

Acoustic South East



97-99 Montague Street

Sound Insulation Test Report

SOUND INSULATION TEST REPORT

Address of building tested	97-99 Montague Street, Worthing, BN11 3BN
Property type(s)	Houses/Flats
Date(s) of testing	21 Jan 2026
ANC Registered Testers	Josh Robinson
Report prepared for	Moretons Investments Clarence House, 30-31 North Street, Brighton, BN1 1EB
Report created at	21/01/2026 16:32:32
Report number	J4114
Registered ANC test organisation	Acoustic Associates Sussex Ltd t/a Acoustic South East, 8 Highdown House, Shoreham-by-Sea, BN43 5PB
ANC organisation number	117
Report prepared by	Josh Robinson TechIOA
Checked by	Scott Castle BSc(Hons) MCIEH CEnvH MIOA



NOTICE TO BUILDING CONTROL OFFICER

Certification of Test Results

ANC operates an online, secure, paperless certification system for sound insulation tests.

The online verification (certification) system means that Building Control Bodies will need to follow the steps below to verify the results quoted in the relevant test report:

1. Go to the ANC secure server at www.anc-advance.co.uk

2. Enter the following in the spaces provided:

Task Number:	190837
Task Password:	LDTZZO

3. Select role "Building Control Officer" and press "Login"
4. You will then see a summary list of results of all the Tests undertaken to date for this project as held on the secure primary server and you can print this table for your records.

EXECUTIVE SUMMARY

Acoustic South East is listed on the list of ANC Registered Members and was at the time of the testing.

This is an ANC Registered report, with the unique registration number as detailed on page 3 of the report.

The results show that the room pairs tested satisfy the requirements of Approved Document E.

RESULTS SUMMARY

TABLE 1: Airborne Tests

Test No.	Source room	Vol m ³	Receiver room	Vol m ³	Project type	Construction type	$D_{nT,w} + C_{tr}$, dB		Pass / fail †
							Result	Target	
1	Flat A Bedroom	54	Flat B Bedroom	54	HFCON	Wall (W1)	47	≥ 43	✓
2	GF Commercial	1155	Flat A Bedroom	54	HFCON	Floor (F1)	57	≥ 43	✓
3	GF Commercial	1155	Flat B Bedroom	54	HFCON	Floor (F1)	57	≥ 43	✓

KEY:

All tests appended with a **letter** are retests (ordered alphabetically)

Project types:

HFNB	Purpose built houses and flats
RRNB	Purpose-built rooms for residential purposes
HFCON	Houses or flats formed by material change of use
RRCON	Rooms for residential purposes formed by material change of use.

Pass / fail:

† Responsibility for deciding on compliance with Building Regulations lies with the Building Control body.

✓	Performance at or better than the performance standard cited in Building Regulations Approved Document E
✓ ^c	The highlighted test represents a deviation from ADE B2.13 and B2.14 meaning that the reported test result will not represent the true impact performance of the floor without the soft covering. This should be brought to the attention of the client and the Building Control Officer.
×	Performance is worse than the performance standard cited in Building Regulations Approved Document E
H	Historic building - Result should be displayed in a conspicuous place inside the building in accordance with Regulation 1 or 20(1) and (5) - ADE ref section 0.7

CONSTRUCTION TYPES

Reference	Wall / floor	Description
F1	Floor	Details Held by Client
W1	Wall	2 x 12.5mm Soundbloc board (joints staggered, taped and sealed 75mm x 50mm CLS grade studs with min 50mm Rockwool RW45 or equivalent between studs 75mm x 50mm CLS grade studs with min 50mm Rockwool RW45 or equivalent between studs 2 x 12.5mm Soundbloc board (joints staggered, taped and sealed)

APPLICABLE TEST CODES / STANDARDS

Tests have been taken in full accordance with the following test codes and standards. Any deviations are recorded in the individual test reports.

Building Regulations:

All the procedures in Annex B of Approved Document E of The Building Regulations have been followed unless stated otherwise in the individual test report. Approved Document E of The Building Regulations: *Resistance to the passage of sound* sets out the following requirements:

Houses and flats:

Airborne Sound Insulation:

The insulation values for airborne insulation for conversion floors & walls shall not be less than $D_{nT,w} + C_{tr} = 43$ dB.

