

HEALTHY ABODE ACOUSTICS

BUILDING ACOUSTICIANS & ENVIRONMENTAL NOISE CONSULTANTS

REPORT SOUND INSULATION TEST

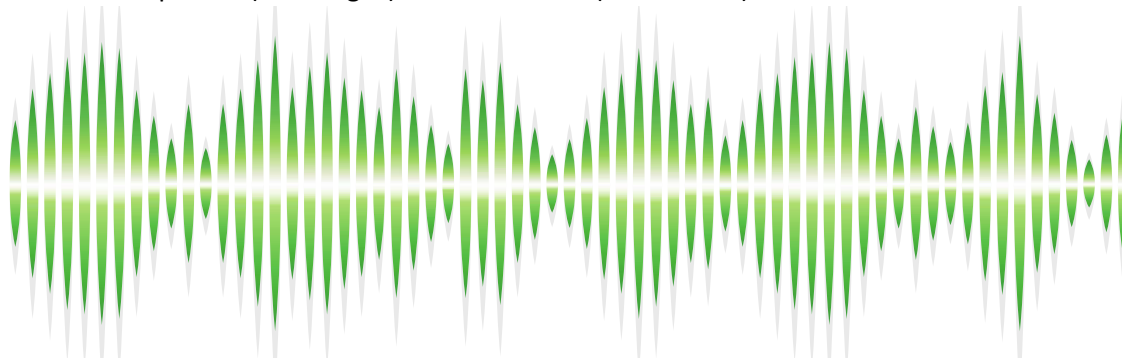
SITE ADDRESS

BLOCK B, 67-71 HIGH STREET, HAMPTON HILL,
LONDON TW12 1NH

Our Ref	HA/AF781-2/V1.1
Site Address	67-71 High Street, Hampton Hill, London TW12 1NH
For	Atlas New Homes Ltd
Client Address	Riding Court House, Riding Court Road, Datchet, Berkshire SL3 9JT
Date of Test	23 October 2024
Date of Report	17 November 2024
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Checked & Authorised by	Miss Josie Nixon <small>MSc BA (Hons) MIOA</small>



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Airborne Tests AB1-AB8

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This report has been prepared with all reasonable expertise, care and diligence. The survey and report has been undertaken in accordance with accepted acoustic consultancy principles, it takes account of the services and terms and conditions agreed verbally and in writing between HA Acoustics and our client. Any information provided by third parties and referenced is considered to have undergone suitably thorough third-party checks to ensure accuracy. We can accept no liability for errors with a third-party data. This report is confidential to our client and therefore HA Acoustics accepts no responsibility whatsoever to third parties unless formally agreed in writing by HA Acoustics. Any such party relies upon the report at their own risk.

1. INTRODUCTION

- 1.1. Atlas New Homes Ltd instructed Healthy Abode Ltd t/a HA Acoustics to undertake sound insulation tests at Block B of 67-71 High Street, Hampton Hill, London TW12 1NH for submission as part of documentation to be provided to Building Control and under the provisions of Building Regulations Approved Document E.

- 1.2. This report applies to testing undertaken in Block B only which consists of a change of use residential development from former office building to create 15 residential flats over 3 storeys (ground floor to second floor levels).

- 1.3. The purposes of this report are:
 - 1.3.1. To detail the procedures used throughout the measurement and processing phase.

 - 1.3.2. To determine and record the results of the sound insulation tests.

 - 1.3.3. To undertake the sound insulation testing to demonstrate compliance with the Building Regulations and Approved Document E (2003 as amended 2010, 2013, 2015).

- 1.4. The sound insulation tests carried out within this report were undertaken in full accordance with BS EN ISO 140-4: 1998 "Field measurements of airborne sound insulation between rooms", BS EN ISO 140-7: 1998 "Field measurements of impact sound insulation between rooms" and the procedures described in Annex B of the Approved Document. The results provided within this report, and accompanying certificates only apply to the specific areas tested as presented at day and time of testing.

2. SITE INVESTIGATION METHODOLOGY

2.1 Airborne Tests

2.2 High volume “pink-EQ” noise was generated from an omnidirectional speaker and amp in the source room. The speaker was positioned in order to obtain a diffuse sound field within the room. Measurements were taken using a sweeping microphone technique over a minimum period of 30 seconds at each of two speaker positions. Sound levels were measured and recorded across the 1/3 octave frequency bands between 100 Hz – 3150 Hz as required by accredited testing. Measurements obtained below 100Hz are included. These have not followed the low frequency procedure as prescribed in ISO 140-4, as they are outside the required testable range.

2.3 The same measurement procedure was followed in the source and receiver room.

2.4 The value tests were carried out in conformance with BS EN ISO 140-4: 1998 *“Field measurements of airborne sound insulation between rooms”* and the post processing of the results with BS EN ISO 717-1: 1997 *“Rating of sound insulation in buildings and of building elements. Part 1 - Airborne sound insulation”*.

2.5 The differences between the levels in the source and receiver rooms have been calculated. Correction factors are then applied based on the effect of background noise and reverberation time in the receiving room. This produces a spectrum of values known as the “Standardised Level Difference”. This spectrum is then converted to a single figure result: the “Weighted Standardised Level Difference” with comparison to two reference spectra to produce the parameter required in Approved Document E.

2.6 Impact Tests

2.7 Impact testing was carried out between the separating elements in compliance with BS EN ISO 140-7. Within the source room, a tapping machine was placed on the floor in four different positions. Measurements were taken for a minimum of six seconds at each position in the receiver room. Sound levels were measured and recorded across the 1/3 octave frequency bands between 100 Hz – 3150 Hz. Receiver measurements were conducted for each measurement position.

2.8 The value tests were carried out in conformance with BS EN ISO 140-7: 1998 “Field measurements of impact sound insulation between rooms” The results of the tests were rated in accordance with BS EN ISO 717-2: 1997 “*Rating of sound insulation in buildings and of building elements. Part 2 - Impact sound insulation*”.

2.9 Reverberation Time

2.10 The reverberation time in the receiver room is obtained using the interrupted noise source method. High volume “pink-EQ noise” was generated within the receiver room. The internal program of the sound level meter was used to measure the decay time of sound in the room. The sound level meter has an internal program, which measures the decay time of sound within a room. Three measurements were taken at each microphone position. A minimum of 3 microphone positions were used. The results were then averaged.

2.11 Background Noise

2.12 Background noise levels were undertaken in conformance with BS EN ISO 140 part 4, within the receiver rooms. Measurements were taken for a minimum of 30 seconds. During testing, it was observed that the dominant noise source emanated from road traffic noise from the surrounding road network.

3. EQUIPMENT

3.1 The equipment used for the pre-completion sound tests is summarised in Table 3.1.

Equipment	Description	Quantity	Serial Number
NTi XL2	Class 1 automated logging sound level meter	1	A2A-14765-E0
MA220 Preamplifier	Class 1 Preamplifier	1	7564
MC230A microphone	Class 1 ½" microphone	1	A15949
NTi	Dodecahedron Sound Source DS3	1	D-1081-A3
NTi	Power Amplifier PA3	1	1168
Larson Davis CAL200	Class 1 Calibrator	1	14069
Leica Disto X310	Laser Measure	1	0844760964
Sound Solutions	Tapper	1	TP02012

Table 3.1 Description of Equipment used for testing

3.2 The sound level meter was calibrated before and after testing. No significant drift was recorded. Equipment calibration certificates can be provided upon request.

