

Victoria Riverside Manchester Midrise B

Sound Insulation Test Report

28499/SIT3

19 December 2024

For:

CR Construction (U.K) Company Limited
55 King Street
Manchester
M2 4LQ



Hann Tucker Associates

Consultants in Acoustics Noise & Vibration

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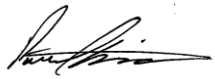
Attachments

Appendix A – Graphs



Sound Insulation Test Report 28499/SIT3

Document Control

Rev	Date	Comment	Prepared by	Authorised by
0	19/12/2024	-		
			Will Robertson Consultant BSc(Hons), TechIOA	Paul Hill Director BSc(Hons), MIOA



1.0 Introduction

Hann Tucker Associates visited Victoria Riverside on 11 December 2024 to undertake airborne and impact sound insulation tests on selected separating wall and floor constructions between residential dwellings.

The properties under test are new build rooms for residential.

This report presents the results of the tests and compares them with recommended sound insulation standards described in the Building Regulations Approved Document E: 2003 Edition and 5dB project requirement uplift.

Uplift above the minimum requirements of Building Regulations Approved Document E: 2003 Edition are beyond the scope of UKAS accreditation.

2.0 Objectives

To undertake airborne sound insulation tests on separating wall constructions between selected residential apartments in Midrise B at Victoria Riverside.

To undertake airborne and impact sound insulation tests on separating floor constructions between selected residential apartments at Victoria Riverside.

To compare the results of the tests with recommended sound insulation standards described in the Building Regulations Approved Document E: 2003 Edition and 5 dB project requirement uplift.

These objectives are as set out in Part 3.0 of our Outline Brief dated 03 September 2021 with written instructions received on 23 September 2021.



3.0 Requirements Of Approved Document E

To satisfy Requirement E1 of Approved Document E: 2003 Edition, the following sound insulation values should be achieved:-

Table 1a: Dwellings – Performance Standards for Separating Walls, Separating Floors, and Stairs that have a Separating Function.		
	Airborne Sound Insulation $D_{nT,w} + C_{tr}$ dB (Minimum Values)	Impact Sound Insulation $L'_{nT,w}$ dB (Maximum Values)
Purpose built dwellings		
Walls	45	-
Floors and stairs	45	62

Therefore the minimum value of weighted standardised level difference ($D_{nT,w}$) plus the spectrum adaptation curve (C_{tr}) as defined in BS EN ISO 717-1: 1997 specified in Approved Document E: 2003 Edition: Sound Insulation Standards for airborne sound tests is 45dB for purpose built dwellings.

The maximum values of weighted standardised impact sound pressure level ($L'_{nT,w}$) as defined in BS EN ISO 717-2: 1997 specified in Approved Document E: 2003 Edition: Sound Insulation Standards for impact sound tests on purpose built dwellings is 62dB.



4.0 Test Procedure

The testing was carried out by George Grenfell (Tester No.62), Naveen Simha (Tester No. 84), and assisted by Will Robertson (Tester No. 80).

4.1 Equipment

The equipment used during the testing is as follows:

Description	Manufacturer	Type	Serial Number	Calibration
Type 1 Precision Sound Level Meter	Brüel and Kjær	2250	3025254	21/02/2024
Type 1 ½" Condenser Microphone	Brüel and Kjær	4189	3004879	21/02/2024
Type 1 Preamp	Brüel and Kjær	ZC0032	28066	21/02/2024
SLM Calibrator	Brüel and Kjær	4231	2308993	20/02/2024
Type 1 Data Logging Sound Level Meter	Brüel & Kjaer	2250	3007292	25/01/2024
Type 1 ½" Condenser Microphone	PCB	7052E	106753	25/01/2024
Preamp	Brüel & Kjaer	ZC0032	27782	25/01/2024
SLM Calibrator	Brüel and Kjær	4231	2271905	22/08/2024
Tapping Machine	Norsonic	277	2775527	01/11/2023
Noise Source - Custom made, un-ported sealed cabinet type	N/A	N/A	N/A	N/A

4.2 Airborne Sound Insulation Test Method (Separating Walls and Floors)

Hann Tucker Associates attended site on 11 December 2024, to undertake airborne sound insulation tests to selected separating floor and wall constructions. The tests were undertaken in full accordance with Approved Document E: 2003 Edition incorporating 2004 and 2010 amendments and BS EN ISO 140-4:1998 Acoustics – Measurement of airborne sound insulation in buildings and of building elements – Part 4: Field measurement of airborne sound insulation between rooms.

The sound level differences were determined by generating a broad band, random diffuse sound field within the source room. A spatial average of the resulting $\frac{1}{3}$ octave band noise levels was obtained within the source room from measurements undertaken over a time period of a least 30 seconds. The measurement procedure was repeated in the receive room. A



second speaker position was then selected in the source room and the measurement procedure was repeated.

The receive levels were corrected for background noise where necessary as follows:

Where the measured background noise level in each $1/3^{\text{rd}}$ octave band was more than 6 dB but less than 10dB below the receive level, the following formula was applied:

$$L = 10 \log \left(10^{\frac{L_{SB}}{10}} - 10^{\frac{L_B}{10}} \right) \text{ dB}$$

where

L is the adjusted signal level in decibels;

L_{SB} is the level of the signal and background noise levels combined, in decibels;

L_B is the background level in decibels.

Where the measured background noise level was less than 6 dB below the receive level, a correction of 1.3 dB was applied (corresponding to a level difference of 6 dB) and the $\geq$ symbol was added to the results to show that the reported values are the limit of measurement.

The corrected receive levels are subtracted from the source levels to determine the level differences over the frequency range 100-3150 Hz from each source position. The level differences for each source position are arithmetically averaged at each frequency band to give the level difference, D .