Standards:

- The tests detailed in this report have been carried out in full accordance with ISO 140-4 and ISO 140-7
- Results of the measurements, in terms of single-figure ratings for airborne sound insulation are provided as Weighted Standardised Level Differences $D_{nT,w} + C_{tr}$ as required by BS EN ISO 140-4 Acoustics - Measurement of sound insulation in buildings and of building elements - Part 4: Field measurements of airborne sound insulation between rooms 1998. They are also defined in ISO 717-1 Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation 1997.
- Results of the measurements, in terms of single-figure ratings for impact sound insulation are provided as Weighted Standardised Impact Sound Pressure Levels $L'_{nT,w}$ (for impact sound) as required by BS EN ISO 140-7 Acoustics - Measurement of sound insulation in buildings and of building elements - Part 7: Field measurements of impact sound insulation of floors 1998. They are also defined in ISO 717-2 Acoustics - Rating of sound insulation in buildings and of building elements - Part 2: Impact sound insulation 1997.
- Reverberation Time measurements are specifically defined in BS EN ISO 3382 Measurement of Room Acoustic Parameters - Part 2: Reverberation Time in Ordinary Rooms 2008
- Test Methods and Procedures are also detailed within the ANC Practice Guidance for sound insulation testing in dwellings v1.1 2018
- All results criteria are set out in Approved Document E 2003 (as amended 2015) of The Building Regulations 2010: *Resistance to the passage of sound*

TEST PROCEDURES

Airborne sound insulation

Two loudspeakers were placed facing into the corners, separated from each other, at different heights in the source room and angled across the room to create a diffuse sound field. An amplifier was used to broadcast

pink noise through the loudspeakers using two individual noise generators. The spectrum shape of the reverberant noise was checked to ensure that each 1/3 octave band was within 6 dB of its neighbouring bands. The spectrum shape was adjusted, if necessary, to comply with this criterion (Firstly loudspeaker position/s are adjusted until the criterion is achieved. If this fails the spectrum shape is adjusted using a graphic equaliser).

Measurements were taken in the source room at each 1/3 octave band centre frequency between 100 Hz and 3.15 kHz using the “sweep” technique as described in ISO140 (at least 30 secs.). Further measurements were then taken in the same way in the receiving room on the other side of the test element. The reverberation time was also obtained using the interrupt stationery method (using pink noise as the source) for each relevant 1/3 octave centre frequency in the receiving room. This was spatially averaged over 6 positions in the room using 1 source position.

Ambient sound pressure levels (without the source operating) were also taken at each frequency in the receiving rooms using the “sweep” technique as described in ISO140 (at least 30 secs). These too were spatially-averaged. Dominant sources of background noise were as follows: Rain on windows

EQUIPMENT USED

Description	Serial number	Manufacturer	Model number	Calibration certificate number	Calibration expires
RCF Art 1	TCCI00033	RCF	Art 310-A MK4	N/A	N/A
RCF Art 2	TCCI00031	RCF	Art 310-A MK4	N/A	N/A
Pink Noise 3	PinkNoise3	NTi	Minirator MR1	N/A	N/A
Pink Noise 4	PinkNoise4	NTi	Minirator MR1	N/A	N/A
Norsonic A	31460	Norsonic	Nor118	TCRT25-1449	08/06/2027
Norsonic A - Microphone	91973	Norsonic	1225	TCRT25-1449	09/06/2027
Norsonic A-Preamplifier	30779	Norsonic	1206	TCRT25-1449	09/06/2027
Nor A Calibrator	30974	Norsonic	1251	TCRT25/1438	04/06/2027

Standardized level difference according to ISO 140-4
Field measurements of airborne sound insulation between rooms

Site Name: 97-99 Montague Street

Date of test: 21/01/2026

Source room: Flat A Bedroom **Receiving room:** Flat B Bedroom

Partition type: Wall

Construction type and description:

W1 2 x 12.5mm Soundbloc board (joints staggered, taped and sealed 75mm x 50mm CLS grade studs with min 50mm Rockwool RW45 or equivalent between studs 75mm x 50mm CLS grade studs with min 50mm Rockwool RW45 or equivalent between studs 2 x 12.5mm Soundbloc board (joints staggered, taped and sealed)

