

AIRBORNE SOUND INSULATION TESTS

THIS REPORT AND ASSOCIATED ATTACHED FIGURES MAY NOT BE REPRODUCED
OTHER THAN IN FULL AND WITH PRIOR WRITTEN APPROVAL OF THE ISSUING LABORATORY

Client

AC English Developments
The Mall
Winchester Road
Chandlers Ford
Hampshire
SO53 2QD



4035

Site Address

Unit 9
South Point
Ensign Way
Hamble
Hampshire
SO31 4RF

Development Status

The site is a development of Dwelling-houses and Flats Formed by material change of use table 0.1a of Building Regulations Approved Document E 2003 'Resistance to the Passage of Sound'.

Introduction

Sound Advice Acoustics Ltd has been instructed to assess the sound insulation values between the properties within this recently completed site. The development's sound insulation tests are to be carried out and rated in accordance with following British Standards:-

- BS EN ISO 140-4:1998 – 'Acoustics – Measurement of Sound Insulation in Buildings and of Building Elements. Part 4 'Field Measurement of Airborne Sound Insulation Between Rooms'
- BS EN ISO 717-1:1997 – 'Acoustics - 'Rating of Sound Insulation in Buildings and of Building Elements: Part 1. Airborne Sound Insulation'

These results are then assessed in accordance with the Building Regulations Approved Document E 2003 'Resistance to the Passage of Sound' in order to indicate compliance. The attached data sheets (figures 1 – 2 inclusive) give details as to the individual performance of each of the elements tested between the properties and should be read in conjunction with this report. Opinions and interpretations contained in this report are clearly marked (by the use blue italic text) and are outside the scope of the organisation's scope of accreditation. Corrections to a report are highlighted in Red. The results contained within this report apply to the sample as received.

Criteria

For purpose built dwellings or dwellings formed by material change of use, the Building Regulations Approved Document E 2003 'Resistance to the Passage of Sound' requires separating structures to adhere to the following requirements as detailed in table 1a of the below document.

Table 0.1a: Dwelling-houses and flats, performance standards for separating walls, separating floors, and stairs that have a separating function		
	Airborne Sound insulation $D_{nT,w} + C_{tr}$ dB (Minimum values)	Impact Sound Insulation $L'_{nT,w}$ dB (Maximum values)
Purpose built dwelling-houses and flats		
Walls	45	-
Floors and Stairs	45	62
Dwelling-houses and flats Formed by material change of use		
Walls	43	-
Floors and Stairs	43	64

Authentication Signature

REPORT COMPILED BY

Mr. D Stephens
Deputy Technical
Manager



Executive Summary

The following tables illustrate the summary of the achieved results carried out by David Stephens.

AIRBORNE TEST - WALLS			REQUIRED MIN $D_{nT,w} + C_{tr}$ dB	ACHIEVED $D_{nT,w} + C_{tr}$ dB	RESULT
TEST NO.	FROM	TO			
10136/1	9 – First Floor Office	8 – First Floor Office	43	53	PASS
10136/2	9 – Ground Floor Office	8 – Ground Floor Office	43	49	PASS

Construction Types

FLOOR - N/A

WALL - Unknown Construction Detail

These construction details have been supplied by the client and therefore Sound Advice Acoustics Ltd accepts no responsibility for their accuracy.

Sound Insulation Test Procedure

Sound insulation tests carried out at the above site were conducted in accordance with Sound Advice Acoustics Ltd technical test procedure SA.SI.803. A full copy of this document is available upon request. The procedures stated in Annex B of Building Regulations Approved Document E 2003 'Resistance to the Passage of Sound' have been followed.

Equipment

All the following equipment was calibrated by a UKAS accredited laboratory in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service (UKAS) on the following dates. Calibration schedules are implemented within Sound Advice Acoustics Ltd in accordance with UKAS directive LAB 23.

Description	Make	Type	Serial No.	Calibration Intervals	Uncertainty	Next Due Calibration
Integrated Sound Level Meter	Norsonic	140	1403570	2 YEARS	0.0 dB	08.08.2026
Integrated Sound Level Meter (Filters)	Norsonic	140	14031570	2 YEARS	2.0 dB	08.08.2026
Integrated Sound Level Meter (RT 60sec)	Norsonic	140	1403122	2 YEARS	0.2 dB	08.08.2026
12.5mm Microphone (with windshield)	Norsonic	1225	96052	2 YEARS	0.0 dB	08.08.2026
Microphone Pre – Amplifier	Norsonic	1209	12514	2 YEARS	0.0 dB	08.08.2026
Calibrator	Norsonic	1251	31310	1 YEAR	0.12 dB	30.07.2025

Full UKAS calibration data sheets and certificates are available upon request.

Customer Feedback

Sound Advice Acoustics Ltd welcomes any feedback from our clients. Please email info@soundadviceacoustics.co.uk with any comments.