Reverberant decays were then recorded in the receive room to determine the reverberation times over the same frequency range using a broadband noise source. For each receiver room 6No. measurements were made, comprising of 2No. source positions and 3No. microphone positions per source position. The reverberation time, T , used in subsequent calculations is an average of the 2No. source positions.

Having established $1/3$ octave band level differences and reverberation times over the frequency range 100-3150 Hz, the Standardised Level Difference, D_{nT} , is calculated for each $1/3$ octave band by applying the following formula:

$$D_{nT} = D + 10 \log_{10} \left(\frac{T}{T_0} \right)$$



where $T_0=0.5$ seconds

The $1/3$ octave band results are then compared with a standard curve using the method described in BS EN ISO 717-1: 1997 to determine the single figure descriptor of airborne sound insulation, the Weighted Standardised Level Difference, or $D_{nT,w}$.

The $1/3$ octave band results are also weighted using spectrum adaptation term No.2, C_{tr} , as detailed in BS EN ISO 717-1: 1997, to allow a more rigorous assessment of sound insulation performance with respect to low frequency noise.

The Weighted Standardised Level Difference and spectrum adaptation term are then added to give $D_{nT,w} + C_{tr}$, allowing comparison with the minimum airborne sound insulation requirements of Approved Document E.

4.3 Impact Sound Insulation Test Method (Separating Floors)

Hann Tucker Associates also undertook impact sound insulation tests on the selected separating floor constructions. The tests were undertaken in full accordance with Approved Document E: 2003 Edition incorporating 2004 and 2010 amendments and BS EN ISO 140-7:1998 Acoustics – Measurement of sound insulation in buildings and of building elements – Part 7: Field measurements of impact sound insulation of floors.

A tapping machine (meeting the requirements of BS EN ISO 140-7:1998, Annex A) was located at four positions in each source room. The machine generated a sound field in the room underneath (receive room) by means of dropping 5, $1/2$ kg hammers in sequence onto the floor at 0.1 second intervals.

A spatial average of the resulting $1/3$ octave band noise levels was obtained within the receive room from measurements undertaken over a time period of a least 30 seconds for each of the 4 source positions. The 4 No. resulting receive levels were logarithmically averaged at each $1/3$ octave frequency band to give the receive level L .

The receive levels were corrected for background noise where necessary as follows:

Where the measured background noise level in each $1/3^{\text{rd}}$ octave band was more than 6 dB but less than 10 dB below the receive level, the following formula was applied:

$$L = 10 \log \left(10^{\frac{L_{SB}}{10}} - 10^{\frac{L_B}{10}} \right) \text{ dB}$$



where

L is the adjusted signal level in decibels;

L_{SB} is the level of the signal and background noise levels combined, in decibels;

L_B is the background level in decibels.

Where the measured background noise level was less than 6 dB below the receive level, a correction of 1.3 dB was applied (corresponding to a level difference of 6 dB) and the $\leq$ symbol was added to the results to show that the reported values are the limit of measurement.

Reverberant decays were then recorded in the receive room to determine the reverberation times over the same frequency range using both broadband and impulsive noise sources. For each receiver room 6No. measurements were made, comprising of 2No. source positions and 3No. microphone positions per source position. The reverberation time, T , used in subsequent calculations is an average of the 2No. source positions.

Having established the $1/3$ octave impact sound pressure levels and reverberation times over the frequency range 100-3150Hz, the standardized Impact Sound Level is calculated for each $1/3$ octave by applying the following formula:

$$L'_{nT} = L - 10 \log_{10} \left(\frac{T}{T_0} \right)$$

where $T_0 = 0.5$ seconds

The $1/3$ octave band results are then compared with a standard curve using the method described in BS EN ISO 717-2: 1997 to determine the single figure descriptor of impact sound insulation, the Weighted Standardised Impact Sound Pressure Level, or $L'_{nT,w}$.

4.4 Background Noise

The background noise levels were measured in each receive room in order to correct the received noise measurements for the effect of the prevailing noise climate.

The prevailing background noise comprised road traffic noise from the surrounding roads and occasional train passes.



4.5 Test Locations

All rooms tested had all doors and windows fitted and closed. The rooms were unfurnished.

The following airborne wall tests were undertaken:

Test	Source Room		Receive Room		Tested Construction Details
	Location	Approximate Volume	Location	Approximate Volume	
AW01*	PodiumB-304-LKD	65 m ³	PodiumB-303-LKD	63 m ³	250mm wide Light-weight twin-stud partition (acoustically braced), with 2x15mm sound rated plasterboard each side and insulation in cavity.
AW02	PodiumB-304-B	31 m ³	PodiumB-305-B	30 m ³	

There were no cupboards present except where stated above *. There were no step/staggers in the walls.

The following airborne floor tests were undertaken:

Test	Source Room		Receive Room		Tested Construction Details
	Location	Approximate Volume	Location	Approximate Volume	
AF01	PodiumB-304-LKD	65 m ³	PodiumB-204-LKD	65 m ³	Concrete slab with plasterboard ceiling below. In Bedrooms (B) carpet was installed. In Living rooms/Kitchens (LKD) LVT flooring was installed
AF02	PodiumB-304-B*	31 m ³	PodiumB-204-B	31 m ³	

There were no carpets present on the floors except where stated above *. There were no step/staggers on the above floors.

