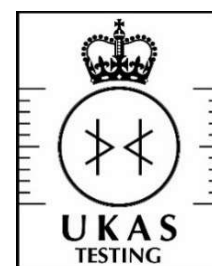




Sound Insulation Test Report

Job Number	7832LG
Client Name	LDM Group
Client Address:	
House name/number	LDM House
Street	46 Great Ancoats Street
City/Town	Manchester
County	Greater Manchester
Post Code	M4 5AB
Test Date	27/05/2022
Testing engineer	Mr T Williams, MSc
Site Address:	
House name/number	Charlotte House
Street	Charlotte Street
City/Town	Manchester
County	Greater Manchester
Post Code	M1 4FL
Type of property	Dwelling-flats formed by material change of use
Instrumentation used	Kit 5



8568

NOVA Acoustics is a
UKAS accredited testing
laboratory No. 8568 for
Sound Insulation Testing

Authorised By:	Mr M Caley, MSc, AMIOA
Date:	27/05/2022
Document Reference:	7832LG
Previous Version Numbers:	NA

NOVA Acoustics Ltd, Suite 13, 94 Armley Road, Leeds, LS12 2EJ
www.novaacoustics.co.uk - info@novaacoustics.co.uk - 0113 3227977

1. Executive Summary

NOVA Acoustics Ltd has been commissioned to carry out testing of the sound insulation properties of the separating partitions, and assess whether or not the acoustical performance of the internal building elements is acceptable. The development's sound insulation tests are to be carried out and rated in accordance with the following standards:

The measurement procedure and guidance within Annex B of the Building Regulations Approved Document E 2003 'Resistance to the Passage of Sound' was followed. The results are then assessed in accordance with it in order to indicate compliance. The rooms referenced in this report were tested in the condition presented by the client and the results relate only to the items tested. The test and subsequent calculations and assessment have indicated that the separating partitions have performed as follows:

The results tests are summarised below:

Type of partition	Source Room	Receiving Room	Measured Level	Required Level	Passed/ Failed	Test No.
			D _{nT,w} +C _{tr} dB			
Wall	Flat 31 - Living Room / Kitchen	Flat 32 - Living Room / Kitchen	54	≥43	Passed	7832LG - A
Floor	Flat 31 - Living Room / Kitchen	Flat 21 - Living Room / Kitchen	47	≥43	Passed	7832LG - B
Floor	Flat 32 - Living Room / Kitchen	Flat 22 - Living Room / Kitchen	48	≥43	Passed	7832LG - C
Wall	Flat 21 - Living Room / Kitchen	Flat 22 - Living Room / Kitchen	54	≥43	Passed	7832LG - D
Floor	Flat 21 - Living Room / Kitchen	Flat 11 - Living Room / Kitchen	47	≥43	Passed	7832LG - E
Floor	Flat 22 - Living Room / Kitchen	Flat 12 - Living Room / Kitchen	50	≥43	Passed	7832LG - F
Wall	Flat 11 - Living Room / Kitchen	Flat 12 - Living Room / Kitchen	49	≥43	Passed	7832LG - G
Wall	Flat 33 - Living Room / Kitchen	Flat 32 - Bedroom 1	52	≥43	Passed	7832LG - H
Floor	Lower Ground Floor - Left Side	Flat 2 - Living Room / Kitchen	46	≥43	Passed	7832LG - M
Floor	Lower Ground Floor - Left Side	Flat 2 - Bedroom 1	51	≥43	Passed	7832LG - N

Table 1

Type of partition	Source Room	Receiving Room	Measured Level	Required Level	Passed/ Failed	Test No.
			L'nT,w dB			
Floor	Flat 31 - Living Room / Kitchen	Flat 21 - Living Room / Kitchen	52	≤64	Passed	7832LG - I
Floor	Flat 32 - Living Room / Kitchen	Flat 22 - Living Room / Kitchen	53	≤64	Passed	7832LG - J
Floor	Flat 21 - Living Room / Kitchen	Flat 11 - Living Room / Kitchen	54	≤64	Passed	7832LG - K
Floor	Flat 22 - Living Room / Kitchen	Flat 12 - Living Room / Kitchen	50	≤64	Passed	7832LG - L

Table 2

In summary the tested separating partitions between rooms COMPLY with the sound insulation requirements within the current Building Regulations.

Deviations from Building Regulations Part E Annex B:

Rooms Tested were Furnished

2.0 The Building Regulations

Approved Document E (2003) edition which incorporates 2004, 2010, 2013 amendments. Sets out guideline sound transmission values that should be achieved under test if acoustical performance is to be deemed acceptable. These values can be found in table 1.0a and 1.0b of Approved Document E.

3.0 Test Methods, Procedures and Equipment

Airborne sound insulation testing uses a Dodecahedral loudspeaker placed in the "source room", which should be the larger of the two rooms when measuring wall and floor insulation. The source is balanced so the average sound pressure levels in adjacent 1/3rd octave bands are no more than 6dB. The source noise level is then measured a minimum of 5 times, measuring each time in a different randomly selected location that is at a minimum distance of 1.0 meter from any wall, floor, ceiling or the speaker. This is repeated for 2 speaker positions. The room on the other side of the partition construction is the "receiver room" and the noise level coming through from the source room is then measured a minimum of 5 times for 2 speaker positions, measuring each time in a different randomly selected location that is at a minimum distance of 1.0 meter from any wall, floor, ceiling. This is repeated for 2 speaker positions.

A difference in source and receiver noise levels is measured and calculated for each wall and floor in accordance with BS EN 140-4:1998. The resulting frequency dependant level differences are converted into "a single number characterising the acoustical performance" using the method given in BS EN ISO 717-1:1997, namely the weighted standardised level difference ($D_{nT,w}$).

Impact sound insulation test uses a standard tapping which is placed on the floor above a receiving room. The noise level from the machine tapping is then measured in the receiver room a minimum of 2 times measuring each time in a different randomly selected location that is at a minimum distance of 1.0 meter from any wall, floor or ceiling. The process is then repeated a further 3 times with the standard tapping machine rotated 90° and moved to a different position within the room. This level is measured and calculated for each floor in accordance with BS EN ISO 140-7:1998. The results are converted into a single number using the method given in BS EN ISO 717-2:1997 namely the weighted standardised impact sound pressure level ($L'_{nT,w}$).

4.0 Instrumentation Details:

Kit 1, 2, 3, 4 or 5

CESVA SC420 & Svantek 977 Sound Level Meter

CESVA CB005, CB006 or SV31 Calibrator

CESVA Dodecahedral Loudspeaker BP012 & Amplifier AP602 or Svantek 103 ACDC Active Loudspeaker

CESVA Impact Machine MI006 or EOS Tapping Machine

(Traceable calibration certificates can be supplied on request)

5.0 Calibration

Before and after the survey the measurement apparatus was checked and calibrated to an accuracy showing negligible deviation using the Calibrator.

6.0 Disclaimer

The customer has provided the following information; client name, client address, site address, type of property and source / receiving room names. The laboratory shall be responsible for all the information provided in the report, except when information is provided by the customer. Information supplied by the customer can affect the validity of results. Where the laboratory has not been responsible for the sampling stage (e.g. the sample has been provided by the customer), the laboratory shall state in the report that the results apply to the sample as received.

