

9 April 2025

Our ref: PH/J3332-1

Hamond Projects Ltd
40 Wormald Street
Liversedge
WF15 6BE

For the attention of Paul McGonagle

Re : Sound Insulation Testing – 3-5 Westgate, Heckmondwike, WF16 0HE

Further to the Sound Insulation Testing carried out on 3rd April 2025, I now have pleasure in enclosing a copy of the acoustic Test Certificates to suit for the locations under consideration.

In order to comply with the Building Regulation, Approved Document E, “Resistance to the passage of sound”, for the change of use development, the building needs to pass a Pre-Completion sound test, as directed by the local Building Control Officer. This is required in order to prove compliance with the Building Regulations and consistency of construction.

The raw data collected during the testing has been utilized in the assessment of the airborne sound insulation provided by the party dividing floors and walls between the formed dwelling spaces. These have been calculated in accordance with the requirements of ISO 140-4 for airborne tests with the graphic representation in accordance with ISO 717-1 and ISO 140-7 for impact tests with graphic representation in accordance with ISO 717-2.

The calculations indicate that the Weighted Standardized Level Difference, $D_{nT,w}$, (C, Ctr) dB provided by the floors as noted within the Test Summary Table for the areas tested for airborne sound.

The calculations indicate that the Weighted Standardized Level Difference, $L_{nT,w}$ (C) dB provided by the floors as noted within the Test Summary Table for the areas tested for impact sound.

Sound Insulation Test Summary – Results

Test Number	Location	Airborne Sound Insulation Achieved DnT, w (C; Ctr) dB	Pass / Fail
J3323 - Test 1	Separating Floor Between 1 st Floor Flat Lounge and Ground Floor Retail Unit	54 dB (-2, -9)	P
J3323 – Test 2	Separating Floor Between Ground Floor Retail Unit and Basement Area	58 dB (-1, -5)	P

Test Number	Location	Impact Sound Insulation Achieved LnT, w (C) dB	Pass / Fail
J3323 - Test 3	Separating Floor Between Ground Floor Retail Unit and Basement Area	58 dB (-5)	P

The Building Regulations Approved Document E states that **43 dB DnT, w (C; Ctr)** is the minimum requirement for airborne sound insulation for separation walls for change of use building applications.

I can confirm that the attenuation values provided by the party separation floors tested are acceptable for airborne sound insulation and meets the minimum requirements noted above for change of use building applications.

The Building Regulations Approved Document E states that **64 dB LnT, w (C)** is the maximum value requirement for impact sound insulation for separation floors for change of use building applications.

I can confirm that the attenuation values provided by the party separation floors tested are acceptable for impact sound insulation and meets the minimum requirements noted above for change of use building applications.

The test certificates have been appended to this document.

I trust the above and attached are acceptable for your needs, however, should you require any further information please do not hesitate to call.

Yours faithfully

A handwritten signature in purple ink, appearing to read 'P. Horsley', with a long horizontal flourish extending to the right.

P Horsley MIOA

Encl.

Standardized level difference measured in accordance with ISO 140-4

Field measurements of airborne sound insulation between rooms

Date of test: 2025-04-03

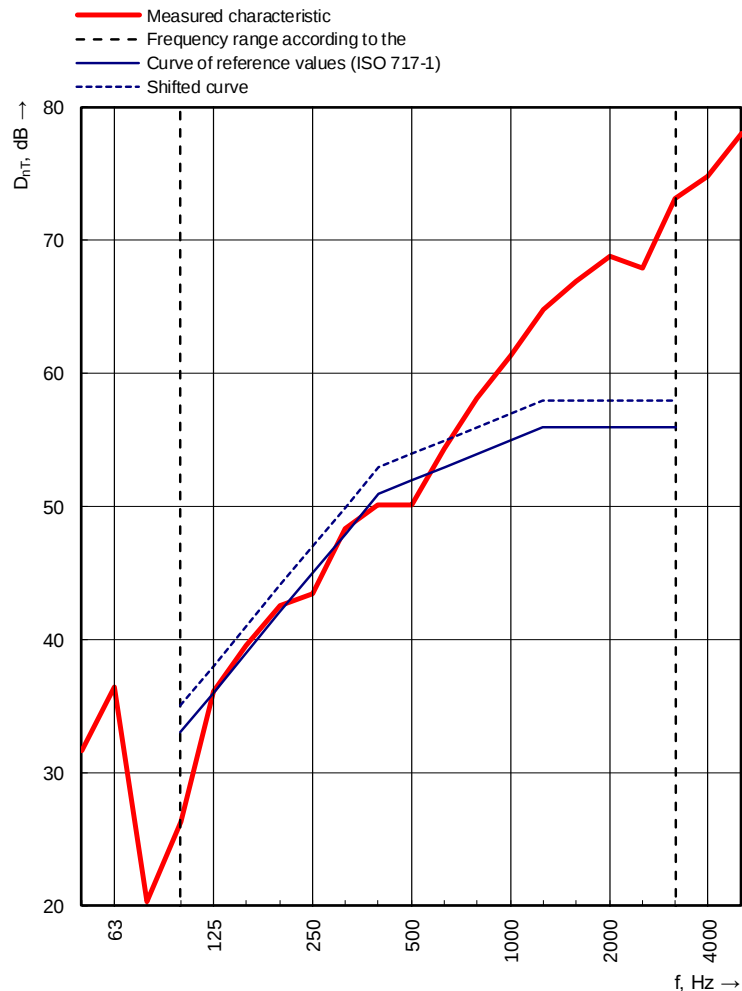
Task: J3323 Object: Sound Insulation Test
Client: Hamond Projects Ltd