The following impact tests were undertaken:



Test	Source Room		Receive Room		Tested Construction Details
	Location	Approximate Volume	Location	Approximate Volume	
IF01**	PodiumB-401-B1*	25 m ³	PodiumB-301-LKD	70 m ³	Concrete slab with plasterboard ceiling below. In Bedrooms (B) carpet was installed. In Living rooms/Kitchens (LKD) LVT flooring was installed
IF02	PodiumB-401-B2*	27 m ³	PodiumB-301-B*	39 m ³	
IF03	PodiumB-304-LKD	65 m ³	PodiumB-204-LKD	65 m ³	
IF04	PodiumB-304-B*	31 m ³	PodiumB-204-B*	31 m ³	

There were no carpets present on the floors except where stated above *. There were no step/staggers on the floors except where indicated above **.

4.6 Annex B Test Procedures

All the test procedures within Annex B of Approved Document E: 2003 Edition have been followed.

5.0 Results

The results of the tests and analysis are given in the attached Certificates 28499/C1 to 28499/C8.

The following tables summarise our findings:

Airborne Tests Across Separating Walls	D _{nT,w} + C _{tr} (dB)		Approved Document E Compliance
	Test Result*	Required	
AW1	58	≥ 45	Pass
AW2	56	≥ 45	Pass

*Tests results including the ≥ symbol are background limited

Airborne Tests Across Separating Floors	D _{nT,w} + C _{tr} (dB)		Approved Document E Compliance
	Test Result*	Required	
AF1	60	≥ 45	Pass
AF2	64	≥ 45	Pass

*Tests results including the ≥ symbol are background limited



Impact Tests Across Separating Floors	L' _{nT,w} (dB)		Approved Document E Compliance
	Test Result*	Required	
IF1	≤ 21	≤ 62	Pass
IF2	≤ 23	≤ 62	Pass
IF3	≤ 36	≤ 62	Pass
IF4	≤ 17	≤ 62	Pass

*Tests results including the ≤ symbol are background limited

6.0 Discussion

6.1 Airborne Tests

With reference to Section 4.0 and Section 5.0 the results for the floors and walls tested are equal to or greater than the minimum value for airborne sound insulation as stated in Approved Document E: 2003 Edition, and project design uplift and thus should be considered to satisfy the requirements.

6.2 Impact Tests

With reference to Section 4.0 and Section 5.0 the results for the floors tested are equal to or less than the maximum value for impact sound pressure level stated in Approved Document E: 2003 Edition, and project design uplift and thus should be considered to satisfy the requirements.

7.0 Conclusion

Hann Tucker Associates have undertaken airborne and impact sound insulation tests across separating wall and floor constructions between selected residential apartments at Victoria Riverside.

The results apply to the sample as provided or presented.

The airborne sound insulation performance ($D_{nT,w} + C_{tr}$) of the separating wall constructions tested are greater than the minimum value stated in Approved Document E: 2003 Edition, and project design uplift and thus should be considered to satisfy the requirements.

The airborne sound insulation performance ($D_{nT,w} + C_{tr}$) of the separating floor constructions tested are greater than the minimum value stated in Approved Document E: 2003 Edition, and project design uplift and thus should be considered to satisfy the requirements.



The Impact Sound Insulation Performance Level ($L'_{nT,w}$) of the separating floor constructions tested are less than the maximum value stated in Approved Document E: 2003 Edition, and project design uplift and thus should be considered to satisfy the requirements.

The results relate only to the floors tested. All data contained in this report (plot numbers, drawings etc.) has been provided by the client.

Uplift above the minimum requirements of Building Regulations Approved Document E: 2003 Edition are beyond the scope of UKAS accreditation.

END OF REPORT



Appendix A

(Including 8No. Graphs)