4. REQUIREMENTS AND TEST ROOMS

4.1 All tested rooms were in a finished state, with doors fitted, walls painted and all power sockets and downlighters installed. The residential dwellings were unoccupied and unfurnished but kitchens were fitted. No carpets or floor finishes had been installed.

4.2 The actions detailed in Annex B of the Approved Document E of the Building Regulations have been followed. Any exceptions are specified in Table 4.1.

Section of Annex B	Annex B Requirement	Reason For Non Compliance	Procedure Undertaken
B2.11	Section 1 gives guidance on the room types that should be used for testing. These rooms should have a volume of at least 25m ³ .	Test room volumes less than 25m ³ . No other rooms were available.	Undertook tests and reported room volumes.

Table 4.1 – Non-compliance list of Annex 2 Approved Document E 2003



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5. RESULTS OF PRE-COMPLETION SOUND TEST

5.1 Airborne Results

5.2 The results of the airborne testing are summarised in table 5.1. Full results are shown in Appendix A.

Test Ref.	Test Element	Source Room	Receiver Room	Test Area (approx.)	Criterion	Test Result	Pass /Fail
AB1	Wall	Flat 9 Living/Kitchen/ Dining (85m ³)	Flat 10 Living/Kitchen/ Dining (80m ³)	13.5m ²	$D_{nT,w} + C_{tr} \geq 43\text{dB}$	$D_{nT,w} + C_{tr}$ 50dB	Pass
AB2	Floor	Flat 9 Living/Kitchen/ Dining (85m ³)	Flat 11 Living/Kitchen/ Dining (57.5m ³)	22m ²	$D_{nT,w} + C_{tr} \geq 43\text{dB}$	$D_{nT,w} + C_{tr}$ 56dB	Pass
AB3	Wall	Flat 8 Living/Kitchen/ Dining (50m ³)	Flat 10 Bedroom 2 (22m ³)	5.5m ²	$D_{nT,w} + C_{tr} \geq 43\text{dB}$	$D_{nT,w} + C_{tr}$ 57dB	Pass
AB4	Floor	Flat 10 Bedroom 1 (22m ³)	Flat 12 Bedroom 2 (21.5m ³)	9m ²	$D_{nT,w} + C_{tr} \geq 43\text{dB}$	$D_{nT,w} + C_{tr}$ 55dB	Pass
AB5	Wall	Flat 2 Living/Kitchen/ Dining (75m ³)	Flat 3 Living/Kitchen/ Dining (53m ³)	13m ²	$D_{nT,w} + C_{tr} \geq 43\text{dB}$	$D_{nT,w} + C_{tr}$ 54dB	Pass
AB6	Floor	Flat 2 Living/Kitchen/ Dining (75m ³)	Flat 7 Living/Kitchen/ Dining (75m ³)	31m ²	$D_{nT,w} + C_{tr} \geq 43\text{dB}$	$D_{nT,w} + C_{tr}$ 62dB	Pass
AB7	Wall	Flat 7 Living/Kitchen/ Dining (75m ³)	Flat 6 Bedroom 1 (25m ³)	8m ²	$D_{nT,w} + C_{tr} \geq 43\text{dB}$	$D_{nT,w} + C_{tr}$ 53dB	Pass
AB8	Floor	Flat 1 Bedroom 1 (25m ³)	Flat 6 Bedroom 2 (25m ³)	10.6m ²	$D_{nT,w} + C_{tr} \geq 43\text{dB}$	$D_{nT,w} + C_{tr}$ 60dB	Pass

Table 5.1 Airborne Test Results



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5.3 The client or client’s representative provided the above plot numbers to HA Acoustics at time of testing.
Any other information provided by the client is identified within this report.

5.4 Impact Results

5.5 The results of the impact testing are summarised in table 5.2. Full results are shown in Appendix A.

Test Ref.	Test Element	Source	Receiver	Test Area (approx.)	Criterion	Test Result	Pass /Fail
IP2	Floor	Flat 11 Living/Kitchen/ Dining (57.5m ³)	Flat 9 Living/Kitchen/ Dining (85m ³)	22m ²	$L'_{nT,w} \leq 64\text{dB}$	$L'_{nT,w}$ 44dB	Pass
IP4	Floor	Flat 12 Bedroom 2 (21.5m ³)	Flat 10 Bedroom 1 (22m ³)	9m ²	$L'_{nT,w} \leq 64\text{dB}$	$L'_{nT,w}$ 52dB	Pass
IP6	Floor	Flat 7 Living/Kitchen/ Dining (75m ³)	Flat 2 Living/Kitchen/ Dining (75m ³)	31m ²	$L'_{nT,w} \leq 64\text{dB}$	$L'_{nT,w}$ 40dB	Pass
IP8	Floor	Flat 6 Bedroom 2 (25m ³)	Flat 1 Bedroom 1 (25m ³)	10.6m ²	$L'_{nT,w} \leq 64\text{dB}$	$L'_{nT,w}$ 44dB	Pass

Table 5.2 Impact Test Results



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6. CONCLUSION

- 6.1. Sound tests were undertaken by Healthy Abode Ltd t/a HA Acoustics at Block B of 67-71 High Street, Hampton Hill, London TW12 1NH.
- 6.2. The sound testing was undertaken under the requirement of Building Regulations Approved Document E in accordance with BS EN ISO 140 Part 4 and 7 and BS EN ISO 717 Part 1 and 2 respectively for both airborne and impact sound insulation.
- 6.3. The airborne sound insulation performance of the tested walls between residential Flats meets the requirements of Approved Document E of the Building Regulations.
- 6.4. The airborne sound insulation performance of the tested floors between residential Flats meets the requirements of Approved Document E of the Building Regulations.
- 6.5. The impact sound insulation performance of the tested floors between residential Flats meets the requirements of Approved Document E of the Building Regulations.

Standardized level difference in accordance with Approved Document E (2003)
Field measurements of airborne sound insulation between rooms



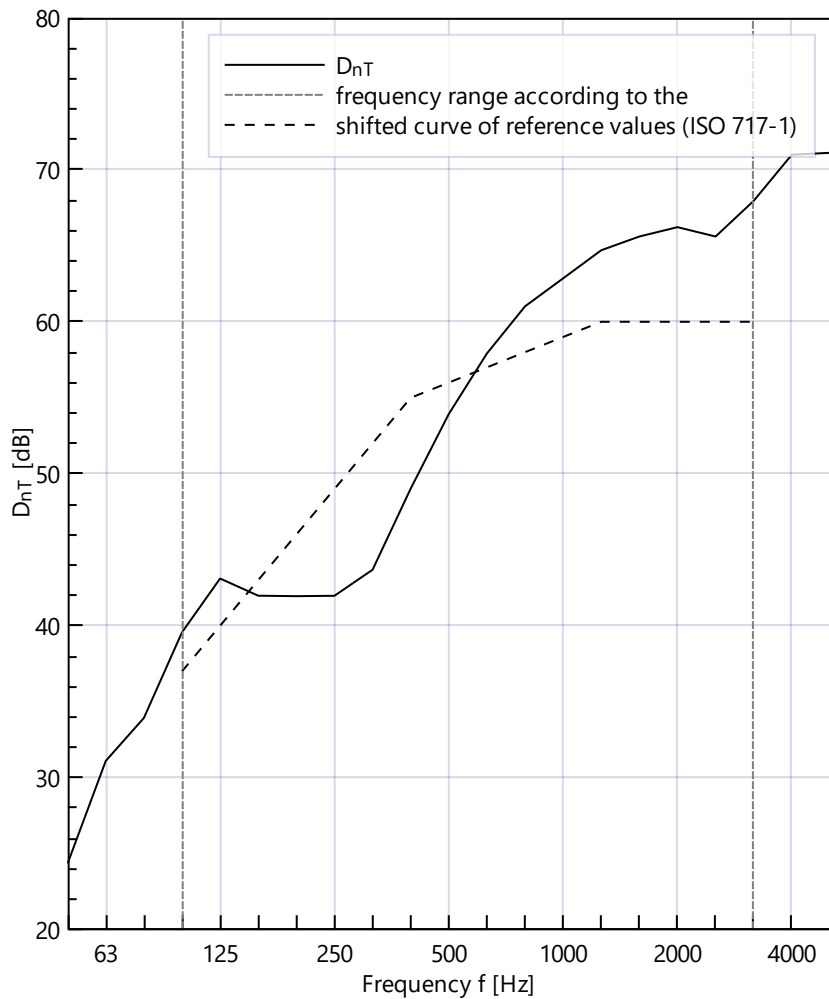
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F9 Liv/Kit/Din to F10 Liv/Kit/Din

