

Acoustic South East

97 Pavilion Road, Worthing

Sound Insulation Test Report

SOUND INSULATION TEST REPORT

Address of building tested	Worthing, BN14 7EG
Property type(s)	Houses/Flats
Date(s) of testing	13 Feb 2026
ANC Registered Testers	Scott Castle
Report prepared for	EVH Developments Limited 10 Petworth Drive, Horsham, RH12 5JH
Report created at	13/02/2026 14:41:59
Report number	J4168
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	Scott Castle
Checked by	Simon Barrett



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:	190944
Task Password:	1GW1YS

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 Party Wall tested exceeded the requirements of condition 4 of AWDM/1287/25.

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	Bedroom 7	38	Living Room	38	HFCON	Wall (W1)	59	≥ 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
W1	Wall	Double brick skin masonry cavity with plasterboard

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 new build floors & walls shall not be less than $D_{nT,w} + C_{tr} = 45$ dB.

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

The Planning Condition (4) of AWD/1287/25 required as follows

Prior to occupation, a scheme for protecting the neighbouring residential property from noise shall be submitted to and approved by the Local Planning Authority. All works which form part of the scheme shall be completed and tested before the new use commences. The scheme shall be designed to achieve a minimum airborne sound insulation value of 45dB ($D_{nT,w} + C_{tr}$ dB) for the party wall. Following approval and completion of the scheme, a test shall be undertaken to demonstrate that the attenuation measures proposed in the scheme are effective and achieve the specified criteria. Should this test show that the criteria has not been complied with and notwithstanding the development hereby approved, a further scheme of attenuation works capable of achieving the criteria shall be submitted to and agreed by the Local Planning Authority and completed within 3 months of the installation and thereafter retained

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 v2.1 2025
- 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: occasional passing vehicles on Pavilion Road.

TEST CONDITIONS

The Local Planning Authority had requested a test to determine that the party wall exceeded 45dB DnTw+Ctr

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 4	PinkNoise4	NTi	Minirator MR1	N/A	N/A
Pink Noise 5	PinkNoise5	NTi	Minirator MR1	N/A	N/A
Norsonic A	31460	Norsonic	Nor118	TCRT25-1449	08/06/2027
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 Pavilion Road

Date of test: 13/02/2026

Source room: Bedroom 7

Receiving room: Living Room

Partition type: Wall

Construction type and description:

W1

Double brick skin masonry cavity with plasterboard

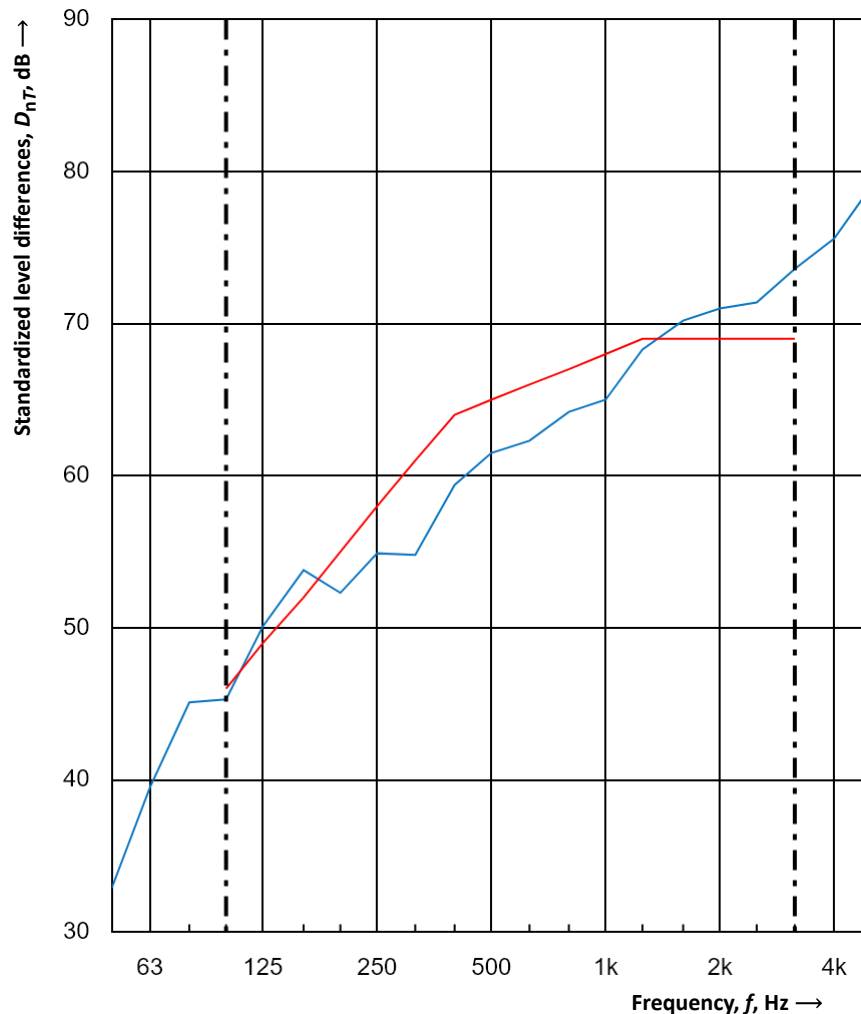
Deviations from test procedures and other relevant observations (if any):

None

Source room volume: 38 m³Receiving room volume: 38 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	32.9
63	39.5
80	45.1
100	45.3
125	50.1
160	53.8
200	52.3
250	54.9
315	54.8
400	59.4
500	61.5
630	62.3
800	64.2
1000	65.0
1250	68.3
1600	70.2
2000	71.0
2500	71.4
3150	73.6
4000	75.6
5000	79.0



Rating according to ISO 717-1

 $D_{nT,w}(C_{tr}) = 65 \text{ (-6) dB}$ $D_{nT,w} + C_{tr} = 59 \text{ dB}$ Target: $\geq 43 \text{ dB}$ **PASS**

Evaluation based on field measurement results obtained by an engineering method

ANC Task / Test No.:

190944/1

Name of test institute:

Acoustic Associates Sussex Ltd t/a Acoustic South East

Person in charge of test:

Scott Castle