28499/C1 to 28499/C8

Standardised level difference according to ISO 140-4

Field measurements of airborne sound insulation between rooms

Project Details

Development: Victoria Riverside

Client: CR Construction (U.K)
Company Limited

Report Ref: 28499/SIT3

Airborne Wall Sound Insulation Test: AW1

Date of test: 11/12/2024

Source Room: PodiumB-304-LKD

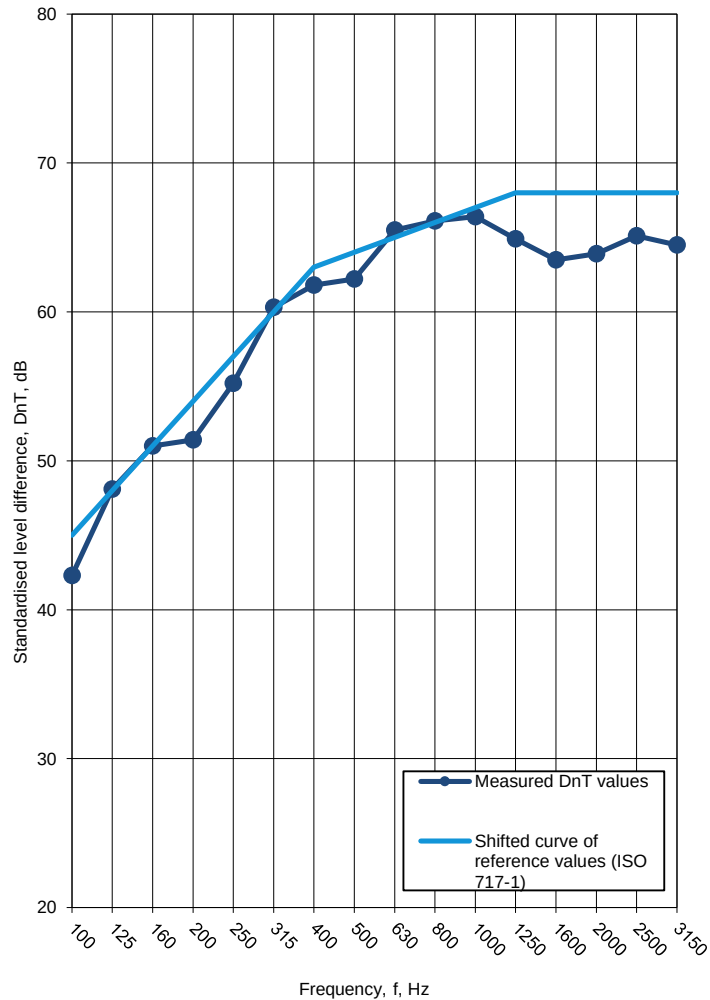
Approximate Source Room Volume: 65m³

Receive Room: PodiumB-303-LKD

Approximate Receive Room Volume: 63m³



Frequency f Hz	DnT dB
100	42.3
125	48.1
160	51.0
200	51.4
250	55.2
315	60.3
400	61.8
500	62.2
630	65.5
800	66.1
1000	66.4
1250	64.9
1600	63.5
2000	63.9
2500	65.1
3150	64.5



Test Result

$$D_{nT,w} + C_{tr} = 58 \text{ dB}$$

Rating according to ISO 717-1:

$$D_{nT,w} (C; C_{tr}) = 64 \text{ (-2 ; -6) dB;}$$

$$C_{(100-3150)} = -2 \text{ dB}$$

$$D_{nT,w} = 64 \text{ dB}$$

$$C_{tr (100-3150)} = -6 \text{ dB}$$

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Certificate Ref: 28499/SIT3/C1

Test organisation: Hann Tucker Associates

Date of issue: 20/12/2024

Test Engineer: George Grenfell

Test Engineer No: 62

Test Engineer Signature:



Hann Tucker Associates

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Standardised level difference according to ISO 140-4

Field measurements of airborne sound insulation between rooms

Project Details

Development: Victoria Riverside

Client: CR Construction (U.K)
Company Limited

Report Ref: 28499/SIT3

Airborne Wall Sound Insulation Test: AW2

Date of test: 11/12/2024

Source Room: PodiumB-304-B

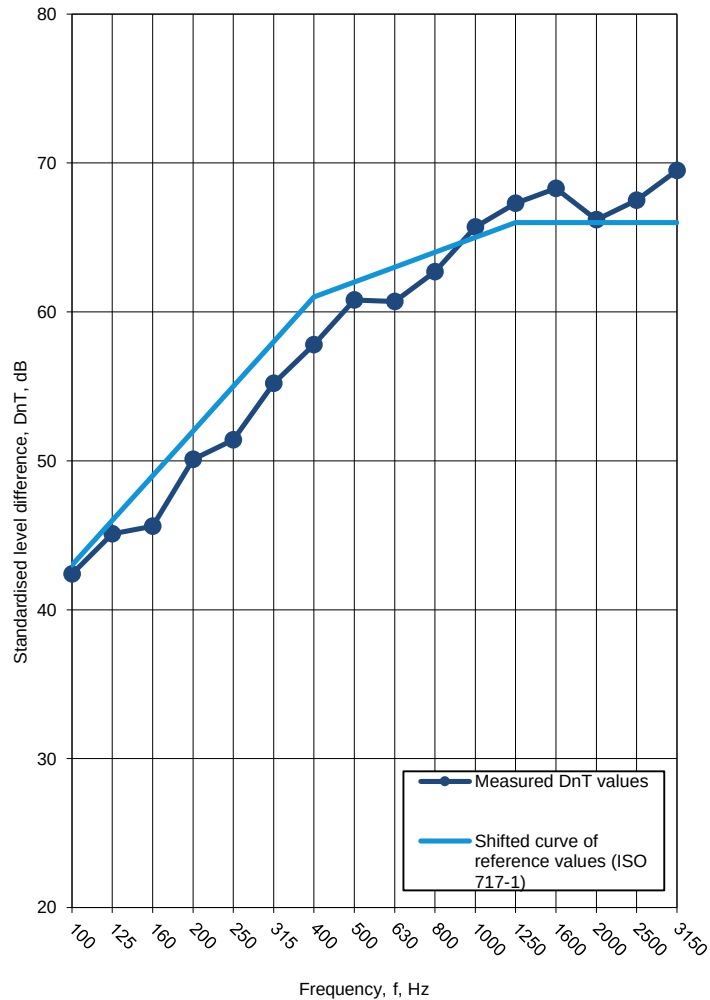
Approximate Source Room Volume: 31m³

Receive Room: PodiumB-305-B

Approximate Receive Room Volume: 30m³



Frequency f Hz	DnT dB
100	42.4
125	45.1
160	45.6
200	50.1
250	51.4
315	55.2
400	57.8
500	60.8
630	60.7
800	62.7
1000	65.7
1250	67.3
1600	68.3
2000	66.2
2500	67.5
3150	69.5



Test Result

$$D_{nT,w} + C_{tr} = 56 \text{ dB}$$

Rating according to ISO 717-1:

$$D_{nT,w} (C; C_{tr}) = 62 (-1; -6) \text{ dB};$$

$$C_{(100-3150)} = -1 \text{ dB}$$

$$D_{nT,w} = 62 \text{ dB}$$

$$C_{tr (100-3150)} = -6 \text{ dB}$$

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Certificate Ref: 28499/SIT3/C2

Test organisation: Hann Tucker Associates

Date of issue: 20/12/2024

Test Engineer: George Grenfell

Test Engineer No: 62

Test Engineer Signature:



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Standardised level difference according to ISO 140-4