Please note this data sheet is to be read in conjunction with report SA.SI.106. 10136

Client Details:	AC English Developments
Site Address:	Unit 9, South Point, Hamble

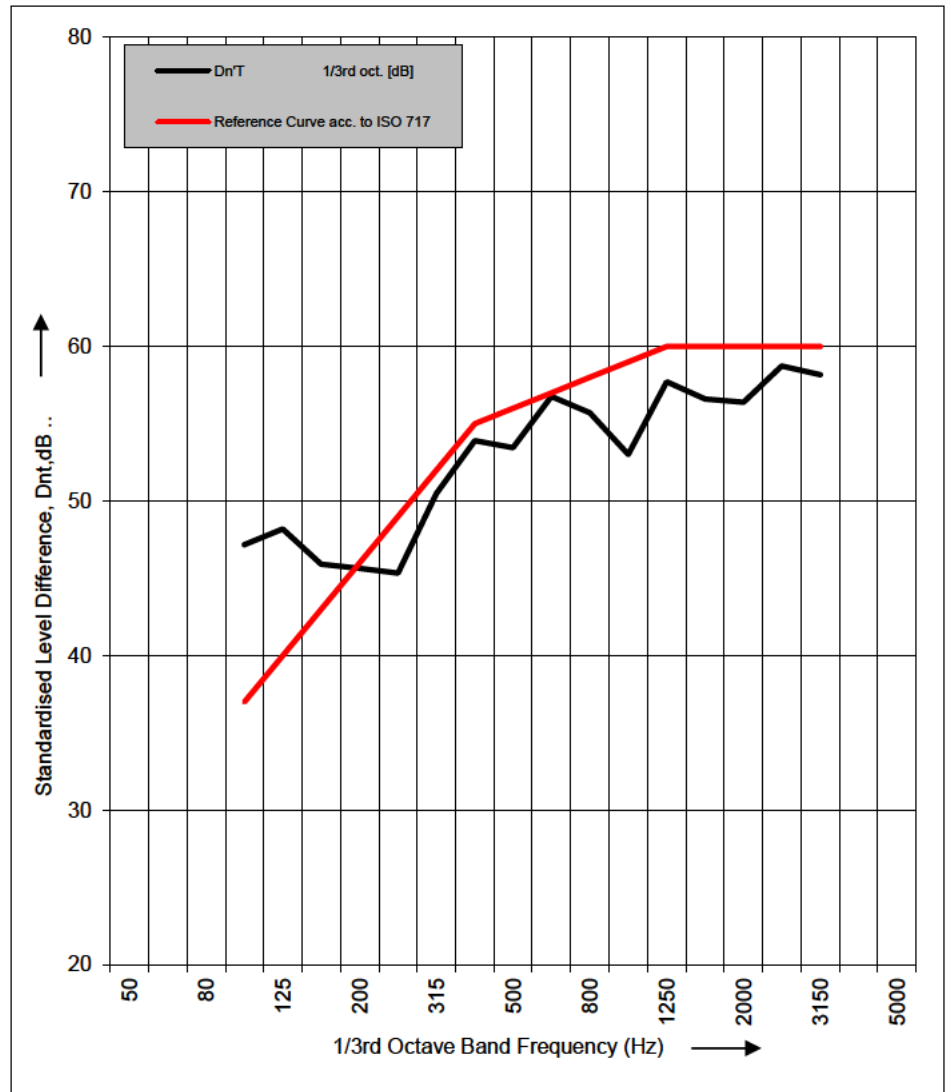
Figure:	1
Test No.:	10136 / 1

Test Location:	From: 9 - First Floor Office
	To: 8 - First Floor Office

Test Dated	15.07.2025
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Source Room Volume (Approx) 270 m³
Receiver Room Volume (Approx) 270 m³

Frequency [Hz]	D_{nT} 1/3rd oct. [dB] B <6	RT
50		
63		
80		
100	47.2 B	2.93
125	48.2 B	3.34
160	45.9 B	2.88
200	45.6 B	2.13
250	45.3 B	1.94
315	50.5 B	2.15
400	53.9 B	2.14
500	53.5 B	1.62
630	56.8 B	1.59
800	55.7 B	1.62
1000	53.0 B	0.55
1250	57.7 B <6	0.98
1600	56.6 B	0.50
2000	56.4 B	0.45
2500	58.7 B	0.54
3150	58.2 B	0.48
4000		
5000		



Rating According to ISO 717 1997 Part 1. Airborne Sound Insulation

$D_{nT,w}$ (C,Ctr) 56 (-1 ; -3) dB

B = Background Corrected Sample Level
<6 = Limit Of Measurement

$D_{nT,w} + C_{tr}$ 53 dB

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Authentication Signature

Mr. D Stephens
Deputy Technical
Manager



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Please note this data sheet is to be read in conjunction with report SA.SI.106. 10136