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Area of common partition: 13.50 m²
 Source room volume: 85.00 m³
 Receiving room volume: 80.00 m³

Frequency f Hz	D _{nT} 1/3 octave dB
50	24.4
63	31.1
80	≥ 33.9
100	39.6
125	43.1
160	42.0
200	41.9
250	42.0
315	43.7
400	49.0
500	53.9
630	57.9
800	61.0
1000	≥ 62.9
1250	≥ 64.7
1600	≥ 65.6
2000	≥ 66.2
2500	65.6
3150	≥ 68.0
4000	≥ 71.0
5000	≥ 71.1



≥: 1.3 dB correction applied,
 value at the limit of measurement

Rating in accordance with ISO 717-1:

D_{nT,w}(C;C_{tr}) = 56 (-2; -6) dB

C₅₀₋₃₁₅₀ = -3 dB;

C₅₀₋₅₀₀₀ = -2 dB;

C₁₀₀₋₅₀₀₀ = -1 dB

C_{tr,50-3150} = -10 dB;

C_{tr,50-5000} = -10 dB;

C_{tr,100-5000} = -6 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: AB1

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

Standardized level difference in accordance with Approved Document E (2003)
Field measurements of airborne sound insulation between rooms



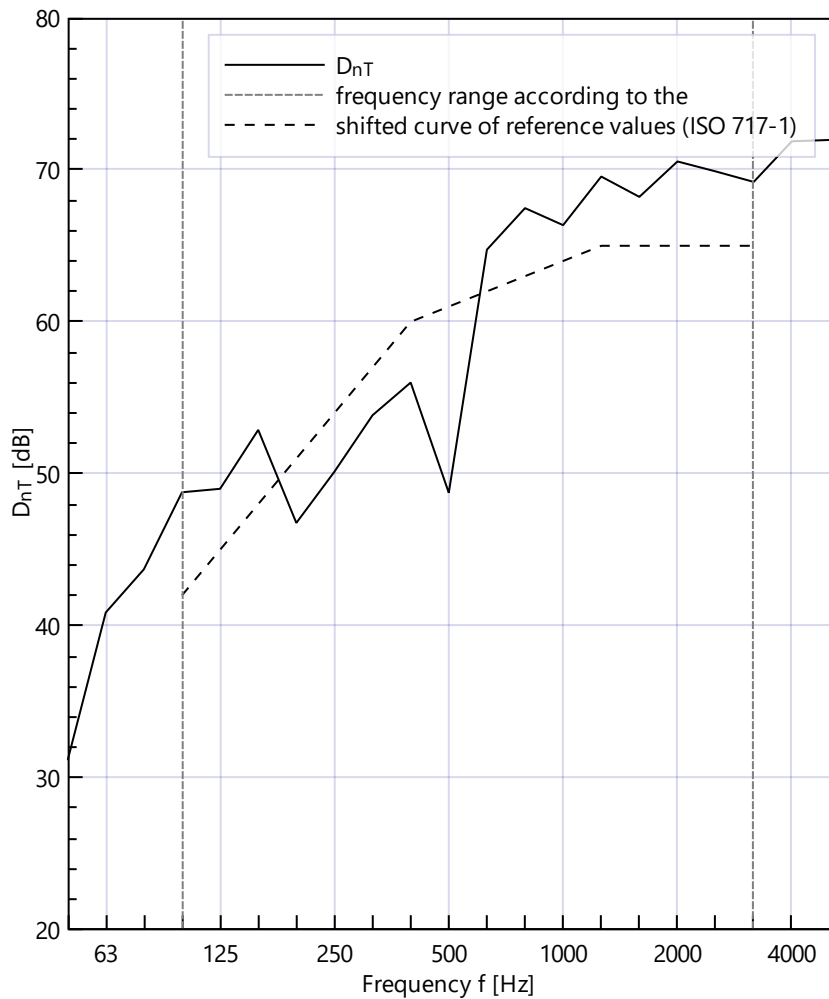
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F9 Liv/Kit/Din to F11 Liv/Kit/Din

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Area of common partition: 22.00 m²
 Source room volume: 85.00 m³
 Receiving room volume: 57.50 m³

Frequency f Hz	D _{nT} 1/3 octave dB
50	31.1
63	≥ 40.9
80	43.7
100	≥ 48.8
125	≥ 49.0
160	52.9
200	46.8
250	50.1
315	53.9
400	56.0
500	48.7
630	64.7
800	≥ 67.5
1000	≥ 66.4
1250	≥ 69.6
1600	≥ 68.2
2000	≥ 70.5
2500	≥ 69.9
3150	≥ 69.2
4000	≥ 71.9
5000	≥ 72.0



≥: 1.3 dB correction applied,
 value at the limit of measurement

Rating in accordance with ISO 717-1:

D_{nT,w}(C;C_{tr}) = 61 (-2; -5) dB

C₅₀₋₃₁₅₀ = -3 dB;

C₅₀₋₅₀₀₀ = -2 dB;

C₁₀₀₋₅₀₀₀ = -1 dB

C_{tr,50-3150} = -9 dB;

C_{tr,50-5000} = -9 dB;

C_{tr,100-5000} = -5 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: AB2

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

**Standardized level difference in accordance with Approved Document E (2003)
Field measurements of airborne sound insulation between rooms**