Field measurements of airborne sound insulation between rooms

Project Details

Development: Victoria Riverside

Client: CR Construction (U.K)
Company Limited

Report Ref: 28499/SIT3

Airborne Floor Sound Insulation Test: AF1

Date of test: 11/12/2024

Source Room: PodiumB-304-LKD

Approximate Source Room Volume: 65m³

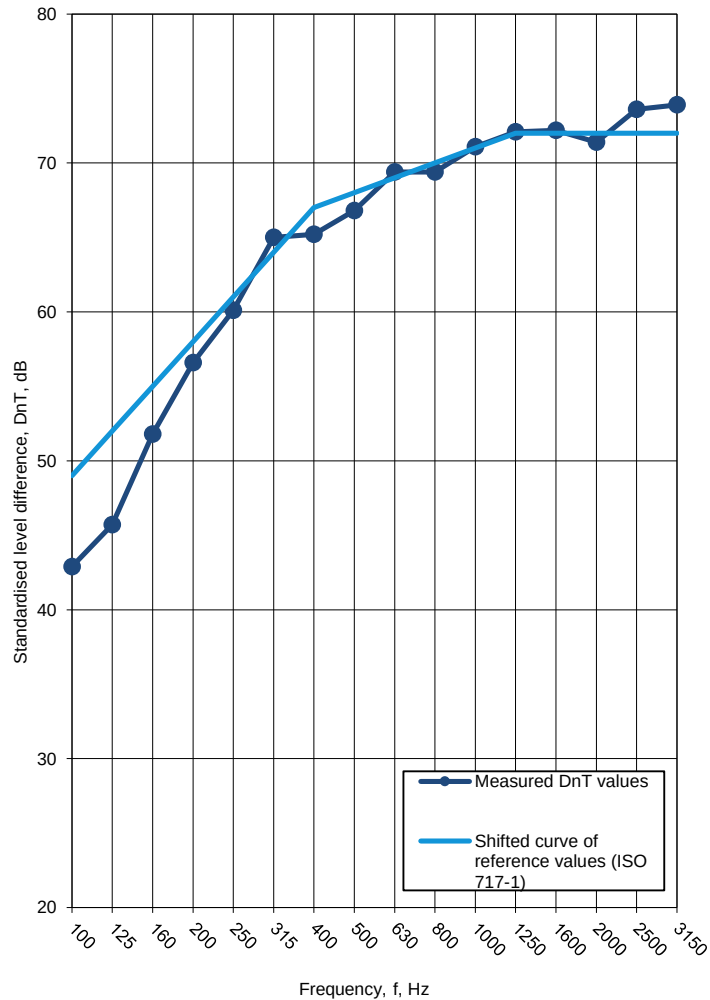
Receive Room: PodiumB-204-LKD

Approximate Receive Room Volume: 65m³



4083

Frequency f Hz	DnT dB
100	42.9
125	45.7
160	51.8
200	56.6
250	60.1
315	65.0
400	65.2
500	66.8
630	69.4
800	69.4
1000	71.1
1250	72.1
1600	72.2
2000	71.4
2500	73.6
3150	73.9



Test Result

$$D_{nT,w} + C_{tr} = 60 \text{ dB}$$

Rating according to ISO 717-1:

$$D_{nT,w} (C; C_{tr}) = 68 (-2; -8) \text{ dB};$$

$$C_{(100-3150)} = -2 \text{ dB}$$

$$D_{nT,w} = 68 \text{ dB}$$

$$C_{tr (100-3150)} = -8 \text{ dB}$$

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Certificate Ref: 28499/SIT3/C3

Test organisation: Hann Tucker Associates

Date of issue: 20/12/2024

Test Engineer: George Grenfell

Test Engineer No: 62

Test Engineer Signature:



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Standardised level difference according to ISO 140-4