Description:

Test between 1st Floor Residential Flat Lounge and Ground Floor retail unit party dividing floor at 3-5 Westgate, Heckmondwike, WF16 0HE

Area of common partition: 45.0 m² Note: Party Floor
Receiving room volume: 55.0 m³ Name: 1st Floor Lounge
Source room volume: 117.0 m³ Name: Ground Floor Retail Unit

Frequency <i>f</i> Hz	<i>D_{nT}</i> (1/3 octave) dB
50	31.7
63	36.4
80	20.3
100	26.3
125	36.1
160	39.6
200	42.5
250	43.4
315	48.3
400	50.1
500	50.1
630	54.4
800	58.1
1000	61.4
1250	64.8
1600	66.9
2000	68.8
2500	67.9
3150	73.2
4000	74.8
5000	78.0



Rating according to ISO 717-1

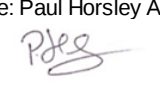
$D_{nT,w}(C; C_{tr}) = 54 \text{ (-2 ; -9) dB}$ $C_{50-3150} = -5 \text{ dB}$ $C_{50-5000} = -4 \text{ dB}$ $C_{100-5000} = -1 \text{ dB}$
 $C_{tr,50-3150} = -14 \text{ dB}$ $C_{tr,50-5000} = -14 \text{ dB}$ $C_{tr,100-5000} = -9 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report: J3323-Test No 1

Name of test institute: Paul Horsley Acoustics Ltd

Date: 2025-04-03

Signature: 

Standardized level difference measured in accordance with ISO 140-4

Field measurements of airborne sound insulation between rooms

Date of test: 2025-04-03

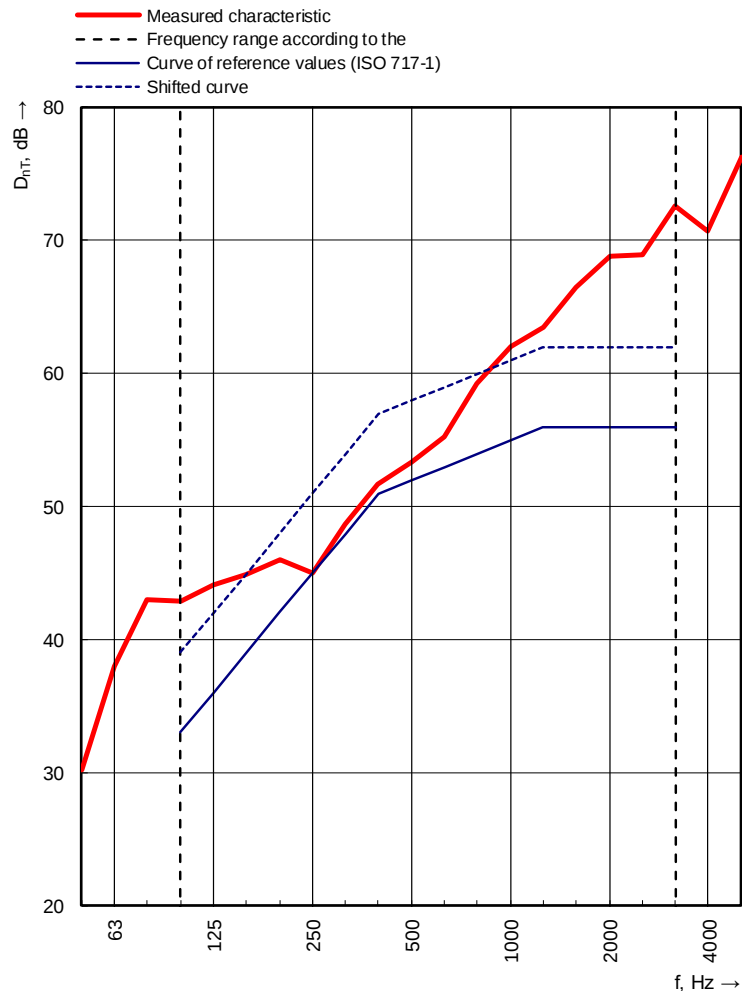
Task: J3323 Object: Sound Insulation Test
Client: Hamond Projects Ltd

Description:

Test between Ground Floor retail unit and basement area party dividing floor at 3-5 Westgate, Heckmondwike, WF16 0HE