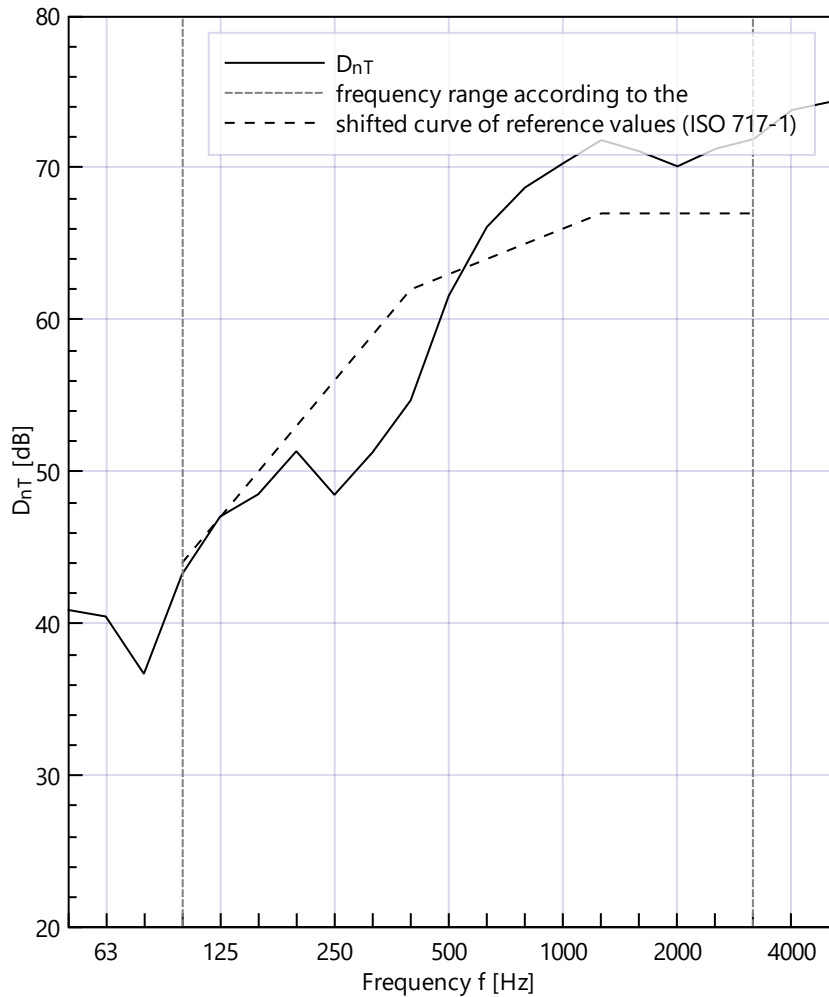
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F8 Liv/Kit/Din to F10 Bedroom 2

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Area of common partition: 5.50 m²
 Source room volume: 50.00 m³
 Receiving room volume: 22.00 m³

Frequency f Hz	D _{nT} 1/3 octave dB
50	40.9
63	40.5
80	36.7
100	43.2
125	47.1
160	48.5
200	51.4
250	48.5
315	51.3
400	54.7
500	61.6
630	66.1
800	68.7
1000	70.3
1250	71.8
1600	71.1
2000	70.1
2500	71.3
3150	≥ 71.9
4000	≥ 73.8
5000	≥ 74.3



≥: 1.3 dB correction applied,
value at the limit of measurement

Rating in accordance with ISO 717-1:

D_{nT,w}(C;C_{tr}) = 63 (-2; -6) dB

C₅₀₋₃₁₅₀ = -3 dB;

C₅₀₋₅₀₀₀ = -2 dB;

C₁₀₀₋₅₀₀₀ = -1 dB

C_{tr,50-3150} = -10 dB;

C_{tr,50-5000} = -10 dB;

C_{tr,100-5000} = -6 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: AB3

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

**Standardized level difference in accordance with Approved Document E (2003)
Field measurements of airborne sound insulation between rooms**



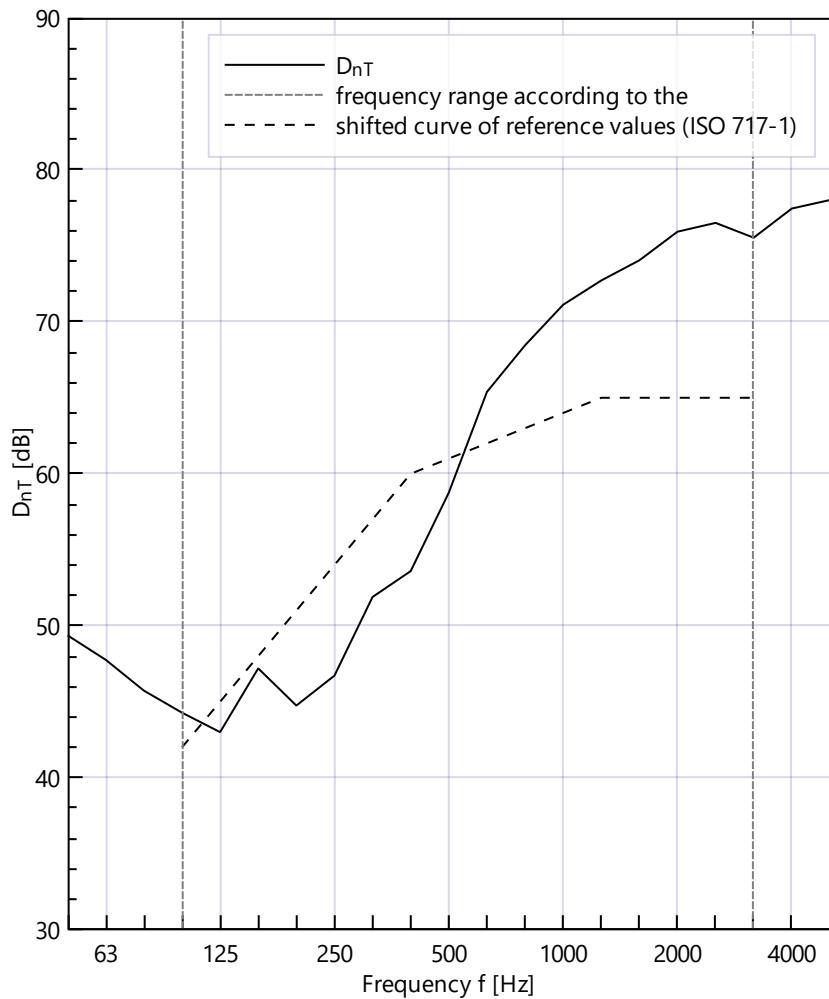
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F10 Bedroom 1 to F12 Bedroom 2

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Area of common partition: 9.00 m²
 Source room volume: 22.00 m³
 Receiving room volume: 21.50 m³

Frequency f Hz	D _{nT} 1/3 octave dB
50	≥ 49.4
63	47.8
80	45.7
100	44.3
125	43.0
160	47.2
200	44.8
250	46.7
315	51.9
400	53.6
500	58.8
630	65.4
800	68.5
1000	71.1
1250	72.7
1600	74.0
2000	75.9
2500	≥ 76.5
3150	≥ 75.5
4000	≥ 77.5
5000	≥ 78.0



≥: 1.3 dB correction applied,
value at the limit of measurement

Rating in accordance with ISO 717-1:

D_{nT,w}(C;C_{tr}) = 61 (-2; -6) dB

C₅₀₋₃₁₅₀ = -2 dB;

C₅₀₋₅₀₀₀ = -1 dB;

C₁₀₀₋₅₀₀₀ = -1 dB

C_{tr,50-3150} = -7 dB;

C_{tr,50-5000} = -7 dB;

C_{tr,100-5000} = -6 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: AB4

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

Standardized level difference in accordance with Approved Document E (2003)
Field measurements of airborne sound insulation between rooms