Field measurements of airborne sound insulation between rooms

Project Details

Development: Victoria Riverside

Client: CR Construction (U.K)
Company Limited

Report Ref: 28499/SIT3

Airborne Floor Sound Insulation Test: AF2

Date of test: 11/12/2024

Source Room: PodiumB-304-B

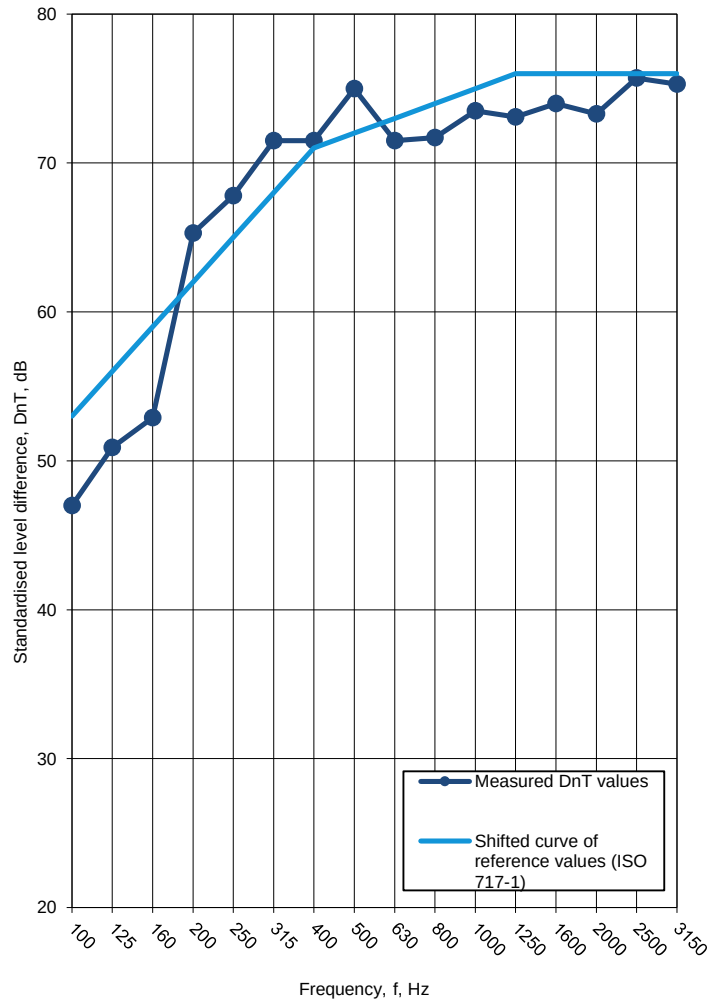
Approximate Source Room Volume: 31m³

Receive Room: PodiumB-204-B

Approximate Receive Room Volume: 31m³



Frequency f Hz	DnT dB
100	47.0
125	50.9
160	52.9
200	65.3
250	67.8
315	71.5
400	71.5
500	75.0
630	71.5
800	71.7
1000	73.5
1250	73.1
1600	74.0
2000	73.3
2500	75.7
3150	75.3



Test Result

$$D_{nT,w} + C_{tr} = 64 \text{ dB}$$

Rating according to ISO 717-1:

$$D_{nT,w} (C; C_{tr}) = 72 (-3; -8) \text{ dB};$$

$$C_{(100-3150)} = -3 \text{ dB}$$

$$D_{nT,w} = 72 \text{ dB}$$

$$C_{tr (100-3150)} = -8 \text{ dB}$$

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Certificate Ref: 28499/SIT3/C4

Test organisation: Hann Tucker Associates

Date of issue: 20/12/2024

Test Engineer: George Grenfell

Test Engineer No: 62

Test Engineer Signature:



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Standardised impact sound pressure levels according to ISO 140-7

Field measurements of impact sound insulation of floors

Project Details

Development: Victoria Riverside

Client: CR Construction (U.K)
Company Limited

Report Ref: 28499/SIT3

Impact Floor Sound Insulation Test: IF1

Date of test: 11/12/2024

Source Room: PodiumB-401-B1

Approximate Source Room Volume: 25m³

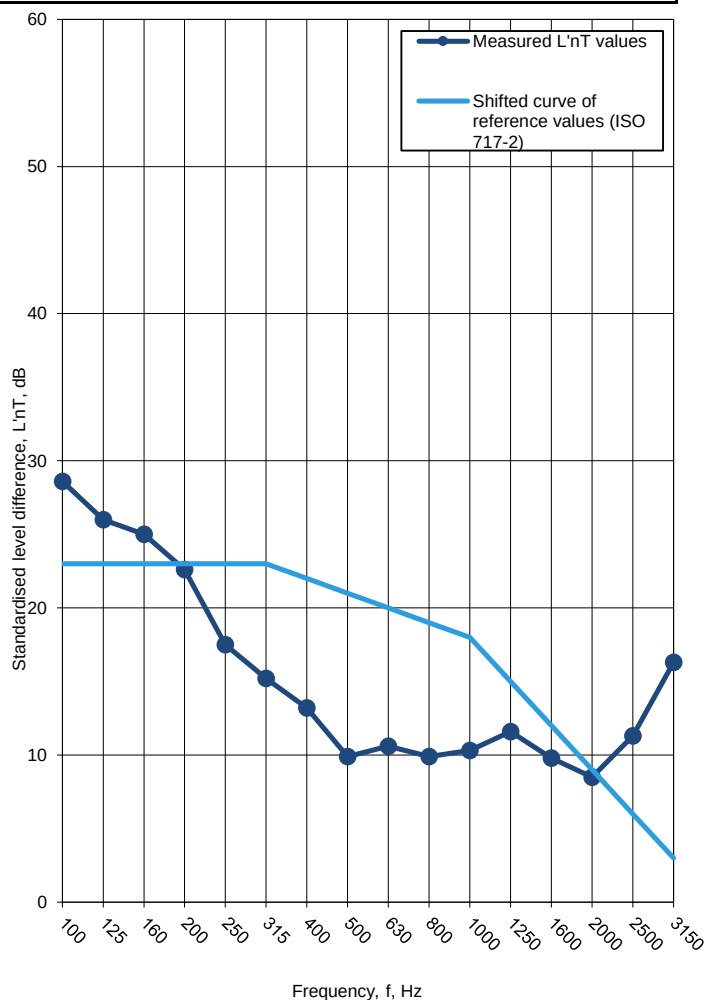
Receive Room: PodiumB-301-LKD

Approximate Receive Room Volume: 70m³



4083

Frequency f Hz	L'nT dB
100	≤ 29
125	≤ 26.0
160	≤ 25.0
200	22.6
250	≤ 17.5
315	≤ 15.2
400	≤ 13.2
500	≤ 9.9
630	≤ 10.6
800	≤ 9.9
1000	≤ 10.3
1250	≤ 11.6
1600	≤ 9.8
2000	≤ 8.5
2500	≤ 11.3
3150	≤ 16.3



Test Result

L' nT,w = ≤ 21 dB

≤ Results limited due to high background noise levels

Rating according to ISO 717-2:

L' nT,w (C₁) = ≤ 21 (-3) dB;

C₁ (100-3150) = -3 dB

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Certificate Ref: 28499/SIT3/C5

Test organisation: Hann Tucker Associates

Date of issue: 20/12/2024

Test Engineer: Naveen Simha

Test Engineer No: 84

Test Engineer Signature:



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Standardised impact sound pressure levels according to ISO 140-7