Area of common partition: 45.0 m² Note: Party Floor
Receiving room volume: 121.0 m³ Name: Basement
Source room volume: 117.0 m³ Name: Ground Floor Retail Unit

Frequency <i>f</i> Hz	<i>D_{nT}</i> (1/3 octave) dB
50	30.2
63	38.0
80	43.0
100	42.9
125	44.1
160	44.9
200	46.0
250	45.0
315	48.7
400	51.7
500	53.4
630	55.2
800	59.2
1000	62.0
1250	63.5
1600	66.5
2000	68.8
2500	68.9
3150	72.6
4000	70.7
5000	76.3



Rating according to ISO 717-1

$D_{nT,w}(C; C_{tr}) = 58 \text{ (-1 ; -5) dB}$ $C_{50-3150} = -2 \text{ dB}$ $C_{50-5000} = -1 \text{ dB}$ $C_{100-5000} = 0 \text{ dB}$
 $C_{tr,50-3150} = -8 \text{ dB}$ $C_{tr,50-5000} = -8 \text{ dB}$ $C_{tr,100-5000} = -5 \text{ dB}$

Evaluation based on field measurement results obtained by an engineering method

No. of test report: J3323 - Test No 2 Name of test institute: Paul Horsley Acoustics Ltd

Date: 2025-04-03

Signature:

Standardized impact sound pressure levels measured in accordance with ISO 140-7

Field measurements of impact sound insulation of floors using tapping machine

Date of test: 2025-04-03

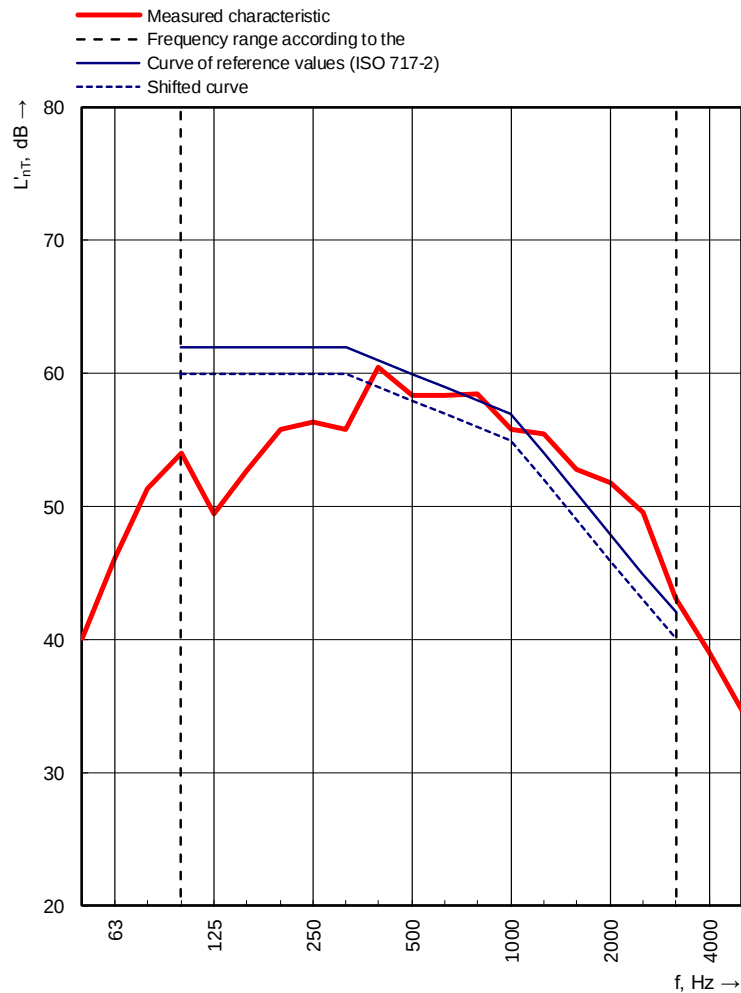
Task: J3323 Object: Impact Sound Insulation Test
Client: Hamond Projects Ltd

Description:

Impact test between Ground Floor retail unit and basement area party dividing floor at 3-5 Westgate, Heckmondwike, WF16 0HE

Receiving room volume: 117.0 m³ Name: Basement

Frequency f Hz	L'_{nT} (1/3 octave) dB
50	40.1
63	46.1
80	51.3
100	54.0
125	49.5
160	52.7
200	55.8
250	56.3
315	55.8
400	60.5
500	58.4
630	58.3
800	58.5
1000	55.8
1250	55.5
1600	52.8
2000	51.8
2500	49.6
3150	43.1
4000	39.0
5000	34.6



Rating according to ISO 717-2

$$L'_{nT,w}(C_i) = 58 \text{ (-5) dB} \quad C_{i,50-2500} = -5 \text{ dB}$$

Evaluation based on field measurement results obtained by an engineering method

No. of test report: J3323 - Test No 3 Name of test institute: Paul Horsley Acoustics Ltd

Date: 2025-04-03

Signature: 