
Address:		ne Gate,	Joh A	ddress:		141-147	Hiah		Date:		act (Floo 9/2023	
		gh Street,	300 A			Street,		Test			ns Ahm	
	Pinner					Brentwood Essex	d,		type:		Build	
Postcode:	HA5 5	QA	Postco	ode:		CM14 4SA	ł	Site	Build:	Dwel Hous	lling- se/Flat	
		Source				Partiti				eiver Rooi		
Description:		t 17 Kitchen		ng Room	1	FC0001**			Flat 13 Kitchen / Dining Room			
Volume / Ar Frequency	<u>rea</u> L'nτ 1/3	Correction	<u>0m³</u> გე	- T	1	24.0r	1	Ť		55.0m ³	ř	1
(Hz) 50	Octave (dB) 52	Correction										
63	49.8		- 80	İ				1		1	1	İ
80	47.6		-	1								į.
100	49.1		_ 75	1								
125	51.8		- 70									
160	54.6		- B	i								i
200	49.2		- L - 65	i								i
250	44.4											
315	40.5		Level,	1								-
400	35.8		sure									1
500	32.7		Se 55			^	-					
630	25.3	Х	- d p	-								
800	23.8	Х	_ 100 50								-	
1	22	Х	- t									
1.25	21.7	Х	- du 45	- i								÷
1.6	21.5	Х	- p									
2	20.4	Х	- 40								17	
2.5	22.6		Standardised Impact Sound Pressure									
3.15	23.1		- ¹ 235									
4	23.7		-									
5	24.2	- Call	30				6		1		1	1
	ation based o rement using											1
	/ an engineer		25		125	Hz 25	i0Hz	500H	z 1	KHz	2 KHz	
2	-											
						1/3rd Oct	tave Ba	and Fre	equency (Hz)		
	*Outside sco	pe of accred	litation						equency ra alues with			
	1'-		12 (1)	N dB				ASS				
Ma	L'n≢,w (CI) [dB]: 42 (1) dB laximum Pass Level [dB]: 62 dB				Adverse	e Aggre		Deviation	S			

Test Exceptions (if any):



Customer: Address:	YSJ01	1 101	Test Job Ref				Test Org Name: Test Type:		e: Eecobuild Ltd Impact (Floor)		
nuui 633.	Elthor	ne Gate,		dress:	141-147	High		t Type: t Date:	30/09/		
		h Street,	JOD AC	101622:	Street,	nign		ter:		Ahmadi	
	Pinner				Brentwo Essex	od,		e type:	New B		
Postcode:	HA5 50	AC	Postco	ode:	CM14 45	SA	Site	e Build:	Dwellir House/		
		Source	Room:		Parti	tion:	Receiver Room:				
Description:		t 9 Kitchen		g Room				Flat 4 Kitche		g Room	
Volume / Are		55.0			20.0	0m²		5	5.0m ³	13 92	
Frequency (Hz) 50	L'n7 1/3 Octave (dB) 50.8	Correction X	85								
63	47.8	Х	- 80							1	
80	49.7	Χ	-								
100	49		75				_			1	
125	54.4		-								
120	57.3		- (gp) ⁷⁰								
200	55.8		Ē								
250	49.7									1	
315	42.2		Level,								
400	38.3										
500	32.3		- Inss							1	
630	26.2	X	- Pre								
800	22.7	X	- pun 50	1/							
1	21.6	Х	So	\sim							
1.25	21.6	Х	ped 45			1.	-			1	
1.6	21	Х	II							1	
2	19.5	Х	40	<u>i</u>			-		<u> </u>	i	
2.5	21		Standardised Impact Sound Pressure						1		
3.15	21.4	Х	- pue 35								
4	21.2	Х	St								
5	21.4	Х	- 30				1			N	
	tion based or		750 7 0					No.		1	
	ement using an engineeri							1			
Solumed by	an engineen	ng methou	25		125Hz 2	250Hz	500	Hz 1 KH	Hz 2	KHz	
					1/2-1 0	ctave P	and E		-)		
	* Outoida an	o of grant -	Itatiar					equency (H	1.0054	ling to th	
	*Outside scop	e or accred	itation		g evoda svruc	of refer	ows fr ence v	equency rar alues within	BS EN IS	ong to th 0 717-2	
	'n τ w	(CI) [dB]·	45 (1)	dB		P	ASS				
Max	L'n _{T,w} (CI) [dB]: 45 (1) dB aximum Pass Level [dB]: 62 dB				Advers		egatec]: 31.	l Deviations 2			