Field measurements of impact sound insulation of floors

Project Details

Development: Victoria Riverside

Client: CR Construction (U.K)
Company Limited

Report Ref: 28499/SIT3

Impact Floor Sound Insulation Test: IF2

Date of test: 11/12/2024

Source Room: PodiumB-401-B2

Approximate Source Room Volume: 27m³

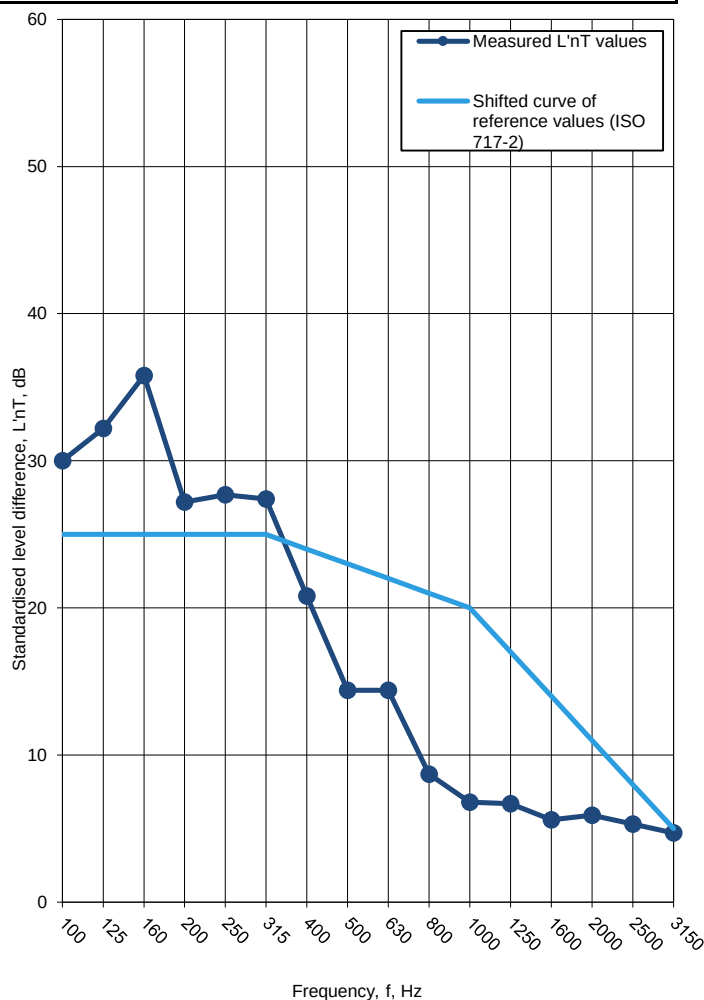
Receive Room: PodiumB-301-B

Approximate Receive Room Volume: 39m³



4083

Frequency f Hz	L'nT dB
100	≤ 30
125	≤ 32.2
160	≤ 35.8
200	≤ 27.2
250	≤ 27.7
315	≤ 27.4
400	≤ 20.8
500	≤ 14.4
630	≤ 14.4
800	≤ 8.7
1000	≤ 6.8
1250	≤ 6.7
1600	≤ 5.6
2000	≤ 5.9
2500	≤ 5.3
3150	≤ 4.7



Test Result

$L'_{nT,w} = \leq 23 \text{ dB}$

≤ Results limited due to high background noise levels

Rating according to ISO 717-2:

$L'_{nT,w} (C_1) = \leq 23 (1) \text{ dB};$

$C_1 (100-3150) = 1 \text{ dB}$

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Certificate Ref: 28499/SIT3/C6

Test organisation: Hann Tucker Associates

Date of issue: 20/12/2024

Test Engineer: Naveen Simha

Test Engineer No: 84

Test Engineer Signature:



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Standardised impact sound pressure levels according to ISO 140-7