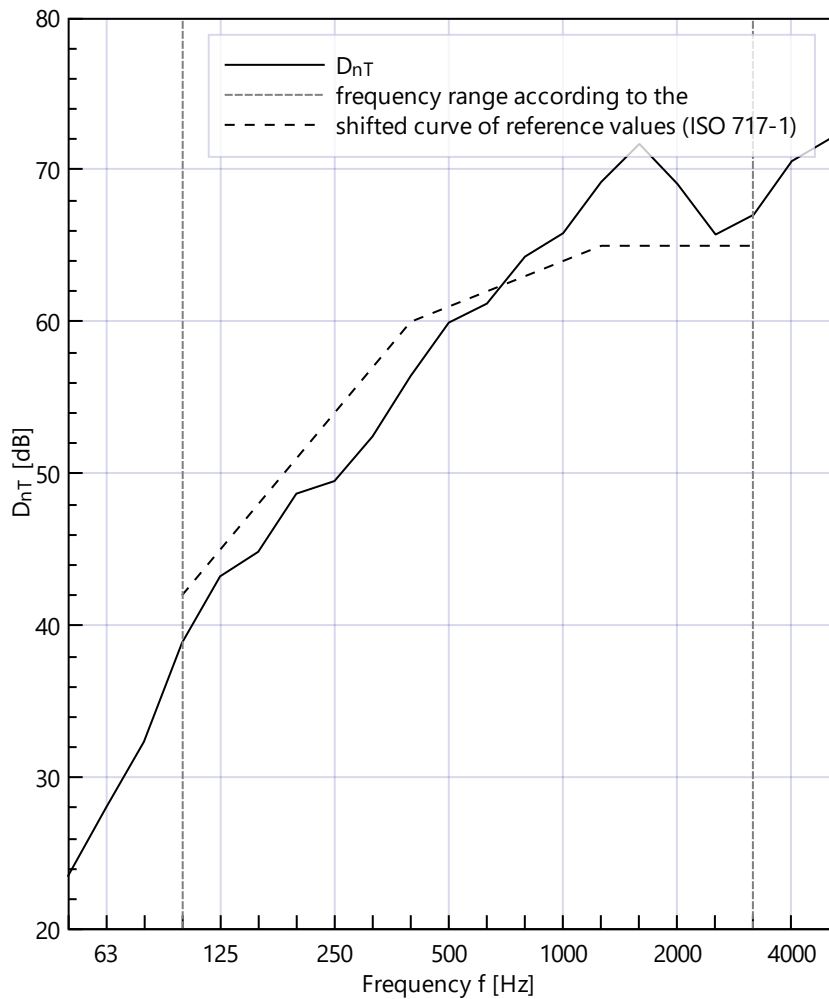
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F2 Liv/Kit/Din 1 to F3 Liv/Kit/Din

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Area of common partition: 13.00 m²
 Source room volume: 75.00 m³
 Receiving room volume: 53.00 m³

Frequency f Hz	D _{nT} 1/3 octave dB
50	23.5
63	≥ 28.0
80	32.4
100	38.9
125	43.3
160	44.9
200	48.7
250	49.5
315	52.5
400	56.4
500	59.9
630	61.2
800	64.3
1000	65.8
1250	69.2
1600	≥ 71.7
2000	69.1
2500	65.7
3150	67.0
4000	70.6
5000	≥ 72.0



≥: 1.3 dB correction applied,
 value at the limit of measurement

Rating in accordance with ISO 717-1:

D_{nT,w}(C;C_{tr}) = 61 (-2; -7) dB

C₅₀₋₃₁₅₀ = -5 dB;

C₅₀₋₅₀₀₀ = -4 dB;

C₁₀₀₋₅₀₀₀ = -1 dB

C_{tr,50-3150} = -16 dB;

C_{tr,50-5000} = -16 dB;

C_{tr,100-5000} = -7 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: AB5

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

Standardized level difference in accordance with Approved Document E (2003)
Field measurements of airborne sound insulation between rooms



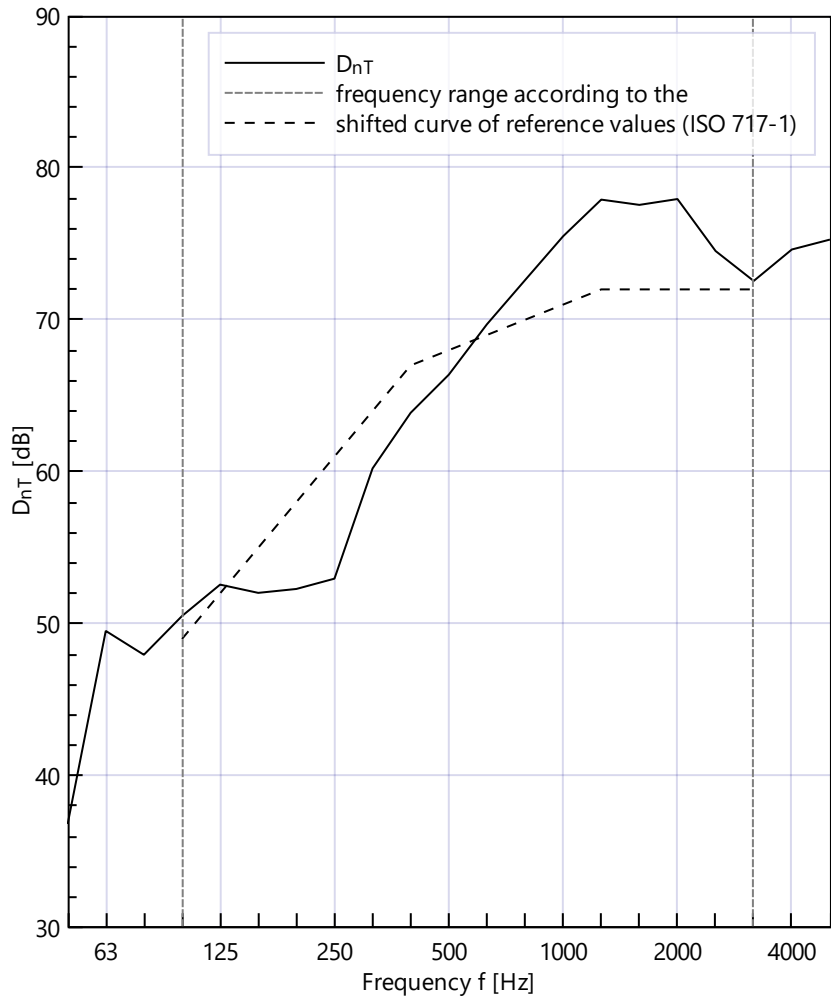
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F2 Liv/Kit/Din to F7 Liv/Kit/Din

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Area of common partition: 31.00 m²
 Source room volume: 75.00 m³
 Receiving room volume: 75.00 m³

Frequency f Hz	D _{nT} 1/3 octave dB
50	≥ 36.8
63	≥ 49.5
80	48.0
100	50.5
125	52.6
160	52.0
200	52.3
250	53.0
315	60.2
400	63.9
500	66.4
630	69.7
800	72.6
1000	75.5
1250	77.9
1600	≥ 77.6
2000	≥ 77.9
2500	≥ 74.5
3150	≥ 72.6
4000	≥ 74.6
5000	≥ 75.3



≥: 1.3 dB correction applied,
 value at the limit of measurement

Rating in accordance with ISO 717-1:

D_{nT,w}(C;C_{tr}) = 68 (-2; -6) dB

C₅₀₋₃₁₅₀ = -2 dB;

C₅₀₋₅₀₀₀ = -1 dB;

C₁₀₀₋₅₀₀₀ = -1 dB

C_{tr,50-3150} = -10 dB;

C_{tr,50-5000} = -10 dB;

C_{tr,100-5000} = -6 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: AB6

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

**Standardized level difference in accordance with Approved Document E (2003)
Field measurements of airborne sound insulation between rooms**