Test Exceptions (if any):



Test No: Customer:	<u>13016</u> YSJ01		Test J	OD RET:	30670			Org Name:		uild Ltd	
Address:		Ltd ne Gate,	loh Ar	dress:	141-147	7 High		: Type: : Date:	30/09/	t (Floor) /2023	
nuu 033.		h Street,	300 A(101 033.	Street,	riigii	Test			Ahmad	
	Pinner				Brentwo Essex		-	type:	New B	uild	
Postcode:	HA5 5	AC	Postco	ode:	CM14 4	SA	Site	Build:	Dwellir House		
		Source			Partition:				er Room:		
Description		16 Kitchen		ng Room				lat 12 Kitch		g Room	
Volume / A	L'n7 1/3	Correction	<u>3 סא</u> מא		28.	0m ²	Ť	5	5.0m ³	1	
Frequency (Hz) 50	Octave (dB) 47	Correction									
63	42.3		- 80	1			1				
80	45.3		-								
100	49.2		_ 75								
125	47.6		_								
160	50.4		- (gp) ⁷⁰	1							
200	49.1		- Lu - 65								
250	46.1										
315	44.2		Level,								
400	37.5		Impact Sound Pressure								
500	31.1		- IS 55								
630	23.6	Х	- d P								
800	23.6	Х	uno 50							-	
1	23.9	Х	Lt S	/i`	\checkmark \checkmark						
1.25	22.1	Х	_ 45								
1.6	20.9	Х	비	/ <u> </u>		•••••	-				
2	21.6	Х	04 N			_					
2.5	24.9	Х	Standardised								
3.15	25	Х	- pu 35						1		
4	25.1	Х	St								
5	24.2	X	- 30								
	ation based or rement using									A	
	y an engineeri									1	
estanica by	, an engineen		25	1	25Hz	250Hz	500	Hz 1 KH	lz 2	KHz	
					1/3rd C	ctave B	and Fr	equency (H	z)		
	*Outside scop	e of accred	itation					equency rar alues within			
-	1'-		<i>A</i> 1 (0)	dB			ASS				
Ma	L'n7,w (CI) [dB]: 41 (0) dB aximum Pass Level [dB]: 62 dB				Adverse Aggregated Deviations [dB]: 30.6						

Test Exceptions (if any):



Test No:	130166		Test J	ob Ref:	30670			org Name:		uild Ltd
Customer:	YSJ01						Test T			t (Floor)
Address:		ne Gate,	Job Ac	ldress:	141-147	High	Test D		30/09/	
	64 Higi Pinner	h Street,			Street, Brentwoo	od,	Tester Site ty		New B	<u>Ahmad</u> uild
Postcode:	HA5 50	2A	Postco	de:	Essex CM14 4S	A	Site B	uild:	Dwellin	
		Source	Room:		Partit	ion:		Receiv	House/Flat ver Room:	
Description:	Flat	t 8 Kitchen		a Room	FC000		Fla	it 3 Kitche		
Volume / Ar			0m ³	9 1100111	28.0				5.0m ³	9
Frequency (Hz) 50	L'n <i>t</i> 1/3 Octave (dB) 49.3	Correction X	85							
63	49.4	Х	- 80	1	63					
80	49.2		- 75							
100	51.4		- 75	1						
125	47.9		-	5		-				
160	50.3		- 'nT (dB) - 'n' - '0'							
200	45.1		65							
250	36.3	Х	<u> </u>							
315	34.7		Level,							
400	28.2		Pressure							
500	22.8	Х	ISSS 55	i						
630	21.3	Х	Pre							
800	20.6	Х	Impact Sound		-					
1	21.4	Х	So	- I V	\mathbf{v}					
1.25	21	Х	- 45	1						
1.6	20.8	Х	_ Tmp	L.,	1					
2	22.1	Х	eq							
2.5	26	Х	- sip					100		
3.15	26.5	Х	Standardised	į.						
4	26.9	Х	25an			1			1	
5	25.6	Х		1					N	
measur	tion based on ement using r an engineerii	results	30							· A we want
5	5	_	25	1.		50Hz	500Hz and Freq	1 KH uency (Hz		KHz
د 	*Outside scop	e of accred	litation					uency ran Jes within		
Ma	L'n7,w (CI) [dB]: 41 (-1) dB Maximum Pass Level [dB]: 62 dB) dB		P. e Aggre	ASS	eviations		