Client Details:	AC English Developments
Site Address:	Unit 9, South Point, Hamble

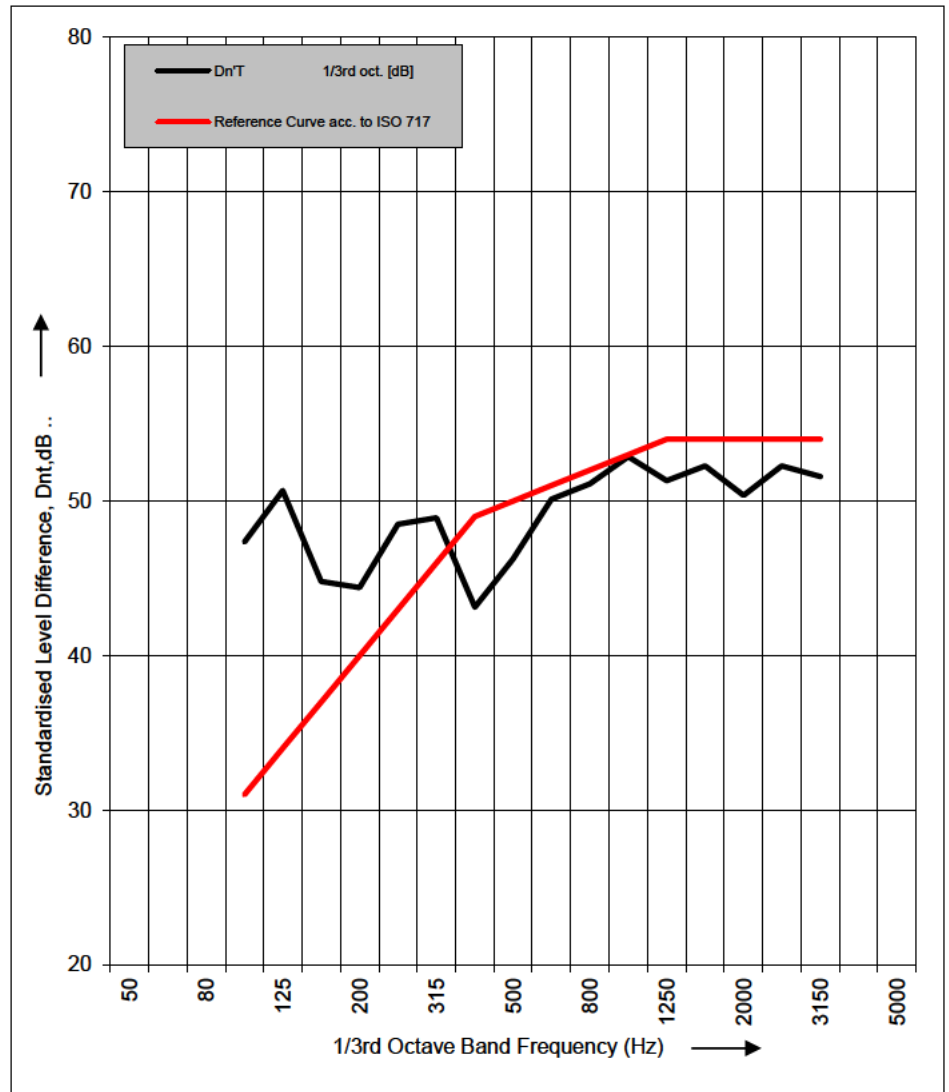
Figure:	2
Test No.:	10136 / 2

Test Location:	From: 9 - Ground Floor Office
	To: 8 - Ground Floor Office

Test Dated	15.07.2025
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Source Room Volume (Approx) 270 m³
Receiver Room Volume (Approx) 39 m³

Frequency [Hz]	D_{nT} 1/3rd oct. [dB] B <6	RT
50		
63		
80		
100	47.3	5.41
125	50.7	5.04
160	44.8	4.46
200	44.4	2.94
250	48.5 B	2.63
315	48.9 B	2.99
400	43.1	2.15
500	46.3	1.86
630	50.1 B	1.76
800	51.1 B	0.75
1000	52.9 B <6	0.67
1250	51.3 B	0.71
1600	52.3 B	0.49
2000	50.4 B	0.39
2500	52.3 B	0.59
3150	51.6 B	0.41
4000		
5000		



Rating According to ISO 717 1997 Part 1. Airborne Sound Insulation

$D_{nT,w}$ (C,Ctr) 50 (0 ; -1) dB

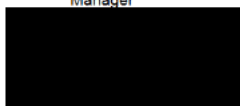
B = Background Corrected Sample Level
<6 = Limit Of Measurement

$D_{nT,w} + C_{tr}$ 49 dB

Evaluation based on field measurement results obtained in one third octave bands by an engineering method

Authentication Signature

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