Appendix A

Calculation of Weighted Standardised Level Difference and/or Calculation of Weighted Standardised Impact Sound Pressure Level

(Please see following pages)

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

13.0 m²

Note:

Receiving room volume:

80.0 m³

Name:

Flat 32 - Living Room / Kitchen

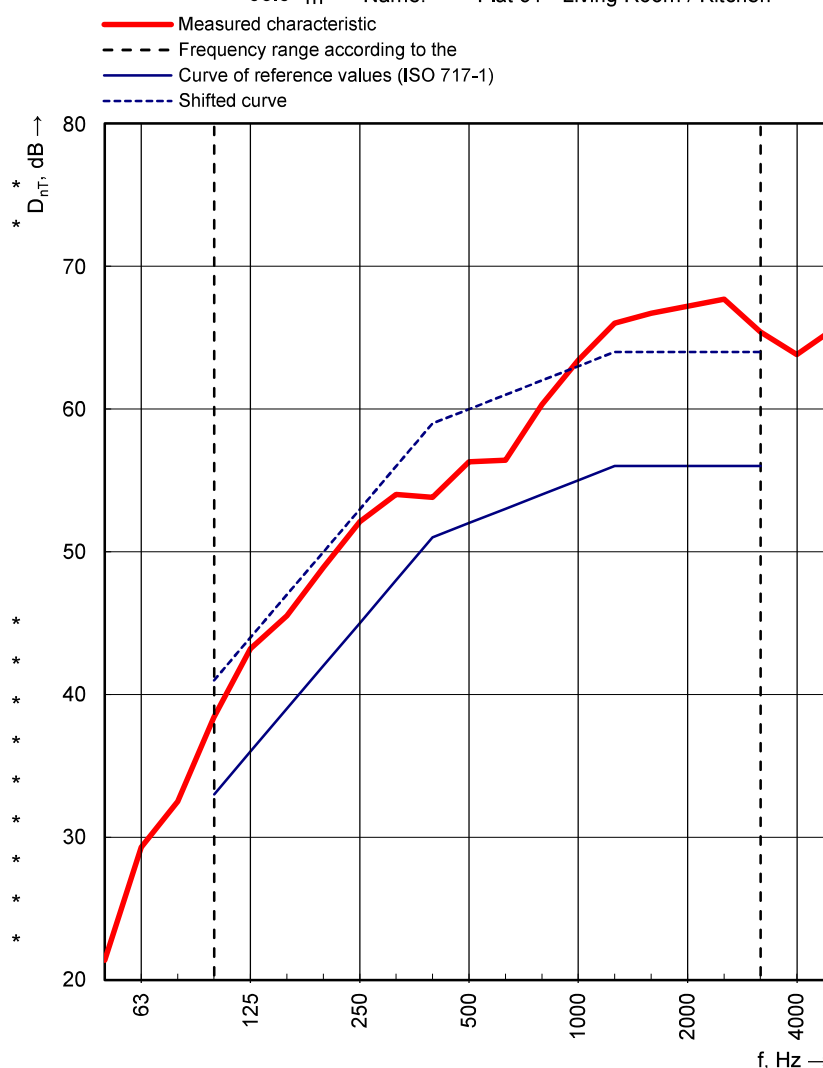
Source room volume:

96.0 m³

Name:

Flat 31 - Living Room / Kitchen

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	21.4
63	29.3
80	32.5
100	38.4
125	43.2
160	45.5
200	48.9
250	52.1
315	54.0
400	53.8
500	56.3
630	56.4
800	60.3
1000	63.4
1250	66.0
1600	66.7
2000	67.2
2500	67.7
3150	65.4
4000	63.8
5000	65.6



Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 60 \text{ (} -1 \text{ ; } -6 \text{) dB}$ $C_{50-3150} = -4 \text{ dB}$ $C_{50-5000} = -3 \text{ dB}$ $C_{100-5000} = -1 \text{ dB}$
 $C_{tr,50-3150} = -16 \text{ dB}$ $C_{tr,50-5000} = -16 \text{ dB}$ $C_{tr,100-5000} = -6 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - A

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

30.0 m²

Note:

Receiving room volume:

96.0 m³

Name:

Flat 21 - Living Room / Kitchen

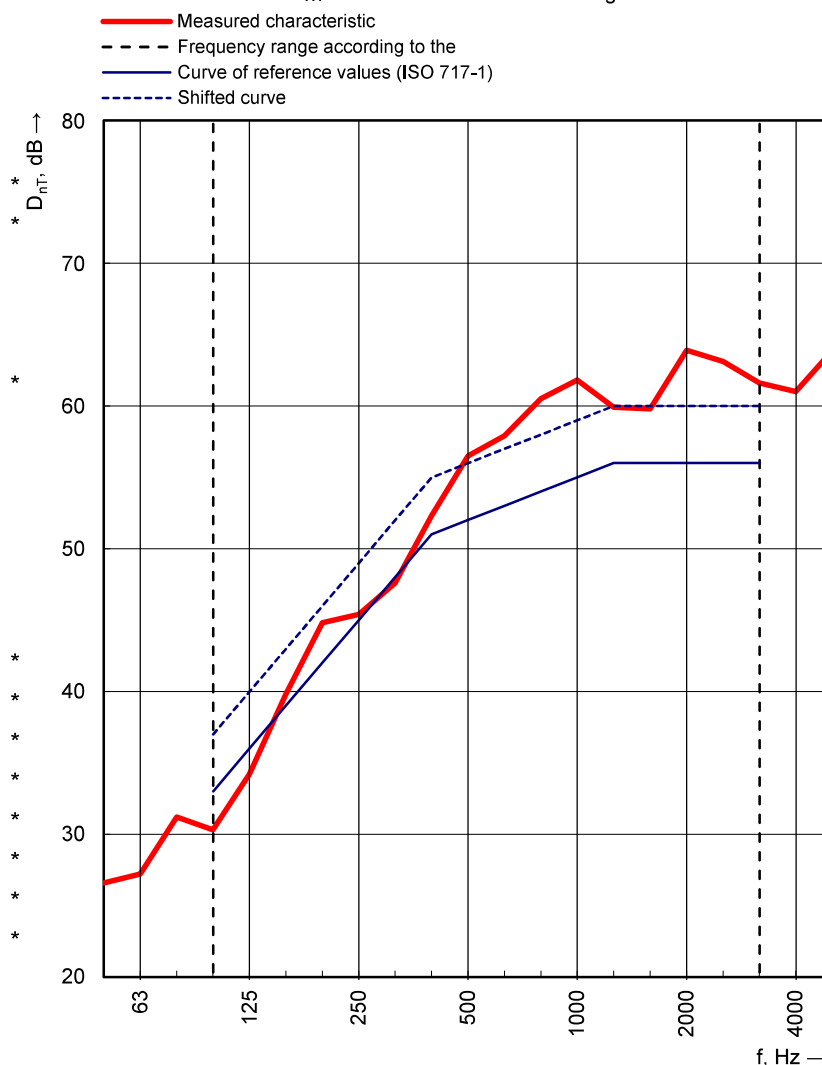
Source room volume:

96.0 m³

Name:

Flat 31 - Living Room / Kitchen

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	26.6
63	27.2
80	31.2
100	30.3
125	34.2
160	39.8
200	44.8
250	45.4
315	47.6
400	52.3
500	56.5
630	57.9
800	60.5
1000	61.8
1250	59.9
1600	59.8
2000	63.9
2500	63.1
3150	61.6
4000	61.0
5000	63.9



Rating according to ISO 717-1

*D*_{nT,w}(*C*; *C*_{tr}) = **56 (-3 ; -9) dB** *C*₅₀₋₃₁₅₀ = -4 dB *C*₅₀₋₅₀₀₀ = -3 dB *C*₁₀₀₋₅₀₀₀ = -2 dB
*C*_{tr,50-3150} = -12 dB *C*_{tr,50-5000} = -12 dB *C*_{tr,100-5000} = -9 dB

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - B

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

24.0 m²

Note:

Receiving room volume:

80.0 m³

Name:

Flat 22 - Living Room / Kitchen

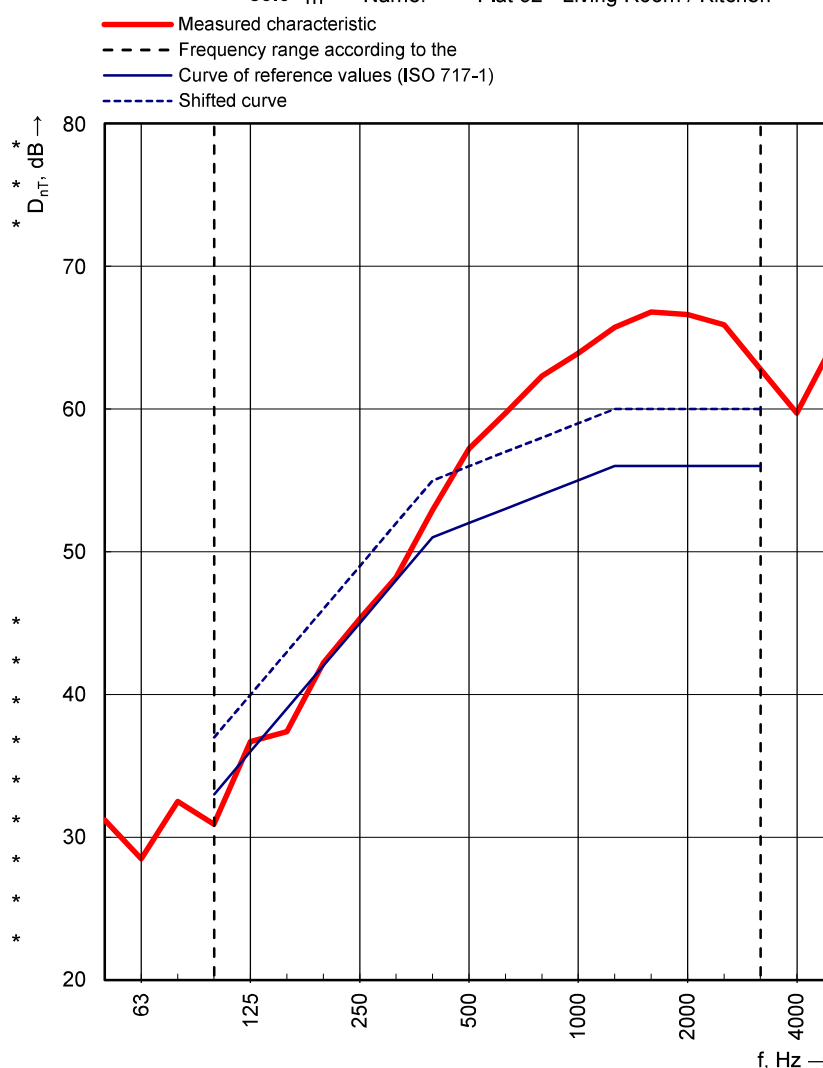
Source room volume:

80.0 m³

Name:

Flat 32 - Living Room / Kitchen

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	31.2
63	28.5
80	32.5
100	30.9
125	36.7
160	37.4
200	42.2
250	45.3
315	48.2
400	52.9
500	57.2
630	59.7
800	62.3
1000	63.9
1250	65.7
1600	66.8
2000	66.6
2500	65.9
3150	62.8
4000	59.7
5000	64.6



Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 56 \text{ (-2 ; -8) dB}$ $C_{50-3150} = -3 \text{ dB}$ $C_{50-5000} = -2 \text{ dB}$ $C_{100-5000} = -1 \text{ dB}$
 $C_{tr,50-3150} = -11 \text{ dB}$ $C_{tr,50-5000} = -11 \text{ dB}$ $C_{tr,100-5000} = -8 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - C

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

M. Calay

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

13.0 m²

Note:

Receiving room volume:

80.0 m³

Name:

Flat 22 - Living Room / Kitchen

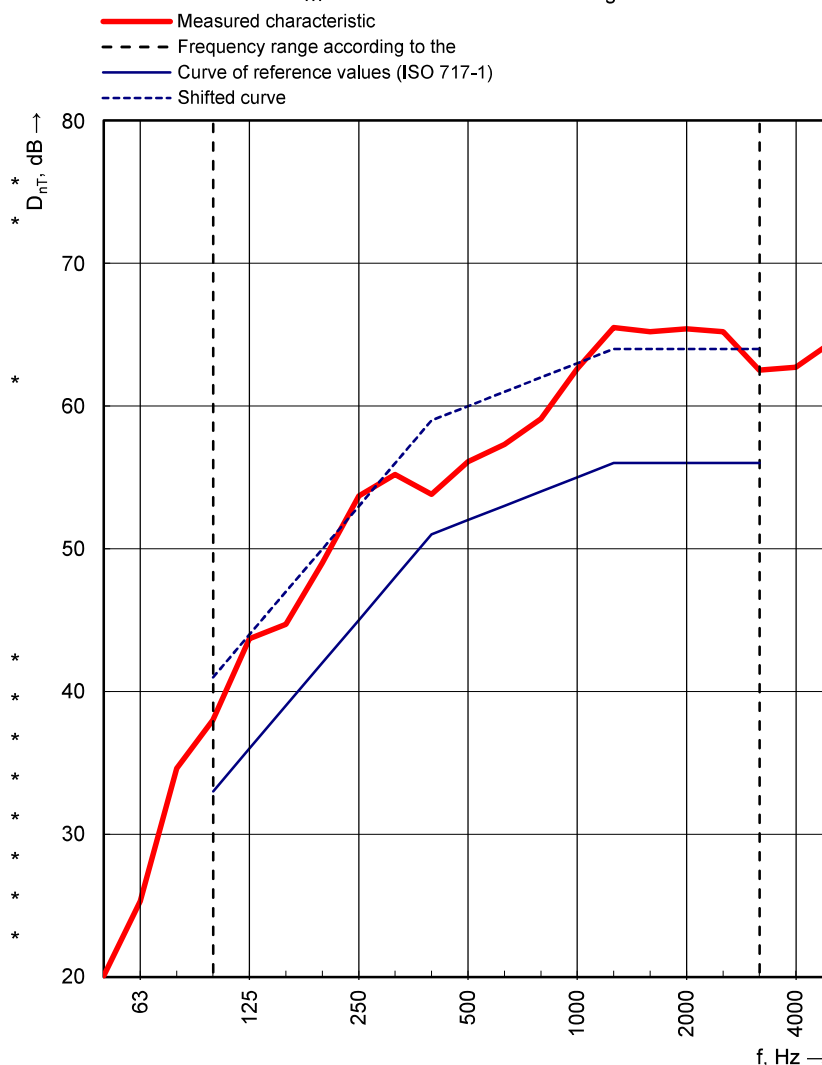
Source room volume:

96.0 m³

Name:

Flat 21 - Living Room / Kitchen

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	20.1
63	25.3
80	34.6
100	38.0
125	43.7
160	44.7
200	49.0
250	53.7
315	55.2
400	53.8
500	56.1
630	57.3
800	59.1
1000	62.6
1250	65.5
1600	65.2
2000	65.4
2500	65.2
3150	62.5
4000	62.7
5000	64.5



Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 60 \text{ (-2 ; -6) dB}$ $C_{50-3150} = -5 \text{ dB}$ $C_{50-5000} = -4 \text{ dB}$ $C_{100-5000} = -1 \text{ dB}$
 $C_{tr,50-3150} = -17 \text{ dB}$ $C_{tr,50-5000} = -17 \text{ dB}$ $C_{tr,100-5000} = -6 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - D

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

30.0 m²

Note:

Receiving room volume:

96.0 m³

Name:

Flat 11 - Living Room / Kitchen

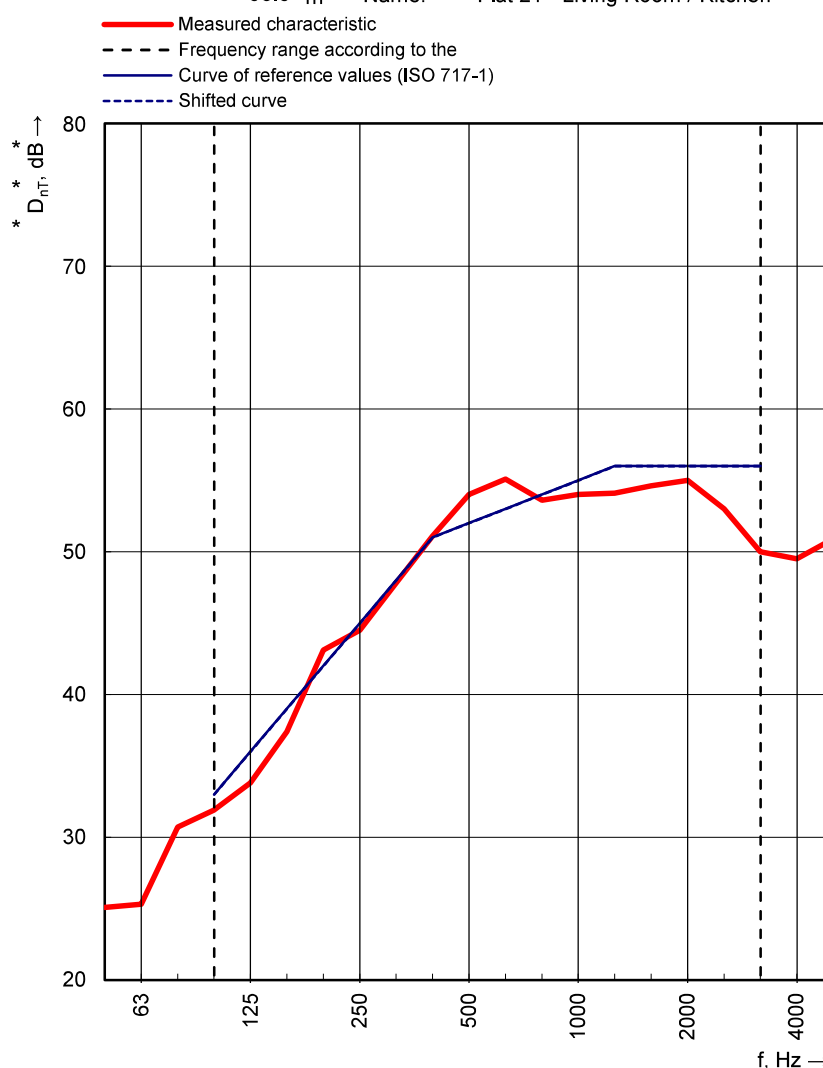
Source room volume:

96.0 m³

Name:

Flat 21 - Living Room / Kitchen

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	25.1
63	25.3
80	30.7
100	31.9
125	33.8
160	37.4
200	43.1
250	44.5
315	47.8
400	51.1
500	54.0
630	55.1
800	53.6
1000	54.0
1250	54.1
1600	54.6
2000	55.0
2500	53.0
3150	50.0
4000	49.5
5000	50.9



Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 52 \text{ (} -1 \text{ ; } -5 \text{) dB}$
 $C_{50-3150} = -2 \text{ dB}$
 $C_{50-5000} = -2 \text{ dB}$
 $C_{100-5000} = -1 \text{ dB}$
 $C_{tr,50-3150} = -9 \text{ dB}$
 $C_{tr,50-5000} = -9 \text{ dB}$
 $C_{tr,100-5000} = -5 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - E

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

M. Casey

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

24.0 m²

Note:

Receiving room volume:

80.0 m³

Name:

Flat 12 - Living Room / Kitchen

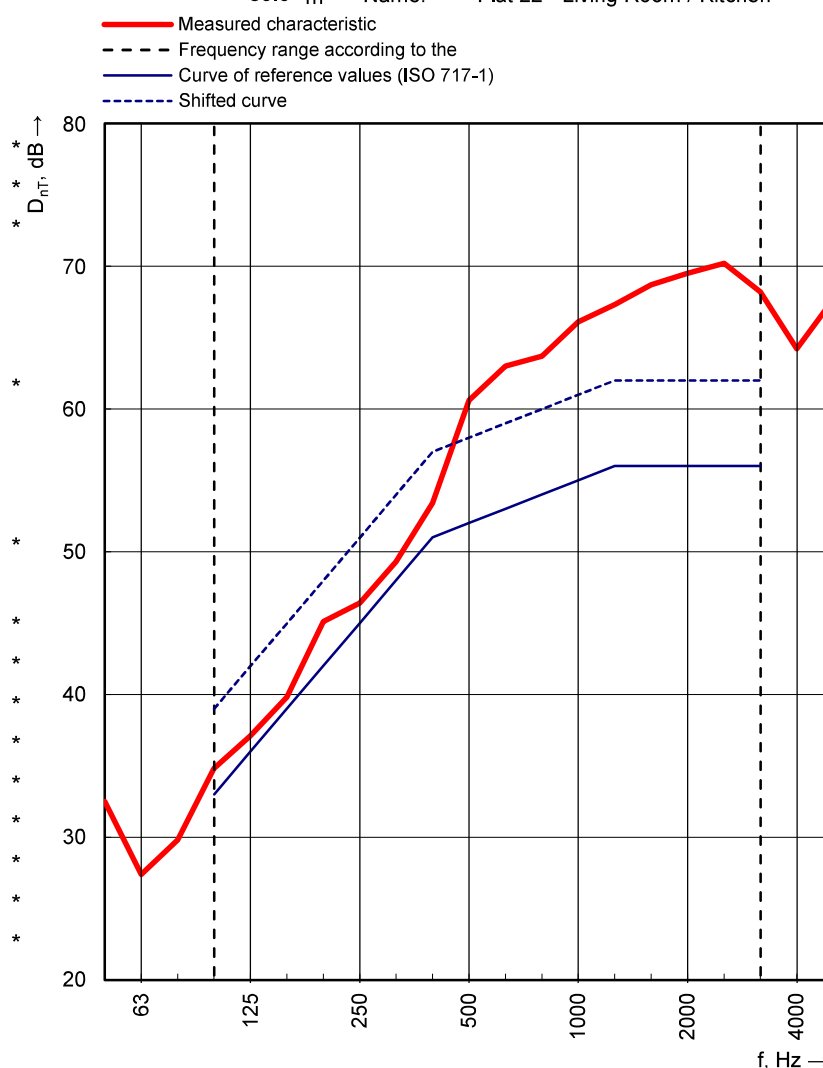
Source room volume:

80.0 m³

Name:

Flat 22 - Living Room / Kitchen

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	32.5
63	27.4
80	29.8
100	34.8
125	37.1
160	39.8
200	45.1
250	46.4
315	49.3
400	53.4
500	60.6
630	63.0
800	63.7
1000	66.1
1250	67.3
1600	68.7
2000	69.5
2500	70.2
3150	68.2
4000	64.2
5000	67.7



Rating according to ISO 717-1

*D*_{nT,w}(*C*; *C*_{tr}) = **58 (-2 ; -8) dB** *C*₅₀₋₃₁₅₀ = -4 dB *C*₅₀₋₅₀₀₀ = -3 dB *C*₁₀₀₋₅₀₀₀ = -1 dB
*C*_{tr,50-3150} = -13 dB *C*_{tr,50-5000} = -13 dB *C*_{tr,100-5000} = -8 dB

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - F

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

M. Casey

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

13.0 m²

Note:

Receiving room volume:

80.0 m³

Name:

Flat 12 - Living Room / Kitchen

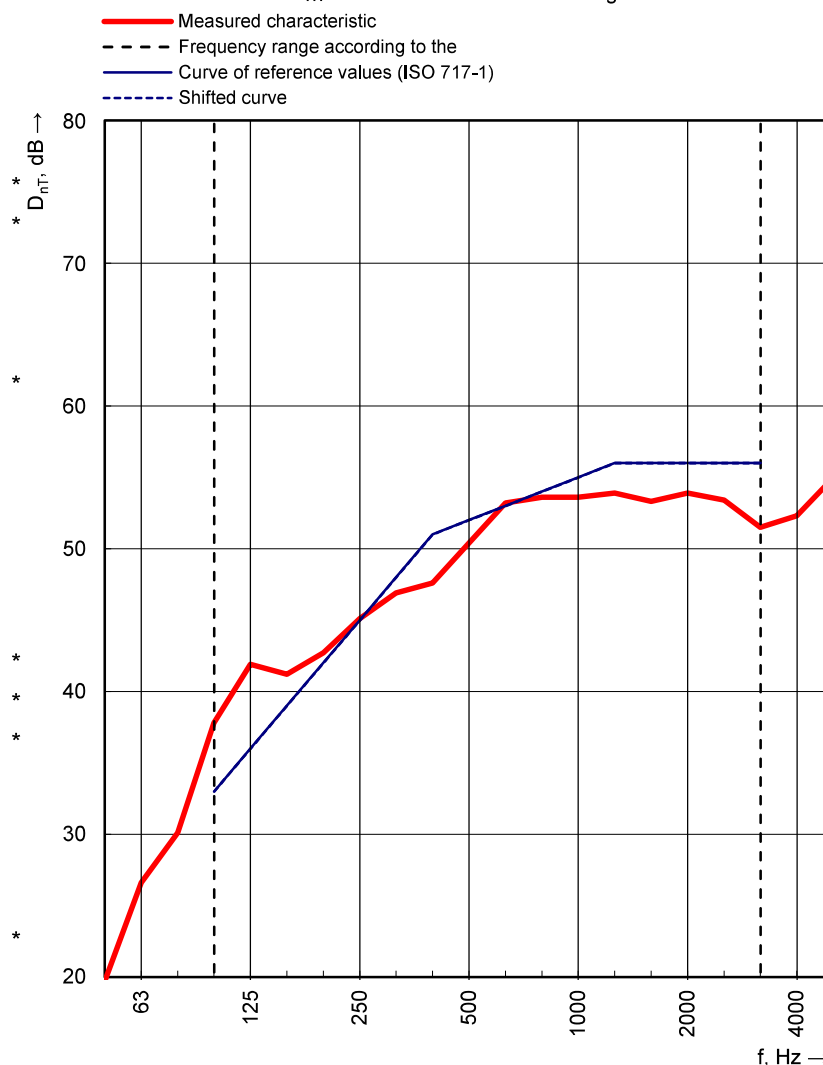
Source room volume:

96.0 m³

Name:

Flat 11 - Living Room / Kitchen

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	19.7
63	26.6
80	30.1
100	37.8
125	41.9
160	41.2
200	42.7
250	45.1
315	46.9
400	47.6
500	50.4
630	53.2
800	53.6
1000	53.6
1250	53.9
1600	53.3
2000	53.9
2500	53.4
3150	51.5
4000	52.3
5000	55.0



Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 52 \text{ (} -1 \text{ ; } -3 \text{) dB}$ $C_{50-3150} = -2 \text{ dB}$ $C_{50-5000} = -1 \text{ dB}$ $C_{100-5000} = 0 \text{ dB}$
 $C_{tr,50-3150} = -10 \text{ dB}$ $C_{tr,50-5000} = -10 \text{ dB}$ $C_{tr,100-5000} = -3 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - G

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

8.0 m²

Note:

Receiving room volume:

39.0 m³

Name:

Flat 32 - Bedroom 1

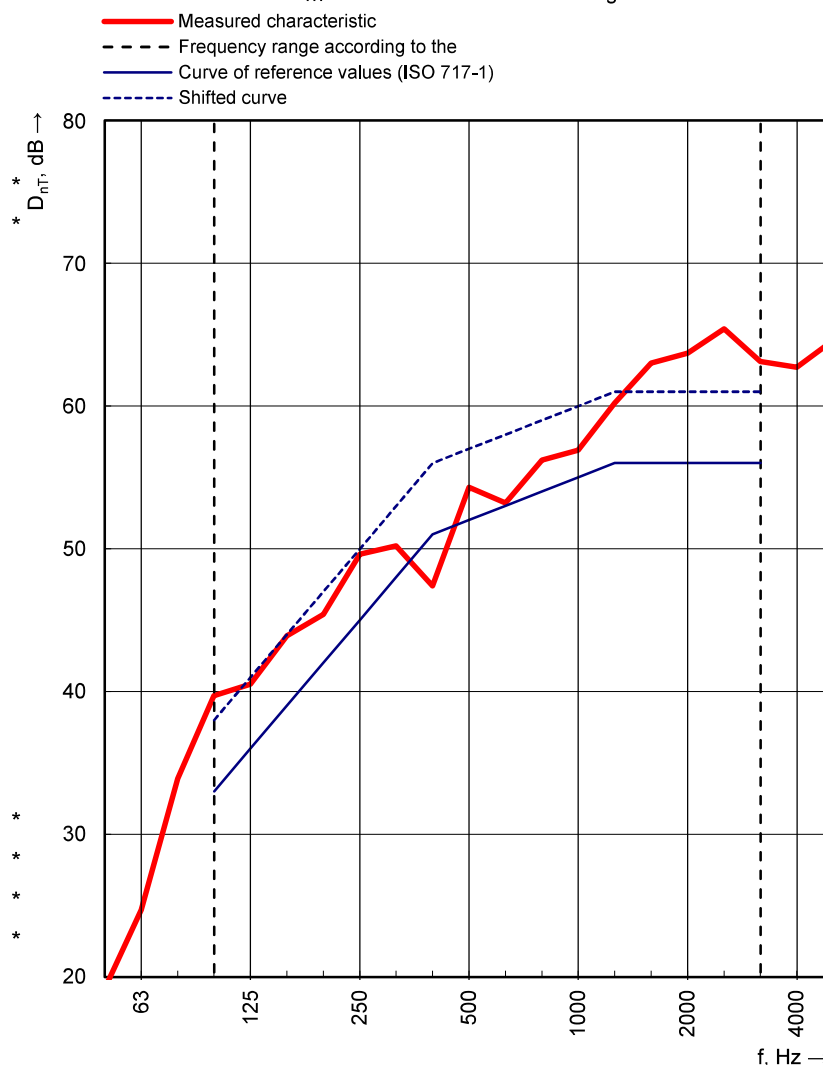
Source room volume:

25.0 m³

Name:

Flat 33 - Living Room / Kitchen

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	19.2
63	24.7
80	33.9
100	39.7
125	40.5
160	43.9
200	45.4
250	49.6
315	50.2
400	47.4
500	54.3
630	53.2
800	56.2
1000	56.9
1250	60.2
1600	63.0
2000	63.7
2500	65.4
3150	63.1
4000	62.7
5000	64.6



Rating according to ISO 717-1

*D*_{nT,w}(*C*; *C*_{tr}) = **57 (-2 ; -5) dB** *C*₅₀₋₃₁₅₀ = -4 dB *C*₅₀₋₅₀₀₀ = -3 dB *C*₁₀₀₋₅₀₀₀ = -1 dB
*C*_{tr,50-3150} = -15 dB *C*_{tr,50-5000} = -15 dB *C*_{tr,100-5000} = -5 dB

