



UKAS Accredited Testing
Laboratory No. 8568 for
Sound Insulation Testing

Sound Insulation Testing Report



Sound Insulation Testing Report

Sound insulation testing has been undertaken at the site address below. The testing was carried out in accordance with the procedures and guidance specified within Annex B of the Building Regulations Approved Document E (ADE) for England 2003 edition which incorporates 2004, 2010, 2013 and 2015 amendments and for Wales 2003 edition which incorporates 2004 and 2010 amendments. The results are assessed in accordance with section 0: performance - table 1.0a and 1.0b of ADE in order to indicate compliance. The rooms referenced in this report were tested in the condition presented by the client and the results relate exclusively to the items tested. The test results are summarised in table 1.0 and detailed test results are provided at the end of the report.

Project Particulars

Job Reference Number:	NP-013743
Previous Version Reference:	NA
Client Name:	Denton Construction
Client Address:	8 Bexley Square Salford, M3 6BZ
Site Address:	Plots 1 - 8 Dalton Avenue, Fallowfield, M14 7NR
Date of Testing:	19 February 2026
Testing Engineer:	Mr A Gledhill
Type of Property Under Test:	Purpose built dwelling-flats
Instrumentation Used:	Kit 4
Calibration:	Before and after testing the equipment was calibrated to an accuracy showing negligible deviation using the calibrator.
Test Report Authorised By:	Mr A Gledhill

Deviations from Approved Document E Annex B:

¹Room volumes measured <25m³

Test Procedures

Airborne sound insulation measurements are undertaken in accordance with BS EN ISO 140-4:1998. A summary of the test procedure is provided below:

- 1) A dodecahedral loudspeaker is used to generate pink noise at a steady and continuous level across the required frequency bands.
- 2) The sound levels are measured in 1/3 octave frequency bands from 100Hz to 3.15kHz in the source and receiver room using fixed or moving microphone positions to establish a representative average sound pressure level for each room.
- 3) The reverberation time is measured in the receiving room in accordance with BS EN ISO 354:2003
- 4) Background sound levels are measured in the receiving room.
- 5) The difference in source and receiver noise levels is calculated for each wall and floor in accordance with BS EN 140-4:1998 and Annex B of ADE. 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 (DnT,w).

Impact sound insulation measurements are undertaken in accordance with BS EN ISO 140 - 7 :1998. A summary of the test procedure is provided below:

- 1) A tapping machine compliant with the relevant standard is used as the impact source.
- 2) The sound levels are measured in 1/3 octave frequency bands from 100Hz to 3.15kHz in the receiver room using fixed or moving microphone positions to establish a representative average sound pressure level for the room.
- 3) The reverberation time is measured in the receiving room in accordance with BS EN ISO 354:2003
- 4) Background sound levels are measured in the receiving room.
- 5) The impact sound pressure level is 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).

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.

Test Type Abbreviations and Acoustic Terms for Test Results

ABW = Airborne Wall Test = DnT,w + Ctr dB

ABF = Airborne Floor Test = DnT,w + Ctr dB

IPF = Impact Floor Test = L'nT,w dB

Sound Insulation Test Results						
Test Ref.	Test Type	Source Room	Receiving Room	Measured Level	Required Level	Pass / Fail
A ¹	ABW	Plot 4 Bedroom	Plot 2 Bedroom	57	≥45	Pass
B ¹	ABW	Plot 3 Bedroom	Plot 1 Bedroom	57	≥45	Pass
C ¹	ABF	Plot 2 Bedroom	Plot 1 Bedroom	45	≥45	Pass
D ¹	IPF	Plot 2 Bedroom	Plot 1 Bedroom	55	≤62	Pass

Table 1.0 - Sound Insulation Test Results

Standardized Level Difference According to Resistance to the Passage of Sound Approved Document E

Field measurements of airborne sound insulation between rooms

Date of test: 2026-02-19

Client: Denton Construction

Description: See Pages 1 & 2

Area of common partition:

7.0 m² Note: wall

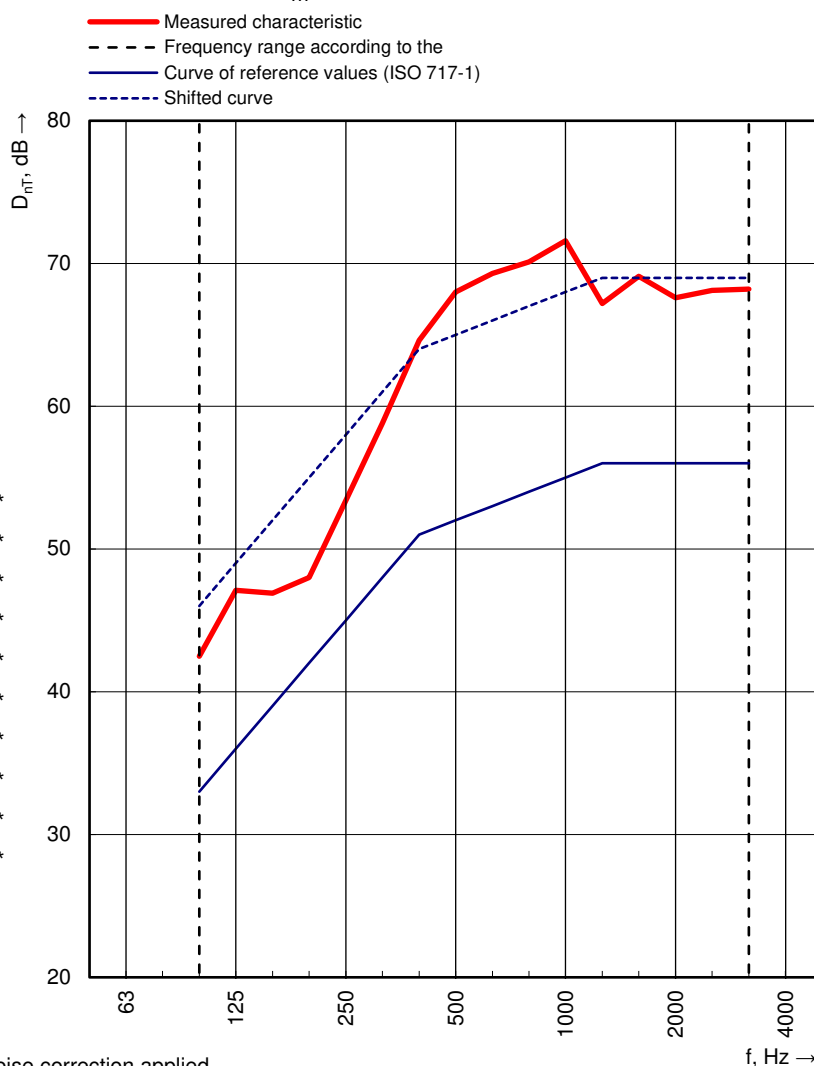
Receiving room volume:

21.0 m³ Name: Plot 4 Bedroom

Source room volume:

21.0 m³ Name: Plot 2 Bedroom

Frequency f Hz	D_{nT} (1/3 octave) dB
50	
63	
80	
100	42.5
125	47.1
160	46.9
200	48.0
250	53.4
315	58.8
400	64.6
500	68.0
630	69.3
800	70.1
1000	71.6
1250	67.2
1600	69.1
2000	67.6
2500	68.1
3150	68.2
4000	
5000	



* ISO 140 - 4 maximum background noise correction applied

Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 65 \text{ (-3 ; -8) dB}$ $C_{50-3150} = -4 \text{ dB}$ $C_{50-5000} = -3 \text{ dB}$ $C_{100-5000} = -2 \text{ dB}$
 $C_{tr,50-3150} = -13 \text{ dB}$ $C_{tr,50-5000} = -13 \text{ dB}$ $C_{tr,100-5000} = -8 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report: NP-013743 - A

Name of test institute: NOVA Acoustics Ltd

Date: 2026-02-19

Signature: [Redacted]

Standardized Level Difference According to Resistance to the Passage of Sound Approved Document E

Field measurements of airborne sound insulation between rooms

Date of test: 2026-02-19

Client: Denton Construction

Description: See Pages 1 & 2

Area of common partition:

7.0 m² Note: Wall

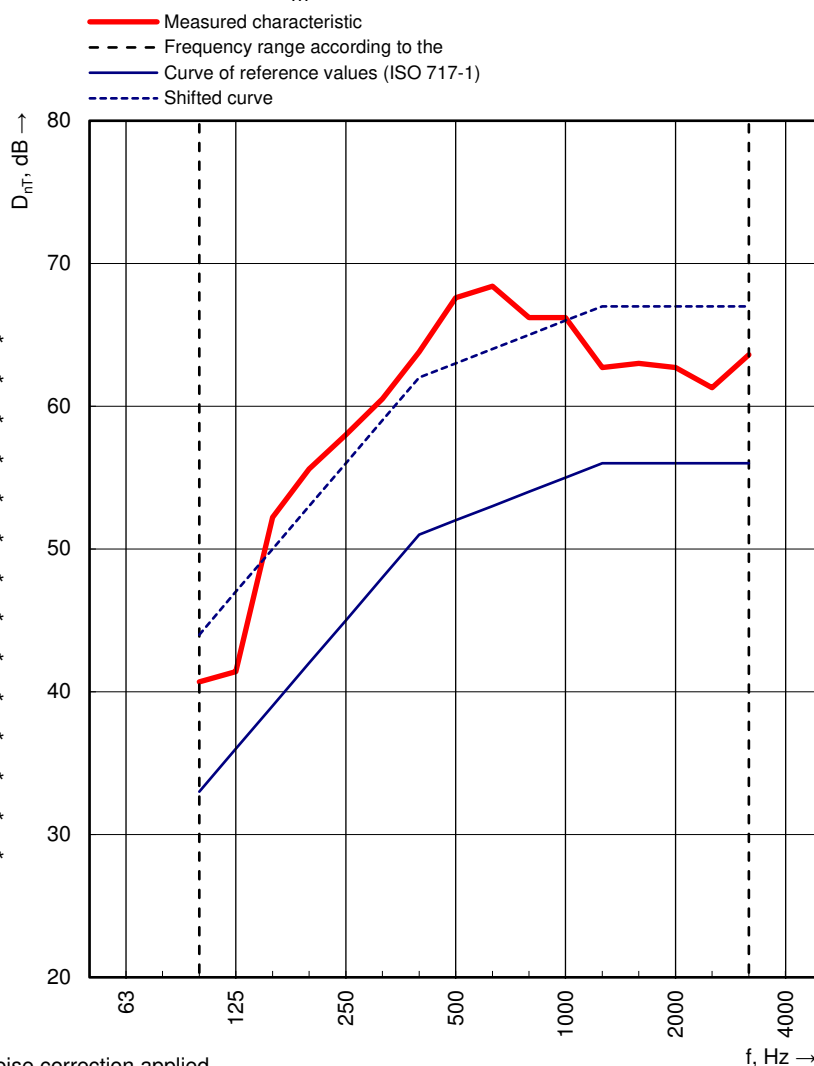
Receiving room volume:

21.0 m³ Name: Plot 1 Bedroom

Source room volume:

21.0 m³ Name: Plot 3 Bedroom

Frequency <i>f</i> Hz	<i>D</i> _{nT} (1/3 octave) dB
50	
63	
80	
100	40.7
125	41.4
160	52.2
200	55.6
250	58.0
315	60.5
400	63.8
500	67.6
630	68.4
800	66.2
1000	66.2
1250	62.7
1600	63.0
2000	62.7
2500	61.3
3150	63.6
4000	
5000	



* ISO 140 - 4 maximum background noise correction applied

Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 63 \text{ (} -2 \text{ ; } -6 \text{) dB}$ $C_{50-3150} = -3 \text{ dB}$ $C_{50-5000} = -2 \text{ dB}$ $C_{100-5000} = -1 \text{ dB}$
 $C_{tr,50-3150} = -11 \text{ dB}$ $C_{tr,50-5000} = -11 \text{ dB}$ $C_{tr,100-5000} = -6 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report: NP-013743 - B

Name of test institute: NOVA Acoustics Ltd

Date: 2026-02-19

Signature: [Redacted]