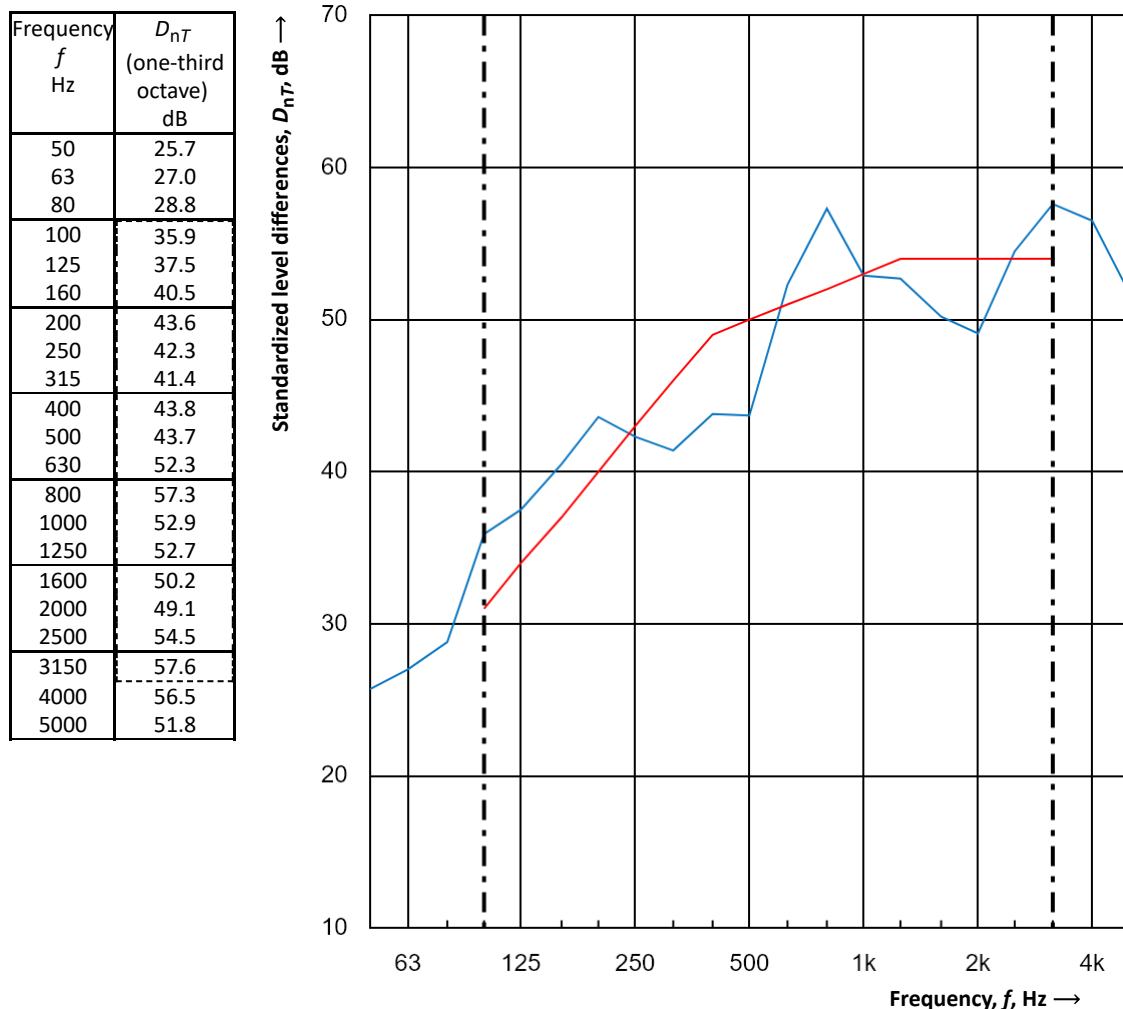
Deviations from test procedures and other relevant observations (if any):

None

Source room volume: 54 m³

Receiving room volume: 54 m³

--- Frequency range according to the
 --- shifted curve of reference values (ISO 717-1)



Rating according to ISO 717-1

$D_{nT,W}(C_{tr}) = 50 \text{ (-3) dB}$

$D_{nT,W} + C_{tr} = 47 \text{ dB}$

Target: $\geq 43 \text{ dB}$

PASS

Evaluation based on field measurement results obtained by an engineering method

ANC Task / Test No.: 190837/1

Name of test institute: Acoustic Associates Sussex Ltd t/a Acoustic South East

Person in charge of test: Josh Robinson

Standardized level difference according to ISO 140-4
Field measurements of airborne sound insulation between rooms

Site Name: 97-99 Montague Street

Date of test: 21/01/2026

Source room: GF Commercial Receiving room: Flat A Bedroom

Partition type: Floor

Construction type and description:

F1 Details Held by Client

Deviations from test procedures and other relevant observations (if any):

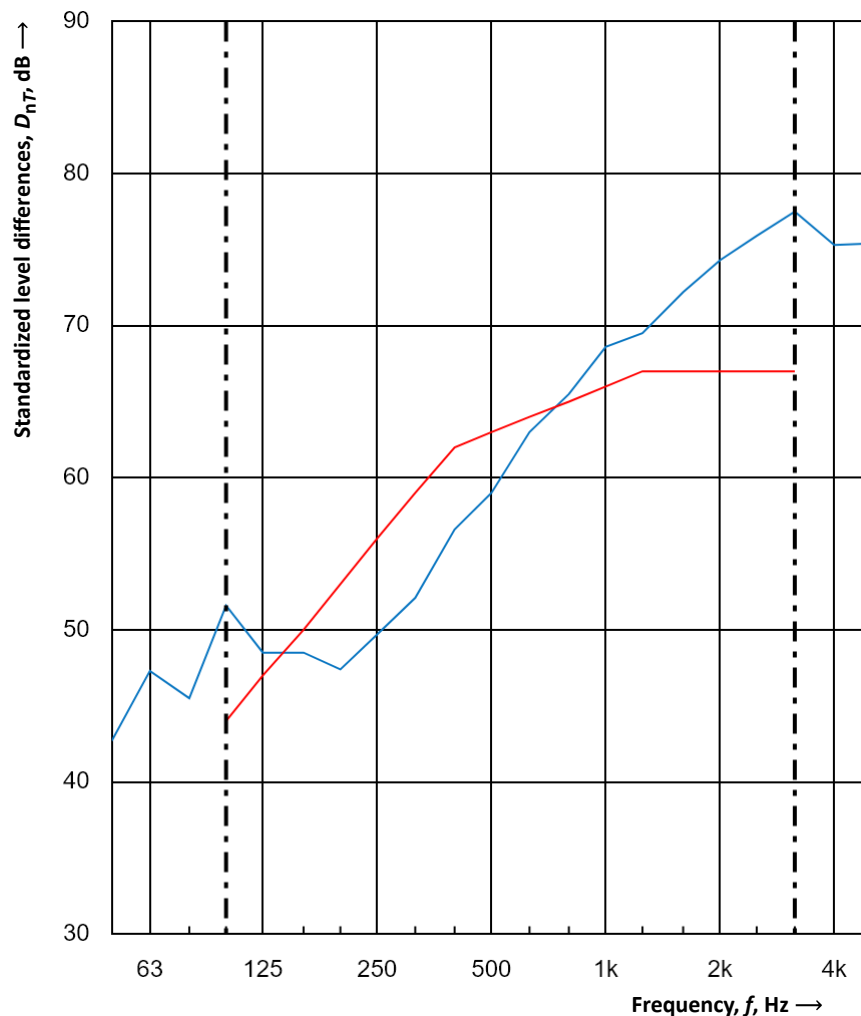
None

Source room volume: 1155 m³Receiving room volume: 54 m³

--- Frequency range according to the
 --- shifted curve of reference values (ISO 717-1)

Frequency <i>f</i> Hz	<i>D_{nT}</i> (one-third octave) dB
50	≥ 42.7 *
63	47.3
80	45.5
100	51.6
125	48.5
160	48.5
200	47.4
250	49.7
315	52.1
400	56.6
500	59.0
630	63.0
800	65.5
1000	68.6
1250	≥ 69.5 *
1600	≥ 72.2 *
2000	≥ 74.3 *
2500	≥ 75.9 *
3150	≥ 77.5 *
4000	75.3
5000	75.4

* Result should be taken as limit of measurement due to low SNR in receiver room (≤6 dB)



Rating according to ISO 717-1

 $D_{nT,w}(C_{tr}) = 63 \text{ (-6) dB}$ $D_{nT,w} + C_{tr} = 57 \text{ dB}$

Target: ≥ 43 dB

PASS

Evaluation based on field measurement results obtained by an engineering method

ANC Task / Test No.: 190837/2

Name of test institute: Acoustic Associates Sussex Ltd t/a Acoustic South East

Person in charge of test: Josh Robinson

Standardized level difference according to ISO 140-4
Field measurements of airborne sound insulation between rooms