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - H

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

Standardized impact sound pressure level according to Resistance to the passage of sound approved document E

Field measurements of impact sound insulation of floors using tapping machine

Date of test: 2022-05-27

Client: LDM Group Ltd

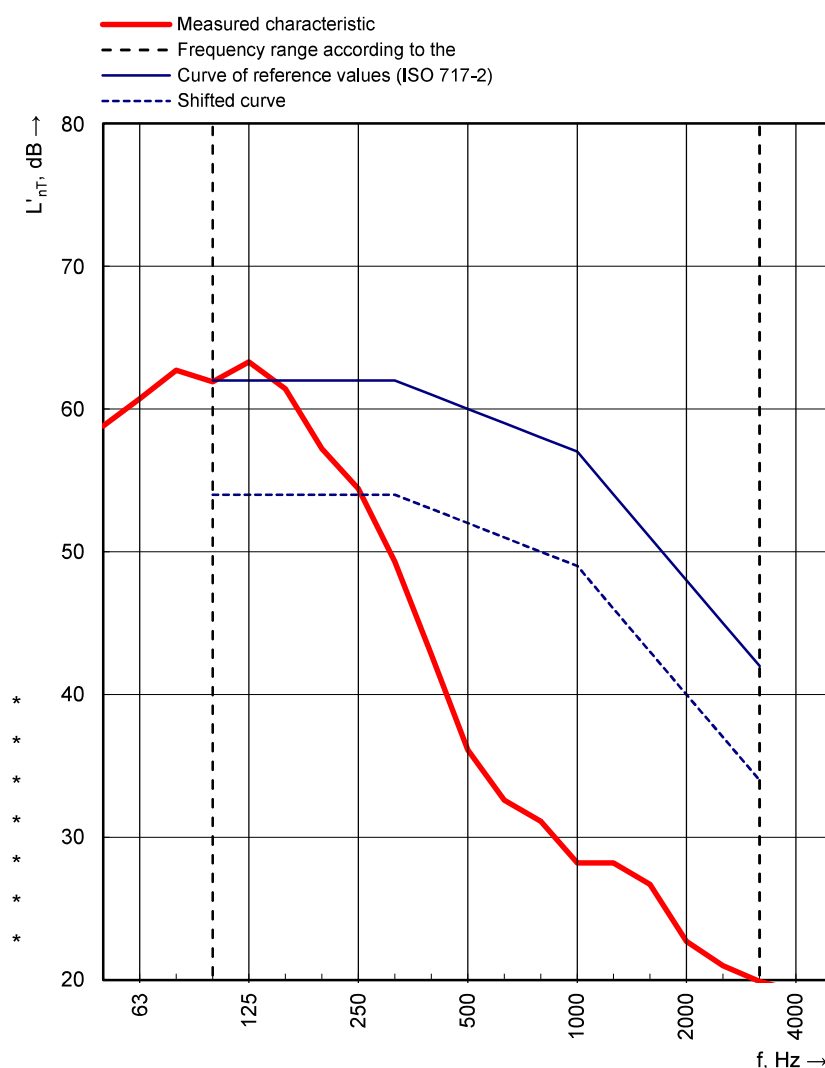
Description: See Pages 1, 2, 3 & 4.

Receiving room volume:

96.0 m³

Name: Flat 21 - Living Room / Kitchen

Frequency f Hz	L'_{nT} (1/3 octave) dB
50	58.8
63	60.7
80	62.7
100	61.9
125	63.3
160	61.4
200	57.2
250	54.4
315	49.3
400	42.8
500	36.1
630	32.6
800	31.1
1000	28.2
1250	28.2
1600	26.7
2000	22.7
2500	21.0
3150	19.9
4000	19.2
5000	18.4



Rating according to ISO 717-2

$$L'_{nT,w}(C_1) = 52 (1) \text{ dB}$$

$$C_{1,50-2500} = 3 \text{ dB}$$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - I

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

Standardized impact sound pressure level according to Resistance to the passage of sound approved document E

Field measurements of impact sound insulation of floors using tapping machine

Date of test: 2022-05-27

Client: LDM Group Ltd

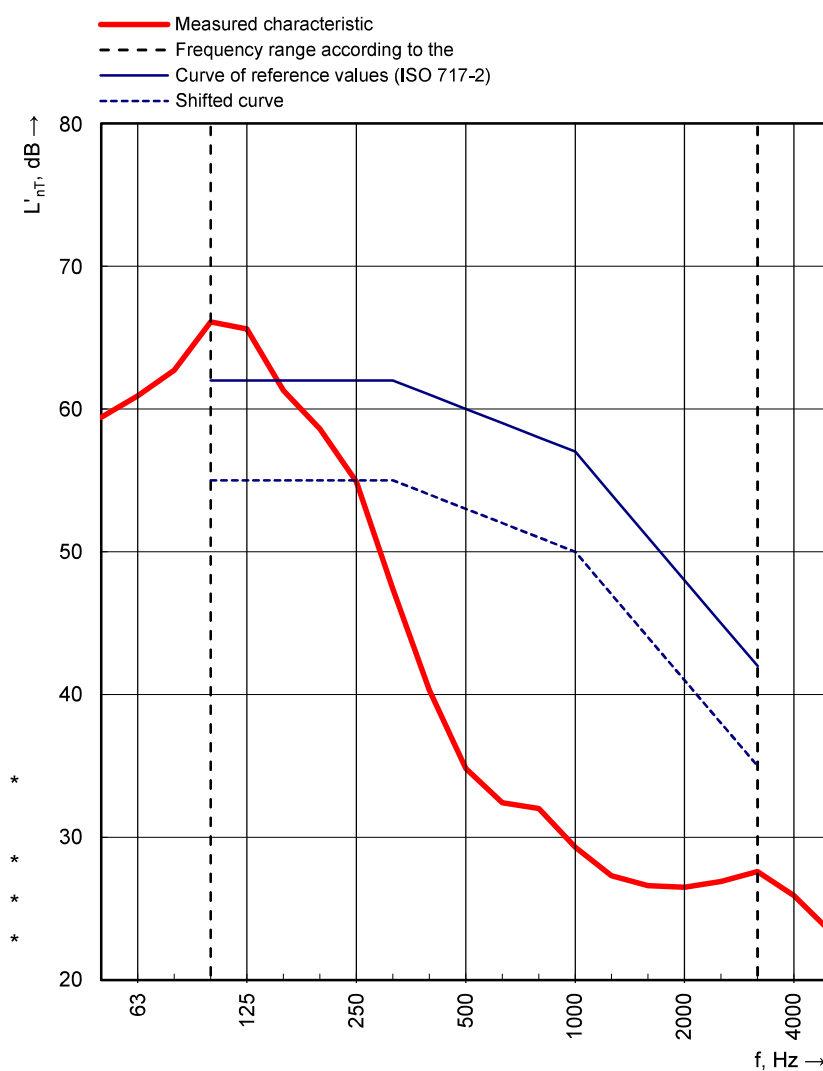
Description: See Pages 1, 2, 3 & 4.