Standardized Level Difference According to Resistance to the Passage of Sound Approved Document E

Field measurements of airborne sound insulation between rooms

Date of test: 2026-02-19

Client: Denton Construction

Description: See Pages 1 & 2

Area of common partition:

10.0 m²

Note: Floor

Receiving room volume:

21.0 m³

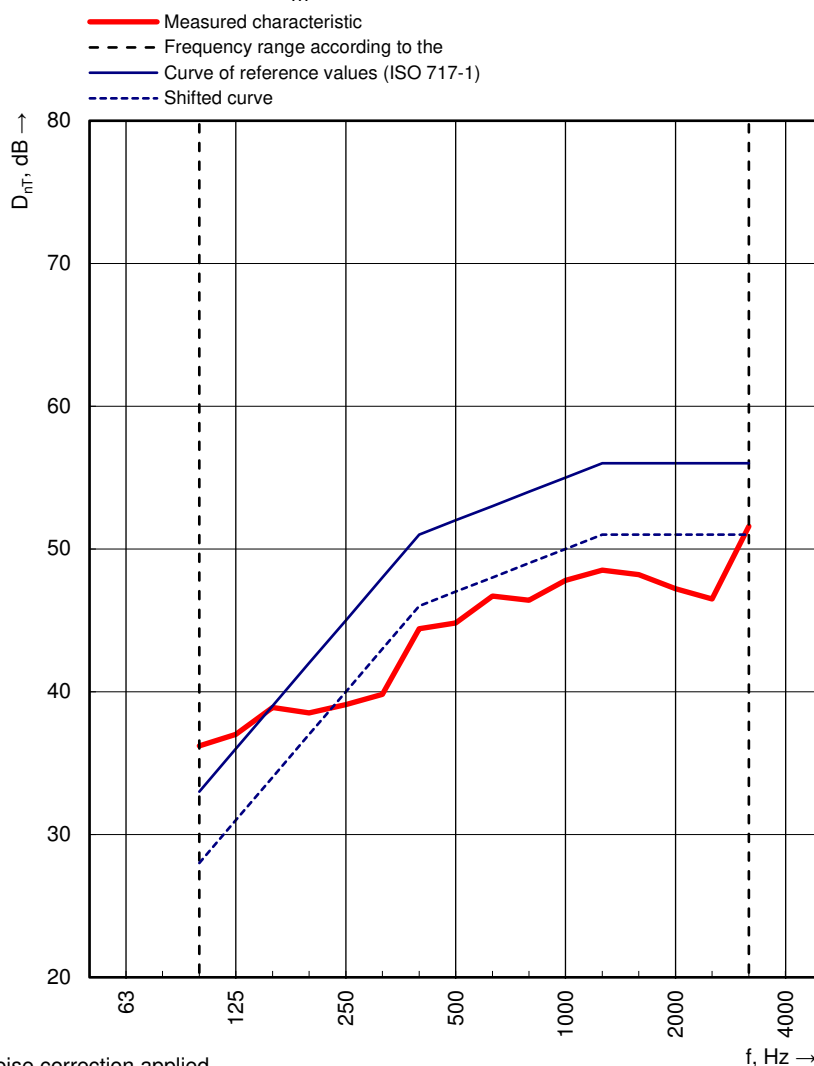
Name: Plot 1 Bedroom

Source room volume:

21.0 m³

Name: Plot 2 Bedroom

Frequency f Hz	D_{nT} (1/3 octave) dB
50	
63	
80	
100	36.2
125	37.0
160	38.9
200	38.5
250	39.1
315	39.8
400	44.4
500	44.8
630	46.7
800	46.4
1000	47.8
1250	48.5
1600	48.2
2000	47.2
2500	46.5
3150	51.6
4000	
5000	



* ISO 140 - 4 maximum background noise correction applied

Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 47 \text{ (-1 ; -2) dB}$ $C_{50-3150} = -1 \text{ dB}$ $C_{50-5000} = 0 \text{ dB}$ $C_{100-5000} = 0 \text{ dB}$
 $C_{tr,50-3150} = -5 \text{ dB}$ $C_{tr,50-5000} = -5 \text{ dB}$ $C_{tr,100-5000} = -2 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report: NP-013743 - C