Field measurements of impact sound insulation of floors

Project Details

Development: Victoria Riverside

Client: CR Construction (U.K)
Company Limited

Report Ref: 28499/SIT3

Impact Floor Sound Insulation Test: IF3

Date of test: 11/12/2024

Source Room: PodiumB-304-LKD

Approximate Source Room Volume: 65m³

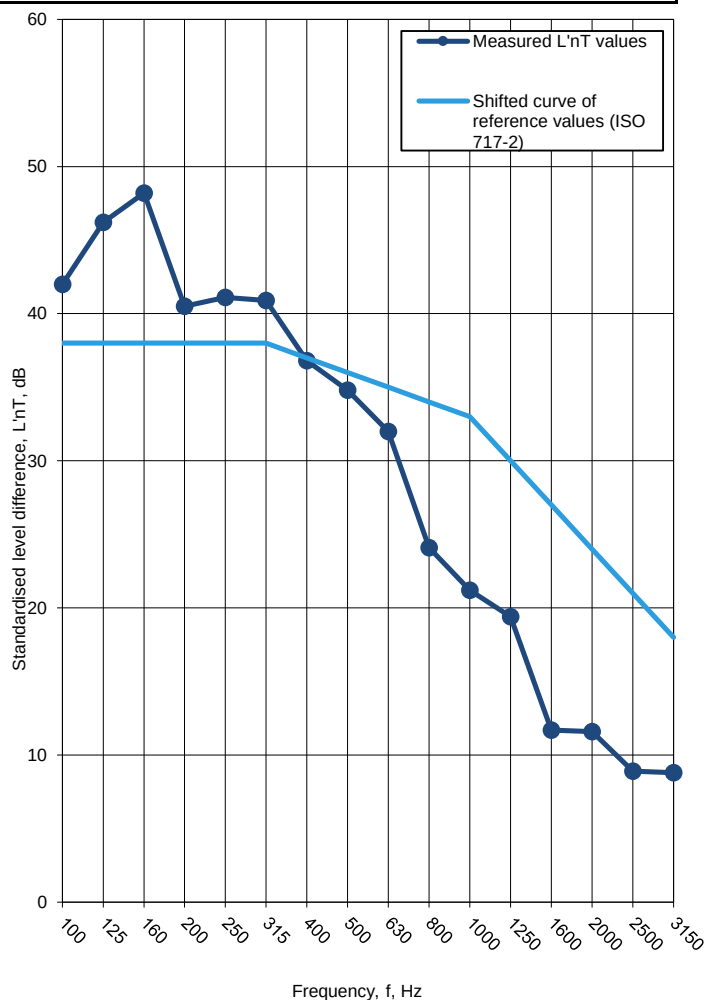
Receive Room: PodiumB-204-LKD

Approximate Receive Room Volume: 65m³



4083

Frequency f Hz	L'nT dB
100	42
125	46.2
160	48.2
200	40.5
250	41.1
315	40.9
400	36.8
500	34.8
630	32.0
800	24.1
1000	21.2
1250	19.4
1600	≤ 11.7
2000	≤ 11.6
2500	≤ 8.9
3150	≤ 8.8



Test Result

$L'_{nT,w} = \leq 36 \text{ dB}$

≤ Results limited due to high background noise levels

Rating according to ISO 717-2:

$L'_{nT,w} (C_1) = \leq 36 (1) \text{ dB};$

$C_1 (100-3150) = 1 \text{ dB}$

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Certificate Ref: 28499/SIT3/C7

Test organisation: Hann Tucker Associates

Date of issue: 20/12/2024

Test Engineer: George Grenfell

Test Engineer No: 62

Test Engineer Signature:



Hann Tucker Associates

Consultants in Acoustics Noise & Vibration

Head Office: Duke House, 1-2 Duke Street, Woking, Surrey GU21 5BA (t) +44 (0) 1483 770 595

Manchester Office: First Floor, 346 Deansgate, Manchester M3 4LY (t) +44 (0) 161 832 7041

(w) hanntucker.co.uk (e) enquiries@hanntucker.co.uk

Standardised impact sound pressure levels according to ISO 140-7

Field measurements of impact sound insulation of floors

Project Details

Development: Victoria Riverside

Client: CR Construction (U.K)
Company Limited

Report Ref: 28499/SIT3

Impact Floor Sound Insulation Test: IF4

Date of test: 11/12/2024

Source Room: PodiumB-304-B

Approximate Source Room Volume: 31m³

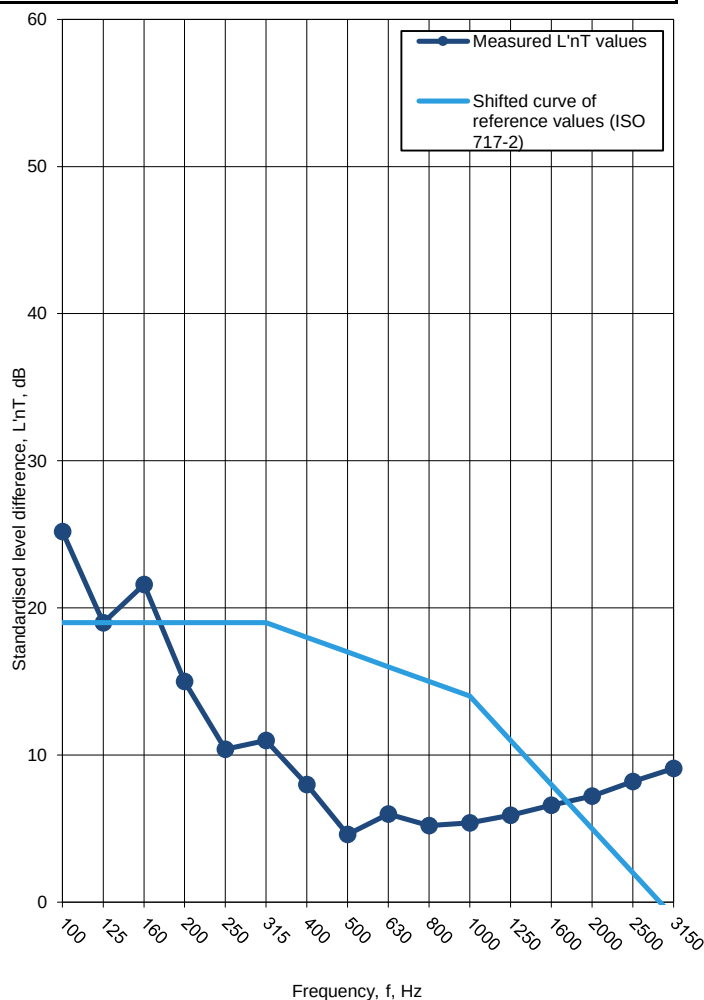
Receive Room: PodiumB-204-B

Approximate Receive Room Volume: 31m³



4083

Frequency f Hz	L'nT dB
100	25
125	19.0
160	21.6
200	≤ 15.0
250	≤ 10.4
315	≤ 11.0
400	≤ 8.0
500	≤ 4.6
630	≤ 6.0
800	≤ 5.2
1000	≤ 5.4
1250	≤ 5.9
1600	≤ 6.6
2000	≤ 7.2
2500	≤ 8.2
3150	≤ 9.1



Test Result

L' nT,w = ≤ 17 dB

≤ Results limited due to high background noise levels

Rating according to ISO 717-2:

L' nT,w (C₁) = ≤ 17 (-4) dB;

C₁ (100-3150) = -4 dB

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Certificate Ref: 28499/SIT3/C8

Test organisation: Hann Tucker Associates

Date of issue: 20/12/2024

Test Engineer: George Grenfell

Test Engineer No: 62

Test Engineer Signature:



Hann Tucker Associates

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