Receiving room volume:

80.0 m³

Name: Flat 22 - Living Room / Kitchen

Frequency f Hz	L'_{nT} (1/3 octave) dB
50	59.4
63	60.9
80	62.7
100	66.1
125	65.6
160	61.3
200	58.6
250	54.9
315	47.4
400	40.3
500	34.8
630	32.4
800	32.0
1000	29.3
1250	27.3
1600	26.6
2000	26.5
2500	26.9
3150	27.6
4000	25.9
5000	23.4



Rating according to ISO 717-2

$$L'_{nT,w}(C_1) = 53 (2) \text{ dB}$$

$$C_{1,50-2500} = 3 \text{ dB}$$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - J

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

Standardized impact sound pressure level according to Resistance to the passage of sound approved document E

Field measurements of impact sound insulation of floors using tapping machine

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

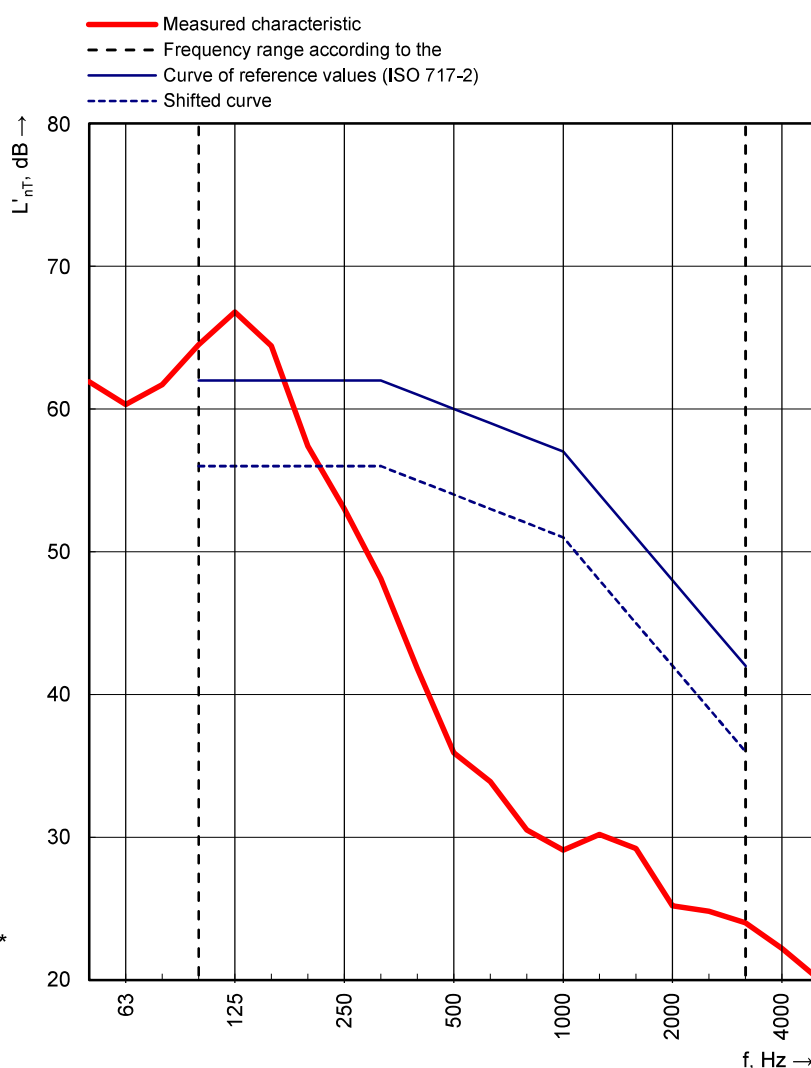
Receiving room volume:

96.0 m³

Name:

Flat 11 - Living Room / Kitchen

Frequency f Hz	L'_{nT} (1/3 octave) dB
50	61.9
63	60.3
80	61.7
100	64.5
125	66.8
160	64.4
200	57.4
250	53.0
315	48.1
400	41.8
500	35.9
630	33.9
800	30.5
1000	29.1
1250	30.2
1600	29.2
2000	25.2
2500	24.8
3150	24.0
4000	22.2
5000	20.1



Rating according to ISO 717-2

$$L'_{nT,w}(C_1) = 54 (1) \text{ dB}$$

$$C_{1,50-2500} = 3 \text{ dB}$$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - K

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

Standardized impact sound pressure level according to Resistance to the passage of sound approved document E

Field measurements of impact sound insulation of floors using tapping machine

Date of test: 2022-05-27

Client: LDM Group Ltd

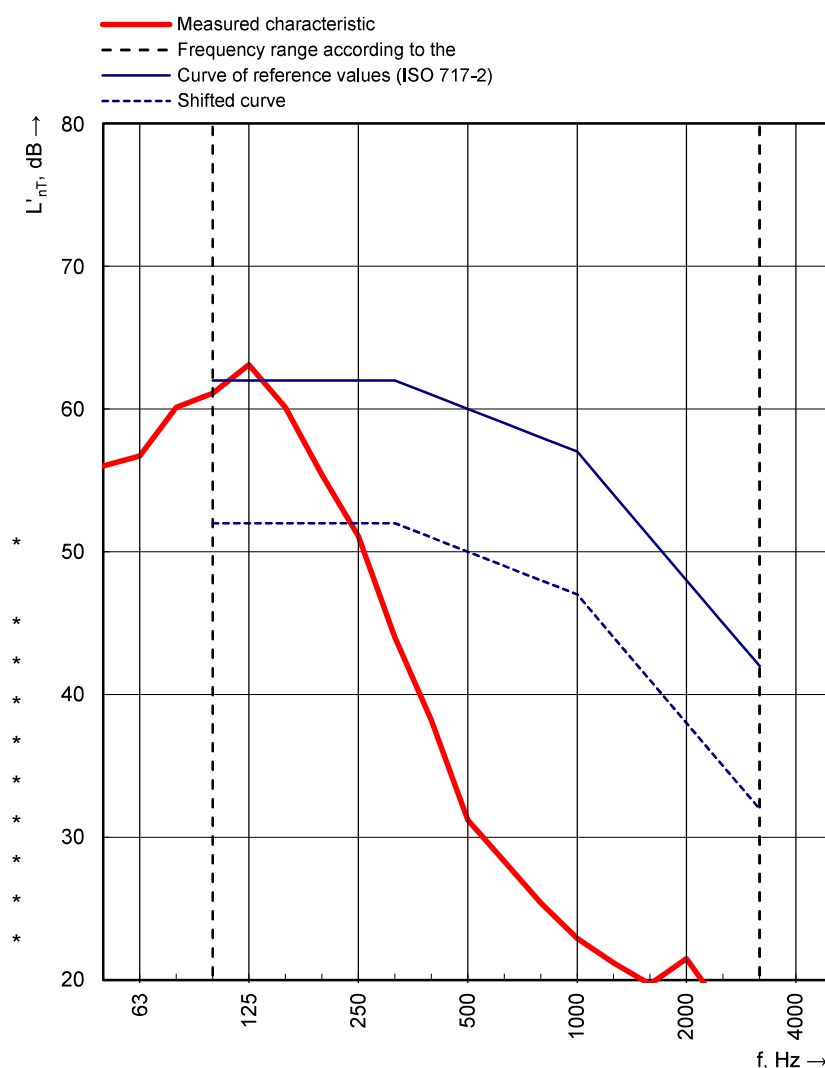
Description: See Pages 1, 2, 3 & 4.