Site Name: 97-99 Montague Street

Date of test: 21/01/2026

Source room: GF Commercial Receiving room: Flat B Bedroom

Partition type: Floor

Construction type and description:

F1 Details Held by Client

Deviations from test procedures and other relevant observations (if any):

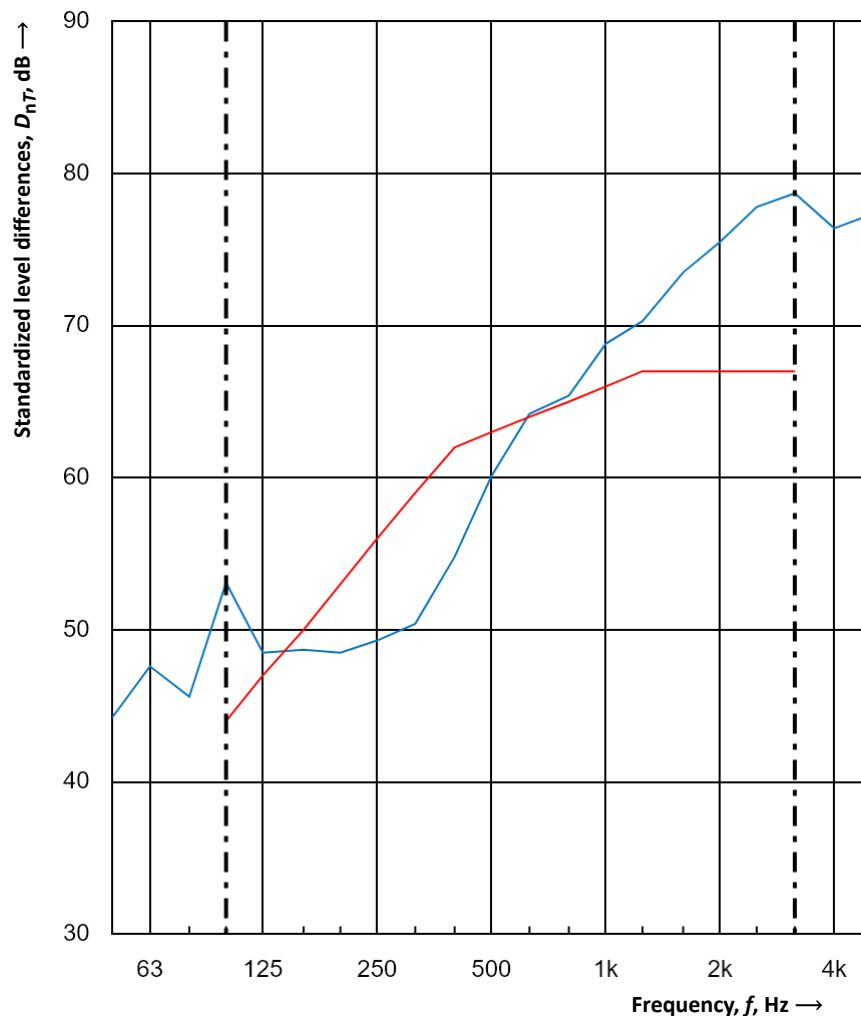
None

Source room volume: 1155 m³Receiving room volume: 54 m³

--- Frequency range according to the
 --- shifted curve of reference values (ISO 717-1)

Frequency <i>f</i> Hz	<i>D_{nT}</i> (one-third octave) dB
50	≥ 44.2 *
63	47.6
80	45.6
100	53.1
125	48.5
160	48.7
200	48.5
250	49.3
315	50.4
400	54.8
500	60.1
630	64.2
800	65.4
1000	68.8
1250	≥ 70.3 *
1600	≥ 73.5 *
2000	≥ 75.5 *
2500	≥ 77.8 *
3150	≥ 78.7 *
4000	≥ 76.4 *
5000	≥ 77.3 *

* Result should be
 taken as limit of
 measurement due to
 low SNR in receiver
 room (≤6 dB)



Rating according to ISO 717-1

 $D_{nT,w}(C_{tr}) = 63 \text{ (-6) dB}$ $D_{nT,w} + C_{tr} = 57 \text{ dB}$

Target: ≥ 43 dB

PASS

Evaluation based on field measurement results obtained by an engineering method

ANC Task / Test No.: 190837/3

Name of test institute: Acoustic Associates Sussex Ltd t/a Acoustic South East

Person in charge of test: Josh Robinson