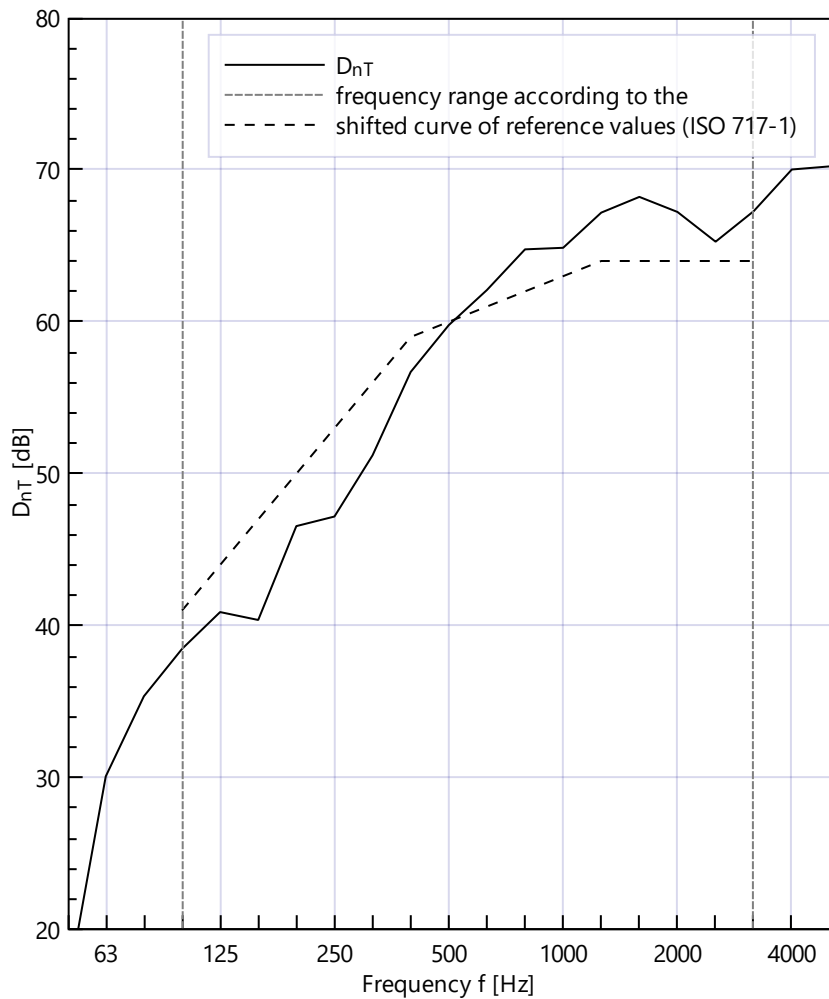
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F7 Liv/Kit/Din to F6 Bedroom

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Area of common partition: 8.00 m²
 Source room volume: 75.00 m³
 Receiving room volume: 25.00 m³

Frequency f Hz	D _{nT} 1/3 octave dB
50	16.2
63	30.1
80	35.4
100	38.5
125	40.9
160	40.4
200	46.6
250	47.2
315	51.2
400	56.7
500	59.8
630	62.1
800	64.8
1000	64.9
1250	67.2
1600	68.2
2000	67.2
2500	65.3
3150	67.3
4000	70.0
5000	70.2



Rating in accordance with ISO 717-1:

D_{nT,w}(C;C_{tr}) = 60 (-2; -7) dB

C₅₀₋₃₁₅₀ = -7 dB;

C₅₀₋₅₀₀₀ = -6 dB;

C₁₀₀₋₅₀₀₀ = -1 dB

C_{tr,50-3150} = -19 dB;

C_{tr,50-5000} = -19 dB;

C_{tr,100-5000} = -7 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: AB7

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

**Standardized level difference in accordance with Approved Document E (2003)
Field measurements of airborne sound insulation between rooms**



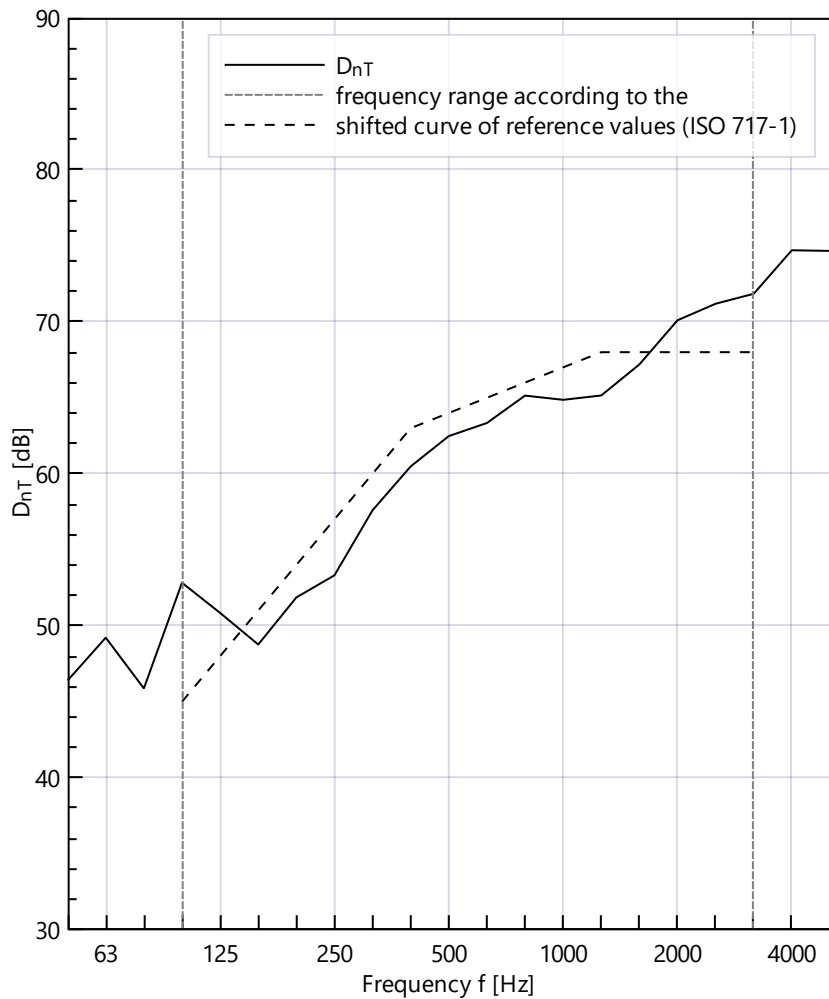
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F1 Bedroom 2 to F6 Bedroom 1

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Area of common partition: 10.60 m²
 Source room volume: 25.00 m³
 Receiving room volume: 25.00 m³

Frequency f Hz	D _{nT} 1/3 octave dB
50	≥ 46.4
63	49.2
80	45.9
100	52.8
125	50.8
160	48.8
200	51.9
250	53.3
315	57.6
400	60.5
500	62.5
630	63.3
800	65.1
1000	64.9
1250	65.2
1600	67.2
2000	70.1
2500	71.2
3150	≥ 71.8
4000	≥ 74.7
5000	≥ 74.7



≥: 1.3 dB correction applied,
value at the limit of measurement

Rating in accordance with ISO 717-1:

D_{nT,w}(C;C_{tr}) = 64 (-1; -4) dB

C₅₀₋₃₁₅₀ = -1 dB;

C₅₀₋₅₀₀₀ = 0 dB;