Receiving room volume:

80.0 m³

Name: Flat 12 - Living Room / Kitchen

Frequency f Hz	L'_{nT} (1/3 octave) dB
50	56.0
63	56.7
80	60.1
100	61.1
125	63.1
160	60.1
200	55.4
250	51.1
315	44.0
400	38.2
500	31.2
630	28.3
800	25.4
1000	22.9
1250	21.2
1600	19.7
2000	21.5
2500	17.9
3150	16.7
4000	18.4
5000	17.7



Rating according to ISO 717-2

 $L'_{nT,w}(C_1) = 50 (2) \text{ dB}$ $C_{1,50-2500} = 3 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - L

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

M. Caley

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

41.0 m²

Note:

Receiving room volume:

145.0 m³

Name:

Flat 2 - Living Room / Kitchen

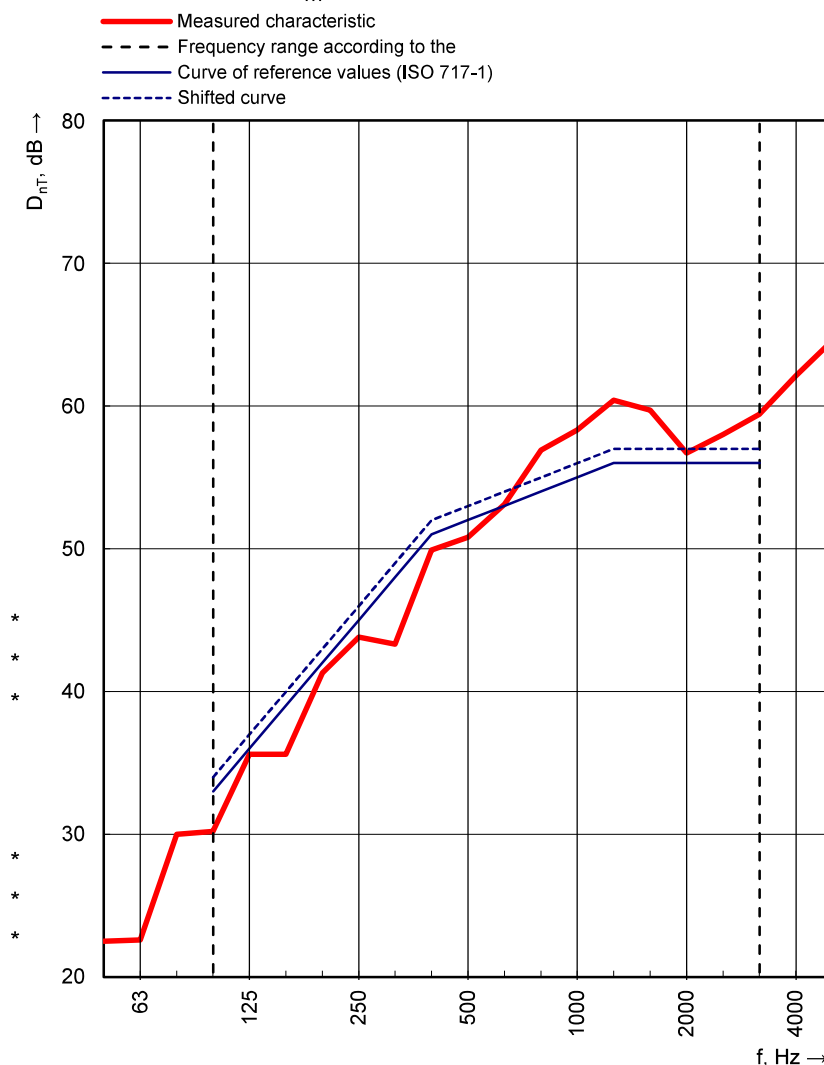
Source room volume:

275.0 m³

Name:

Lower Ground Floor - Left

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	22.5
63	22.6
80	30.0
100	30.2
125	35.6
160	35.6
200	41.3
250	43.8
315	43.3
400	49.9
500	50.8
630	53.1
800	56.9
1000	58.3
1250	60.4
1600	59.7
2000	56.7
2500	58.0
3150	59.4
4000	62.1
5000	64.6



Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 53 \text{ (} -2 \text{ ; } -7 \text{) dB}$ $C_{50-3150} = -3 \text{ dB}$ $C_{50-5000} = -2 \text{ dB}$ $C_{100-5000} = -1 \text{ dB}$
 $C_{tr,50-3150} = -12 \text{ dB}$ $C_{tr,50-5000} = -12 \text{ dB}$ $C_{tr,100-5000} = -7 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - M

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

M. Casey

Standardised level difference according to Resistance to the Passage of sound approved document E

Field measurements of airborne sound insulation between rooms

Date of test: 2022-05-27

Client: LDM Group Ltd

Description: See Pages 1, 2, 3 & 4.

Area of common partition:

14.0 m²

Note:

Receiving room volume:

51.0 m³

Name:

Flat 2 - Bedroom 1

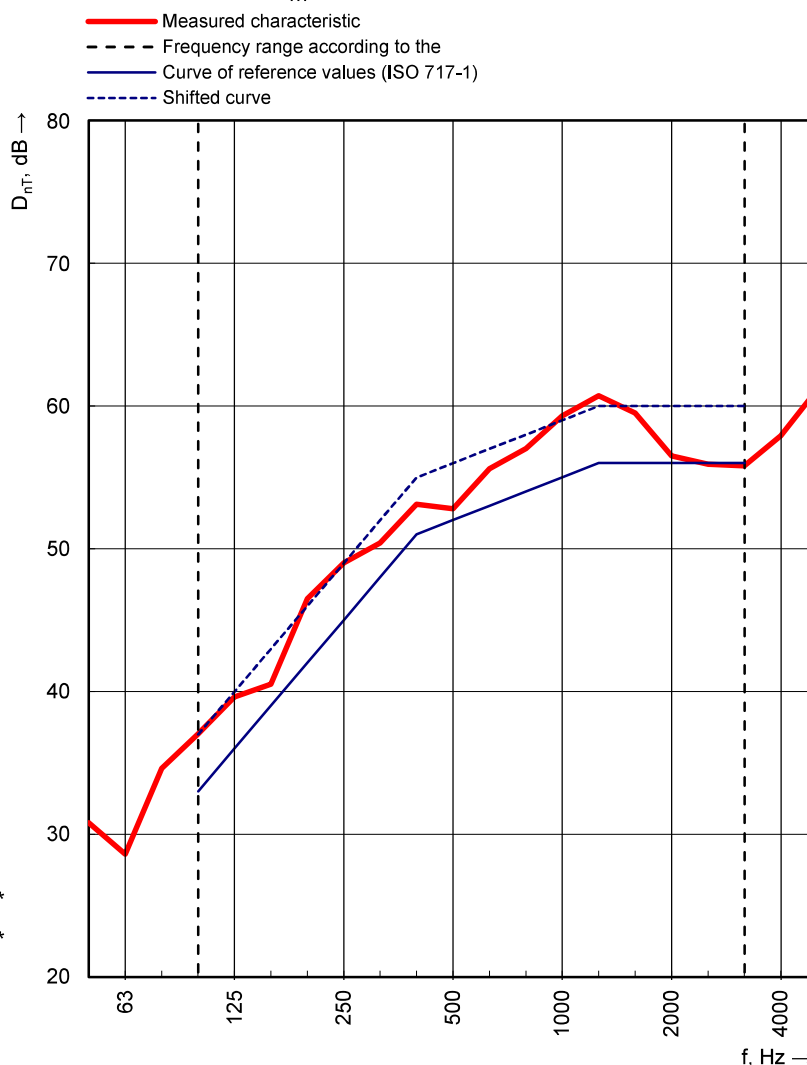
Source room volume:

275.0 m³

Name:

Lower Ground Floor - Left

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	30.8
63	28.6
80	34.6
100	37.0
125	39.6
160	40.5
200	46.5
250	49.0
315	50.4
400	53.1
500	52.8
630	55.6
800	57.0
1000	59.3
1250	60.7
1600	59.5
2000	56.5
2500	55.9
3150	55.8
4000	57.9
5000	61.2



Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 56 \text{ (} -1 \text{ ; } -5 \text{) dB}$
 $C_{50-3150} = -2 \text{ dB}$
 $C_{50-5000} = -1 \text{ dB}$
 $C_{100-5000} = -1 \text{ dB}$
 $C_{tr,50-3150} = -9 \text{ dB}$
 $C_{tr,50-5000} = -9 \text{ dB}$
 $C_{tr,100-5000} = -5 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report:

7832LG - N

Name of test institute:

NOVA Acoustics Ltd

Date:

2022-05-27

Signature:

M. Caley