Test Exceptions (if any):



Appendix B – UKAS Calibration Certificates



Certificate of Calibration

Certificate number:	U40756
Test Object:	Sound Level Meter, BS EN IEC 61672-1:2013 Class 1 Associated Frequency Analyser to BS EN IEC 61260:1996 Class 1
Producer:	Svantek
Туре:	977A
Serial number:	92116
Customer:	Eecobuild Ltd
Address:	C/O Project H Ltd Beadle House, Bull Plain,
	Hertford, Hertfordshire. SG14 1DT.
Contact Person:	Shams Ahmadi
Order No:	

Introduction:

Calibration has been performed as set out in CA Technical Procedures which are based on the procedures for periodic verification of sound level meters as per the Test Object listed above. Results and conformance statement are overleaf and detailed results, where appropriate, are provided in the attached Measurement Report.

Tested: Microphone	Producer ACO	<i>Туре</i> 7052Е	Serial No 77165	<i>Certificate No</i> 40755
Calibrator*	Svantek	SV33B	93175	U40754
Preamplifier	Svantek	SV12L	95133	Included

* The calibrator was complete with any required coupler for the microphone specified.

Additional items that have also been submitted for verification:

Wind shield	Svantek	SA22	
Attenuator	N/A		
Extension cable	N/A		
These items have been taken into account wherever appropriate.			

Instruction Manual: svan 977a man en v03.03 2018-09-18 Firmware Version: v2.02.03 The test object is a single channel instrument.

Conditions	Pressure kPa	Temperature °C	Humidity %RH
Reference conditions	101.325	23	50
Measurement conditions	101.04 ±0.07	21.80 ±0.25	41.08 ±3.5

Calibration Dates:

Received date:	31/03/2022	Reviewed date:	20/04/2022
Calibration date:	20/04/2022	Issued date:	20/04/2022

Technicians: (Electronic certificate)

Calibrated by:		
Reviewed by:		

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Laboratory Location

Certificate number:

Campbell Associates Ltd

5b Chelmsford Road Industrial Estate GREAT DUNMOW, Essex, GB-CM6 1HD Phone 01371 871030



Certificate of Calibration

Test Object:	Floor Tapping Machine
Producer:	Sources Line
Туре:	EOS
Serial number:	NGE05118
Customer:	EecoBuild LTD
Address:	C/O Project H Ltd Beadle House
	Bull Plain Hertford SG14 1D
Contact Person:	Shams Ahmadi
Order No:	ТВА

U40752

Method :

This certificate is issued against the requirements of Annex A of both BS EN ISO 16283-2:2015 and BS EN ISO 140-6/7:1998 in respect of regular verification and also meet the requirements of UKAS publication LAB23 covering the verification of floor tapping machines used for building acoustics applications.

The machine was inspected for mechanical soundness and tested for electrical safety. It was cleaned and lubricated in accordance with the manufacturers instructions where necessary. The cams and hammer guides were inspected to ensure a free fall of the hammers. The mass of each of the hammers was determined either by measurement or reference to historical data (see Statements overleaf) along with their curvature and diameter of the impact face. The machine was set up as per the manufacturers specification using the calibration gauge provided (where applicable) and checked for level, then the direction of fall of the hammer set was checked against the requirements of the standard. The time between successive hammer impacts was measured over a 30 second period and the mean and range of successive values calculated.

Statements:

A successful calibration indicates that this Tapping Machine meets the requirements of BS EN ISO 16283-2:2015 and BS EN ISO 140 parts 6, 7 & 8 annex A and is therefore suitable for the measurement of impact sound transmission following the procedures set out in their associated standards.

Expanded measurement uncertainties are:- Impact rate 0.25 ms, Hammer mass (mounted) 0.79 g, Hammer mass (demounted) 0.19 g, Hammer diameter 0.03 mm, Radius of curvature 11.0 mm, Hammer impact velocity 0.01 m/s and Hammer angle of fall 0.07 degree.

The mass of each individual hammer was measured in situ and the resulting data has been used in the calculation of the momentum of impact.

Environmental Conditions		Temperature	Relative Humidity
Reference Conditions:		23 °C	50 %RH
Measurement Conditions:		23.0 °C	44.3 %RH
Calibration Dates: Received date: Calibration date:	31/03/2022 19/04/2022	Reviewed date: Issued date:	20/04/2022 20/04/2022

Technicians: (Electronic certificate)

Calibrated by: Reviewed by:



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