C₁₀₀₋₅₀₀₀ = 0 dB

C_{tr,50-3150} = -5 dB;

C_{tr,50-5000} = -5 dB;

C_{tr,100-5000} = -4 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: AB8

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

Standardized impact sound pressure levels in accordance with Approved Document E (2003)
 Field measurements of impact sound insulation of floors using the tapping machine



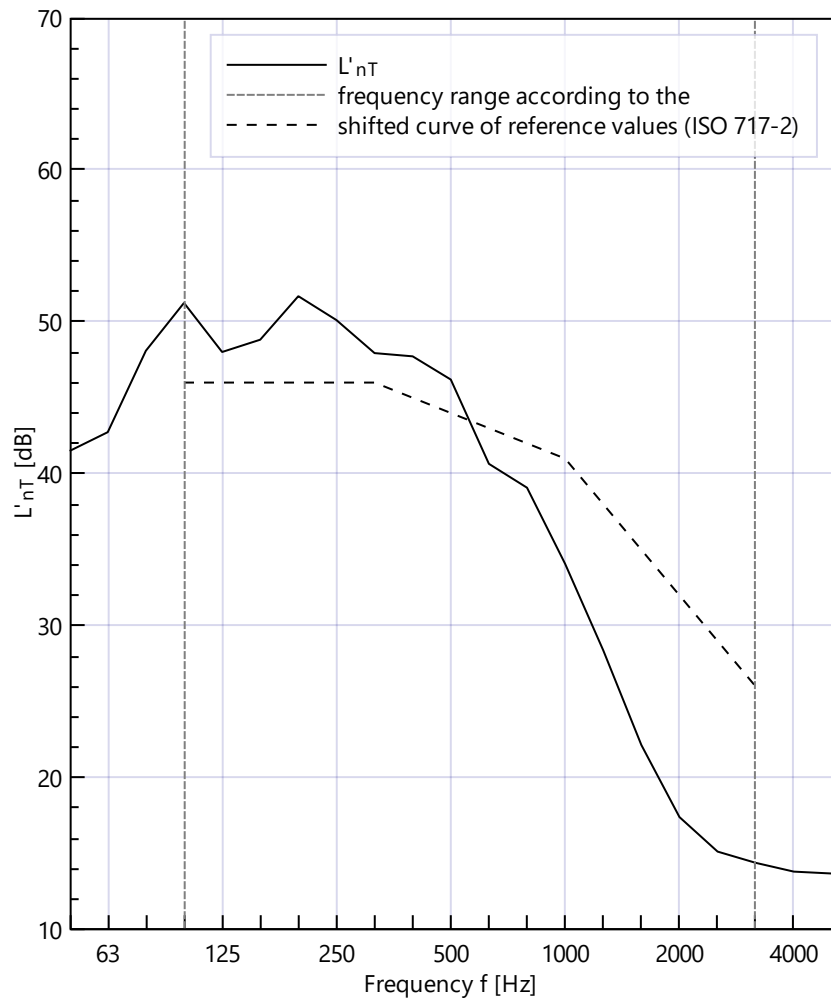
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F11 Liv/Kit/Din to F9 Liv/Kit/Din

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Receiving room volume: 85.00 m³

Frequency f Hz	L' _{nT} 1/3 octave dB
50	41.5
63	42.7
80	48.1
100	51.2
125	48.0
160	48.8
200	51.7
250	50.1
315	47.9
400	47.7
500	46.2
630	40.7
800	39.1
1000	34.1
1250	28.4
1600	≤ 22.2
2000	≤ 17.4
2500	≤ 15.1
3150	≤ 14.4
4000	≤ 13.8
5000	≤ 13.7



≤: 1.3 dB correction applied,
 value at the limit of measurement

Rating in accordance with ISO 717-2:

L'_{nT,w}(C_i) = 44 (-1) dB

C_{i,50-2500} = 0 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: IP2

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

Standardized impact sound pressure levels in accordance with Approved Document E (2003)
 Field measurements of impact sound insulation of floors using the tapping machine



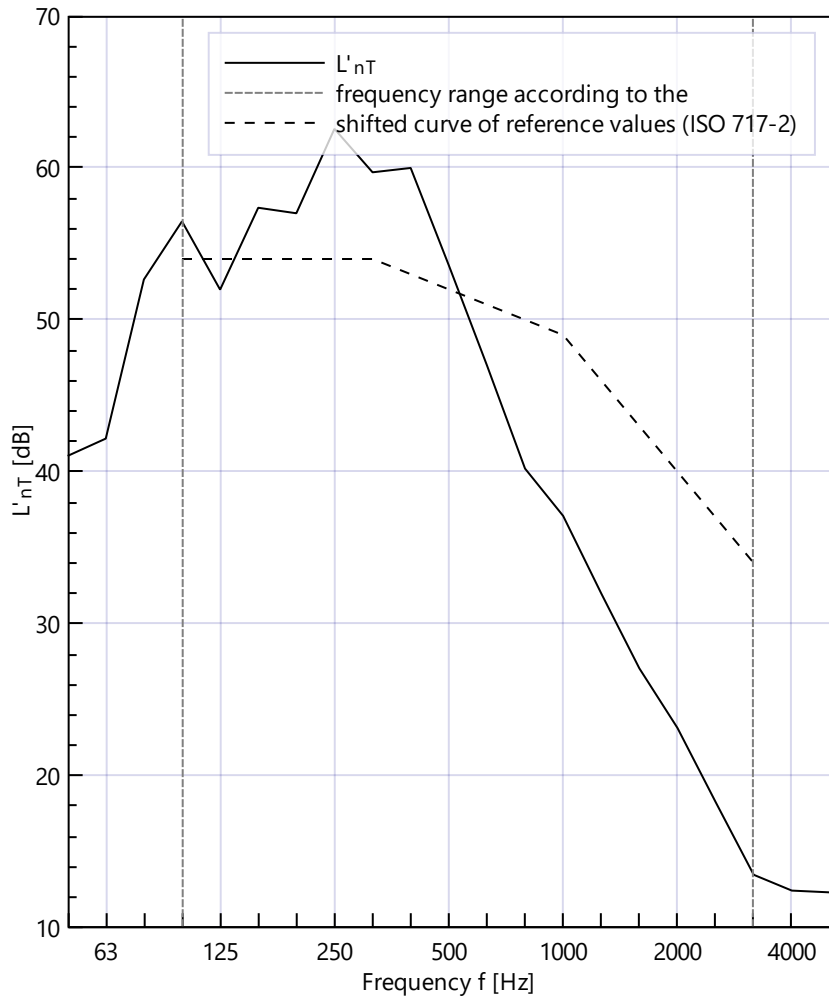
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F12 Bedroom 2 to F10 Bedroom 1

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Receiving room volume: 22.00 m³

Frequency f Hz	L' _{nT} 1/3 octave dB
50	41.0
63	42.2
80	52.7
100	56.5
125	52.0
160	57.4
200	57.0
250	62.6
315	59.7
400	60.0
500	53.6
630	47.0
800	40.2
1000	37.1
1250	32.0
1600	27.1
2000	23.1
2500	18.3
3150	≤ 13.5
4000	≤ 12.4
5000	≤ 12.3



≤: 1.3 dB correction applied,
 value at the limit of measurement

Rating in accordance with ISO 717-2:

L'_{nT,w}(C_i) = 52 (1) dB

C_{i,50-2500} = 1 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: IP4

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

Standardized impact sound pressure levels in accordance with Approved Document E (2003)
 Field measurements of impact sound insulation of floors using the tapping machine