Name of test institute: NOVA Acoustics Ltd

Date: 2026-02-19

Signature: [Redacted]

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: 2026-02-19

Client: Denton Construction

Description: See Pages 1 & 2

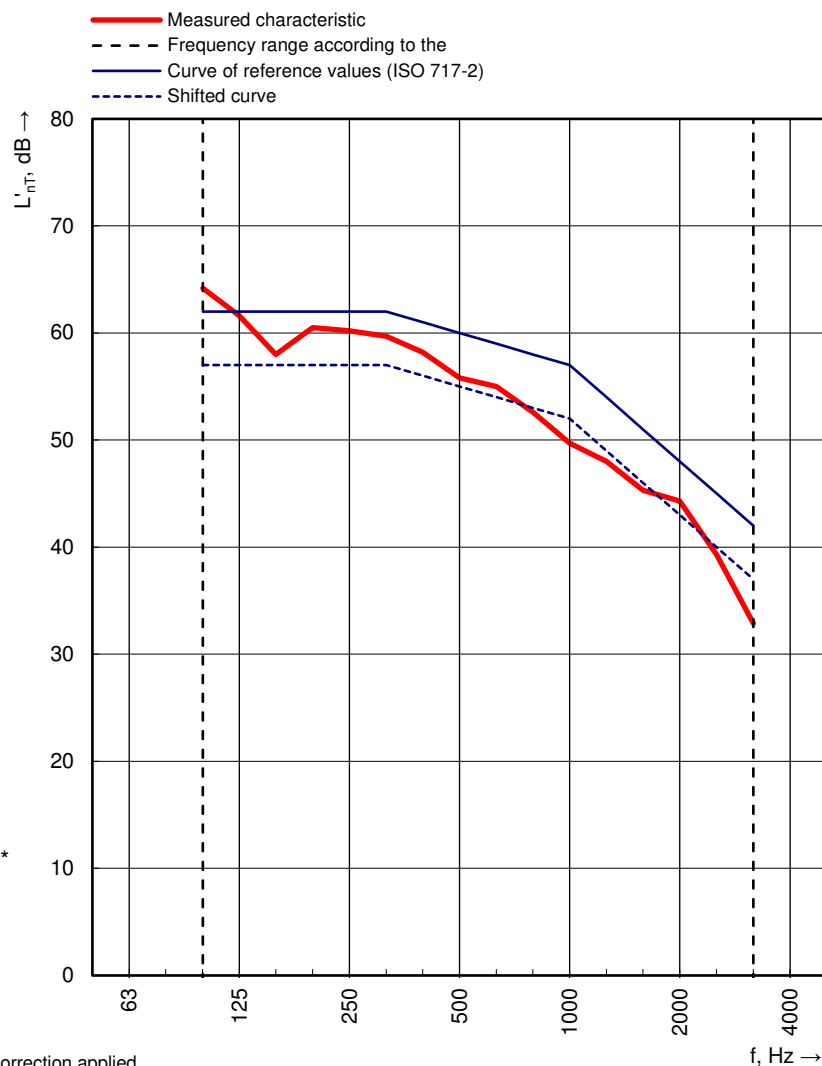
Receiving room volume:

21.0 m³

Name:

Plot 1 Bedroom

Frequency f Hz	L'_{nT} (1/3 octave) dB
50	
63	
80	
100	64.2
125	61.6
160	58.0
200	60.5
250	60.2
315	59.7
400	58.2
500	55.8
630	55.0
800	52.6
1000	49.7
1250	48.0
1600	45.3
2000	44.3
2500	39.3
3150	32.9
4000	
5000	



* ISO 140 - 7 maximum background noise correction applied

Rating according to ISO 717-2

$L'_{nT,w}(C_1) = 55 (0)$ dB

$C_{1,50-2500} = 4$ dB

Evaluation based on field measurement results obtained by an engineering method

No. of test report: NP-013743 - D

Name of test institute: NOVA Acoustics Ltd

Date: 2026-02-19

Signature: 



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