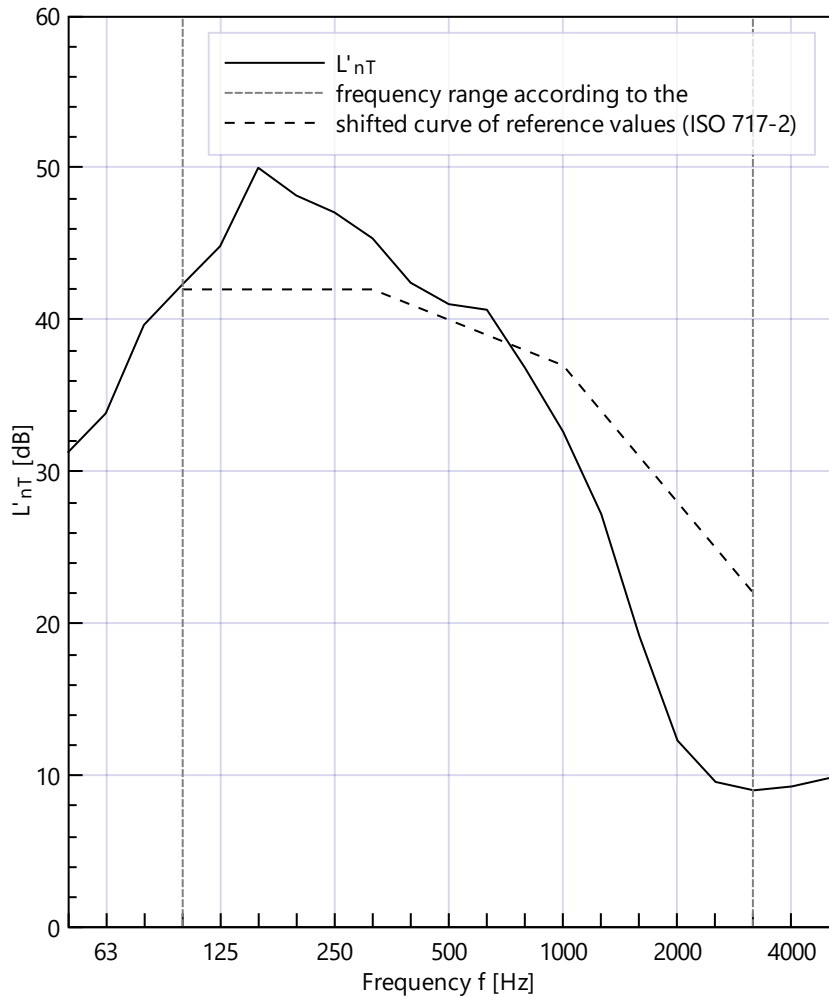
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F7 Liv/Kit/Din to F2 Liv/Kit/Din

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Receiving room volume: 75.00 m³

Frequency f Hz	L' _{nT} 1/3 octave dB
50	≤ 31.3
63	33.8
80	39.7
100	42.3
125	44.8
160	50.0
200	48.2
250	47.1
315	45.4
400	42.4
500	41.0
630	40.7
800	36.8
1000	32.6
1250	27.2
1600	19.2
2000	12.3
2500	≤ 9.6
3150	≤ 9.0
4000	≤ 9.3
5000	≤ 9.9



≤: 1.3 dB correction applied,
 value at the limit of measurement

Rating in accordance with ISO 717-2:

L'_{nT,w}(C_i) = 40 (0) dB

C_{i,50-2500} = 1 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: IP6

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature:

Standardized impact sound pressure levels in accordance with Approved Document E (2003)
 Field measurements of impact sound insulation of floors using the tapping machine



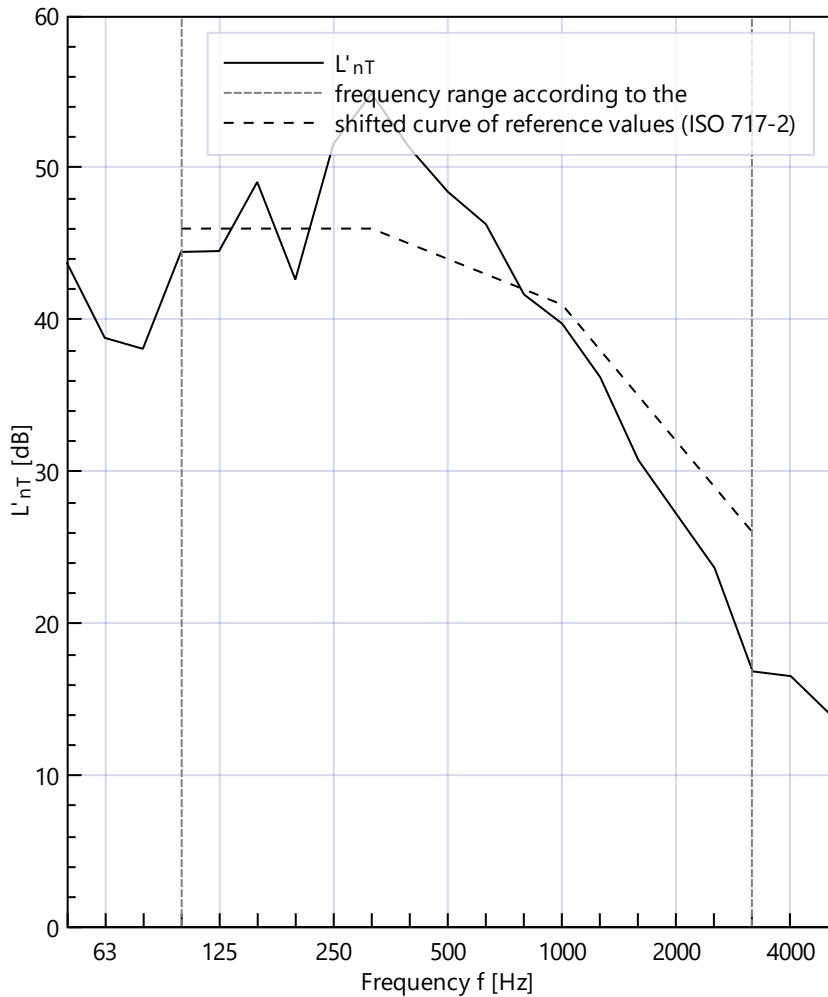
Client: Atlas New Homes Ltd
 Location: 67-71 High Street, Hampton Hill, London TW...
 AF781 Block B: F6 Bedroom 1 to F1 Bedroom 2

Date of test: 23/10/2024



Sound Level Meter: A2A-14765-E0 (M2230: 7564)
 Receiving room volume: 25.00 m³

Frequency f Hz	L' _{nT} 1/3 octave dB
50	43.8
63	38.8
80	38.1
100	44.5
125	44.5
160	49.1
200	42.6
250	51.6
315	54.9
400	51.3
500	48.4
630	46.3
800	41.7
1000	39.7
1250	36.2
1600	30.8
2000	27.2
2500	23.7
3150	≤ 16.9
4000	16.6
5000	≤ 14.1



≤: 1.3 dB correction applied,
 value at the limit of measurement

Rating in accordance with ISO 717-2:

L'_{nT,w}(C_i) = 44 (0) dB

C_{i,50-2500} = 1 dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: IP8

Name: Healthy Abode t/a HA Acoustics

Date: 25/10/2024

Signature: