

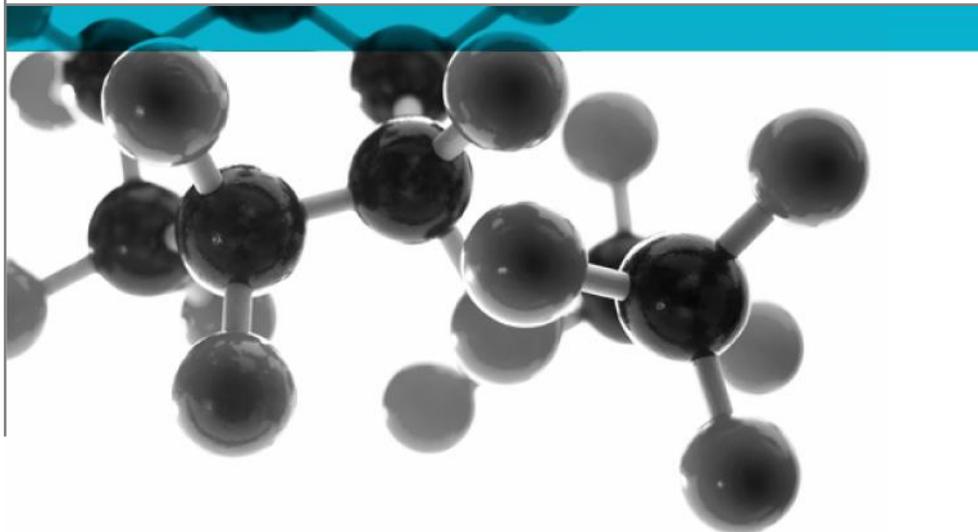
Exova
Chiltern House
Stocking Lane
Hughenden Valley
High Wycombe
Buckinghamshire
HP14 4ND

T: +44 (0) 1494 569 600
F: +44 (0) 1494 564 895
E: europe@exova.com
W: www.exova.com

Testing, calibrating, advising.



BS EN ISO 10140-2:2010



Test of: Sealants / Compounds

Acoustics - Laboratory measurement of sound insulation of building elements. Measurement of airborne sound insulation

Date: 03/10/2017

Copy: 1

Issue No.: 1

Page 1

A Report To:
Wurth Oy
Hyvinkääntie 1,
11710 Riihimäki
Finland

Document Reference:
WYC385361/AR1

The details of the sponsor of test report WYC385361 are held on file by Exova. This report is additional to that issued as WYC385361 and dated 15th September 2017. The original report shall remain valid and is not replaced by the additional report.

This report is issued in accordance with our terms and conditions, a copy of which is available on request. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This document is confidential and remains the property of Exova (UK) Ltd. The legal validity of this report can only be claimed on the presentation of the complete report.

Registered Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL United Kingdom. Reg No. SC070429



1762

Contents

	Page No.
Summary of Performance	3
1 Introduction.....	5
2 See Appendix 1 for Specimen Technical Details	5
3 Methodology	6
4 Parameters & Limitations.....	7
5 Authorisation.....	7
Appendix 1 – Specimens Technical Data Details.....	8
Appendix 2 – Summary of Results & Test Data Sheets – Full Wall Partition 14.2m2 (22 Pages)	9
Appendix 3 – Summary of Results & Test Data Sheets – Small Technical Partition 1.9m2 (22 Pages)	10
Appendix 4 – Summary of Results & Test Data Sheets – Dnew (22 Pages).....	11
Appendix 5 – Exova Drawings (23 Pages)	12

Summary of Performance

The following performance was achieved from the specimens tested. Full details of the testing and specimen construction are described in the report.

SLM Test Ref.	Product Name	Product Type	Test Description	Full Partition 14m ² Test Result (R _w (C;C _{tr})	Small Technical Size 1.9m ² Test Result (R _w (C;C _{tr})	D _{new} Test Result (D _{new} (C;C _{tr})
P003	Partition Wall	N/A	Test of Partition wall. See Appendix 2 for construction detail	62 (-1;-6) dB	53 (-1;-5) dB	61 (-1;-6) dB
P004	Partition Wall	N/A	Test of partition wall with aperture for sealants not filled in	17 (0;0) dB	8 (0;0) dB	15 (1;0) dB
P005	Sealfire W150	Sealants	Sealfire W150. 50mm wide x 25mm thick (no backing material)	56 (0;-3) dB	47 (0;-3) dB	55 (1;-4) dB
P006	Sealfire W150	Sealants	Sealfire W150. 50mm wide x 25mm thick (no backing material). Plasterboard fixed to exposed cassette	56 (-1;-4) dB	47 (-1;-3) dB	54 (0;-3) dB
P007	Sealfire W100	Sealants	Sealfire W100. 50mm wide x 25mm thick (no backing material)	59 (-1;-4) dB	50 (0;-5) dB	58 (-1;-5) dB
P008	Sealfire W200	Sealants	Sealfire W200. 50mm wide x 25mm thick (no backing material)	58 (-1;-5) dB	49 (-1;-4) dB	57 (-1;-6) dB
P009	Sealfire W200	Sealants	Sealfire W200. 50mm wide x 25mm thick (with 70mm rockwool placed in void)	59 (-1;-5) dB	50 (-1;-5) dB	58 (-1;-5) dB
P010	Sealfire W250	Sealants	Sealfire W250. 50mm wide x 25mm thick (no backing material)	58 (0;-4) dB	50 (-1;-5) dB	57 (-1;-5) dB
P012	Sealfire W100	Sealants	Sealfire W100. 30mm wide x 15mm thick sealant (both sides) with PE backing material	59 (-2;-6) dB	50 (-1;-6) dB	57 (-1;-6) dB
P013	Sealfire W150	Sealants	Sealfire W150. 20mm wide x 30mm thick sealant (both sides) with 40mm Stone Mineral Wool backing	58 (-1;-4) dB	49 (-1;-4) dB	57 (-1;-5) dB
P014	Sealfire W200	Sealants	Sealfire W200. 30mm wide x 10mm thick sealant (both sides) with PE backing material	56 (-1;-5) dB	47 (-1;-4) dB	54 (-1;-4) dB
P015	Sealfire W200	Sealants	Sealfire W200. 50mm wide x 5mm thick sealant (both sides) with 90mm Stone Mineral Wool backing	60 (-1;-6) dB	51 (-1;-6) dB	59 (-2;-7) dB
P016	Sealfire W250	Sealants	Sealfire W250. 30mm wide x 10mm thick sealant (both sides) with PE backing material	56 (0;-3) dB	48 (-1;-4) dB	55 (0;-4) dB

Test No.	Product Name	Product Type	Test Description	Full Partition 14m ² Test Result (R _w (C;C _{tr})	Small Technical Size 1.9m ² Test Result (R _w (C;C _{tr})	D _{new} Test Result (D _{new} (C;C _{tr})
P017	Sealfire W250	Sealants	Sealfire W250. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing	57 (-1;-4) dB	48 (0;-4) dB	56 (-1;-5) dB
P018	Sealfire W100	Sealants	Sealfire W100. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing	57 (0;-4) dB	49 (-1;-5) dB	56 (0;-4) dB
P019	50mm Sealfire W1000 Compound	Compounds	50mm thick Sealfire W1000 Compound	47 (-1;-3) dB	38 (0;-2) dB	45 (0;-2) dB
P020	50mm Sealfire W1000 Compound	Compounds	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)	57 (-1;-5) dB	48 (-1;-4) dB	55 (0;-4) dB
P022	50mm Sealfire W1000 Compound	Compounds	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)	53 (0;-4) dB	44 (0;-3) dB	52 (-1;-4) dB
P023	100mm Sealfire W1000 Compound	Compounds	100mm thick Sealfire W1000 Compound	50 (0;-2) dB	42 (-1;-3) dB	49 (0;-2) dB
P024	90mm Sealfire W1000 Compound	Compounds	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)	57 (0;-3) dB	48 (0;-3) dB	56 (-1;-4) dB
P025	90mm Sealfire W1000 Compound	Compounds	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)	56 (0;-3) dB	47 (0;-3) dB	54 (0;-3) dB
P026	150mm Sealfire W1000 Compound	Compounds	150mm thick Sealfire W1000 Compound	54 (0;-3) dB	45 (0;-2) dB	53 (-1;-3) dB

1 Introduction

The test specimen was supplied by the sponsor and delivered to EXOVA on 12 June 2017.

The material which were tested have been independently sampled with details of the sampling held on file.

The specimen was installed into a timber stud partition within the test chamber by Exova.

Test Details

The specimen was tested to BS EN ISO 10140-2:2010 Acoustics - Laboratory measurement of sound insulation of building elements. Measurement of airborne sound insulation

Testing was conducted at Exova, Chiltern House, Stocking Lane, Hughenden Valley, Buckinghamshire. HP14 4ND on the 12 July 2017.

For details of the testing, please see Section 3, Methodology.

Supporting Construction Description

The partition consisted of two wall leaves separated by a 400mm air gap. Each wall leaf was constructed of nominal 45mm x 90mm softwood studs at 600mm centres with three layers of 15mm plasterboard on the source room face and two layers of plasterboard on the receive room face. The stud wall cavities were filled with 100mm thick Rockwool insulation.

Specific small-sized test opening

The specific small-sized test opening measured 1250mm wide x 1500mm high. This was integral to the supporting construction as per BS EN ISO 10140-5, clause 3.3.3. See Appendix 5, Exova drawings of wall construction and test set up, for details.

2 See Appendix 1 for Specimen Technical Details

3 Methodology

Airborne Sound Insulation Test

- The loudspeakers were placed in the corners of the source room
- The sound level meter was calibrated prior to testing.
- 5 measurements were taken in the source room, at fixed positions.
- 5 measurements were taken in the receive room at fixed positions.
- Background measurements were taken at each third octave frequency between 50Hz and 5000Hz.
- 6 Reverberation measurements were taken in the receive room, in accordance with BS EN ISO 3382-2:2008 interrupted, engineering method.
- Calculations, including C & C_{tr}, were carried out in accordance with BS EN ISO 717-1
- The sound reduction index was calculated using the following formula from BS EN ISO 10140-2:2010:

$$R_w = L1 - L2 + 10 \log \left(\frac{S}{A} \right) \text{ dB}$$

Where:

L1 is the logarithmic average of the source room measurements

L2 is the logarithmic average of the receive room measurements

S is the area of the test specimen

A is the equivalent absorption area, where $A = \frac{0.16V}{T}$

Where:

V = The volume of the receive room

T = the reverberation time measured in seconds

1. Logarithmic average of 5 Measurements (L1 & L2)
2. Deduction of L1s from L2s
3. Area of test specimen (S) divided by equivalent sound absorption area (A)
4. Weighted Final Result R_w dB

Test Equipment

Equipment	Equipment reference number
Brüel & Kjaer Sound Level Meter (Type 2270)	ACT-009
Brüel & Kjaer Microphones (Type 4189)	ACT-010 & ACT-016
Brüel & Kjaer Calibrator (Type 4231)	ACT-011
Amplifiers	ACT-007 & ACT-049
Noise Generators	ACT-008 & ACT-009
Loudspeakers (EV ZX1-90PA)	ACT-006, ACT-021, ACT-022
Graphic Equaliser (DBX Dual Channel)	ACT-023

4 Parameters & Limitations

Parameters

The test fulfilled all criteria required of ISO 10140-2, including:

- Sound level meter (microphone) was located as required
- Sound sources (loudspeakers) were located as required
- Reverberation Time readings were greater than 20dB but not so large that the observed decay cannot be represented by a straight line.
- Background noise measurements were 10dB below L2 measurements.
- Temperature was reported to within $\pm 0.1^\circ\text{C}$
- Barometric pressure was reported to within $\pm 0.01 \text{ Mbar} (\pm 1 \text{ Pa})$
- Humidity was reported to within $\pm 1\%$
- Frequencies 50Hz, 63Hz and 80Hz are outside of our UKAS accreditation, and are for reference only. These frequencies do not affect the over R_w figure.
- R'_{\max} of the test chambers was measured to be 62dB
- The test chambers are two cuboid rooms 5.49m wide and a ceiling height of 2.58m, volumes of chambers for testing are reported with the individual test data

Limitations

- The results only relate to the behaviour of the specimen submitted for test, as described in the Technical Specification (Section 2), and under the particular conditions of test.
- The results are not intended to be the sole criteria for assessing the acoustic performance of the element in use nor do they necessarily reflect the actual behaviour once installed on site.
- The specification and interpretation of test methods are the subject of ongoing development and refinement. Changes in associated legislation may also occur. For these reasons it is recommended that the relevance of test reports over 5 years old should be considered by the user. EXOVA will be able to offer a review of the procedures adopted for a particular test to ensure that they are consistent with current practices.
- The results are solely for use by the sponsor and the stated purpose.
- The sponsor cannot rely on information provided without consent from EXOVA.
- Any recommendations are specific to the assignment and the sponsor.
- Extracts from the report are not permitted.

5 Authorisation

	Issued by:	Authorised by:
Signature:		
Name:	Lee Grant-Riach	Martin Durham
Title:	Senior Technical Officer	Lab Manager
Date of Issue	3 rd October 2017	

Appendix 1 – Specimens Technical Data Details

- **Sealfire W100** - a quality fire resistant waterborne acoustic sealant designed for internal use where low movement fire resistant and/or acoustic joints are required or to seal around pipe and cable service penetrations through walls and floors.
- **Sealfire W200** - a one part fire resistant neutral curing silicone sealant with excellent acoustic performance. It is designed for internal or external use wherever flexible fire resistant and/or acoustic joints are required or to seal around pipe and cable service penetrations.
- **Sealfire W250** - a one part fire resistant water based silicone sealant with excellent acoustic performance. It is designed for internal or external use wherever flexible fire resistant and/or acoustic joints are required or to seal around pipe and cable service penetrations.
- **Sealfire W150** - a one part intumescent acrylic sealant which in fire conditions expands with high pressure to seal openings in fire compartmenting structure when penetrated by small plastic pipes, metal pipes with combustible insulation and bunched cables.
- **Sealfire W1000 Compound** - a single pack material that, when mixed with water, provides a fire resistant smoke stop seal able to reinstate the fire resistance of separating walls and floors when penetrated by a wide range of building services.

Appendix 2 – Summary of Results & Test Data Sheets – Full Wall Partition 14.2m² (22 Pages)

Product Type	Sealants / Compounds		
---------------------	----------------------	--	--

Data Sheet Ref.	Variations		Test Result R_w (C;C_{tr})
WYC385361/AR1/P003	Test Description	Test of Partition wall. See Appendix 5 for construction detail	62 (-1;-6) dB
WYC385361/AR1/P004	Test Description	Test of partition wall with aperture for sealants not filled in	17 (0;0) dB
WYC385361/AR1/P005	Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material)	56 (0;-3) dB
WYC385361/AR1/P006	Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material). Plasterboard fixed to exposed cassette	56 (-1;-4) dB
WYC385361/AR1/P007	Test Description	Sealfire W100. 50mm wide x 25mm thick (no backing material)	59 (-1;-4) dB
WYC385361/AR1/P008	Test Description	Sealfire W200. 50mm wide x 25mm thick (no backing material)	58 (-1;-5) dB
WYC385361/AR1/P009	Test Description	Sealfire W200. 50mm wide x 25mm thick (with 70mm rockwool placed in void)	59 (-1;-5) dB
WYC385361/AR1/P010	Test Description	Sealfire W250. 50mm wide x 25mm thick (no backing material)	58 (0;-4) dB
WYC385361/AR1/P012	Test Description	Sealfire W100. 30mm wide x 15mm thick sealant (both sides) with PE backing material	59 (-2;-6) dB
WYC385361/AR1/P013	Test Description	Sealfire W150. 20mm wide x 30mm thick sealant (both sides) with 40mm Stone Mineral Wool backing	58 (-1;-4) dB
WYC385361/AR1/P014	Test Description	Sealfire W200. 30mm wide x 10mm thick sealant (both sides) with PE backing material	56 (-1;-5) dB
WYC385361/AR1/P015	Test Description	Sealfire W200. 50mm wide x 5mm thick sealant (both sides) with 90mm Stone Mineral Wool backing	60 (-1;-6) dB
WYC385361/AR1/P016	Test Description	Sealfire W250. 30mm wide x 10mm thick sealant (both sides) with PE backing material	56 (0;-3) dB
WYC385361/AR1/P017	Test Description	Sealfire W250. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing	57 (-1;-4) dB
WYC385361/AR1/P018	Test Description	Sealfire W100. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing	57 (0;-4) dB
WYC385361/AR1/P019	Test Description	50mm thick Sealfire W1000 Compound	47 (-1;-3) dB
WYC385361/AR1/P020	Test Description	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)	57 (-1;-4) dB
WYC385361/AR1/P022	Test Description	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)	53 (0;-4) dB
WYC385361/AR1/P023	Test Description	100mm thick Sealfire W1000 Compound	50 (0;-2) dB
WYC385361/AR1/P024	Test Description	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)	57 (0;-3) dB
WYC385361/AR1/P025	Test Description	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)	56 (0;-3) dB
WYC385361/AR1/P026	Test Description	150mm thick Sealfire W1000 Compound	54 (0;-3) dB



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Test of Partition wall. See Appendix 2 for construction detail

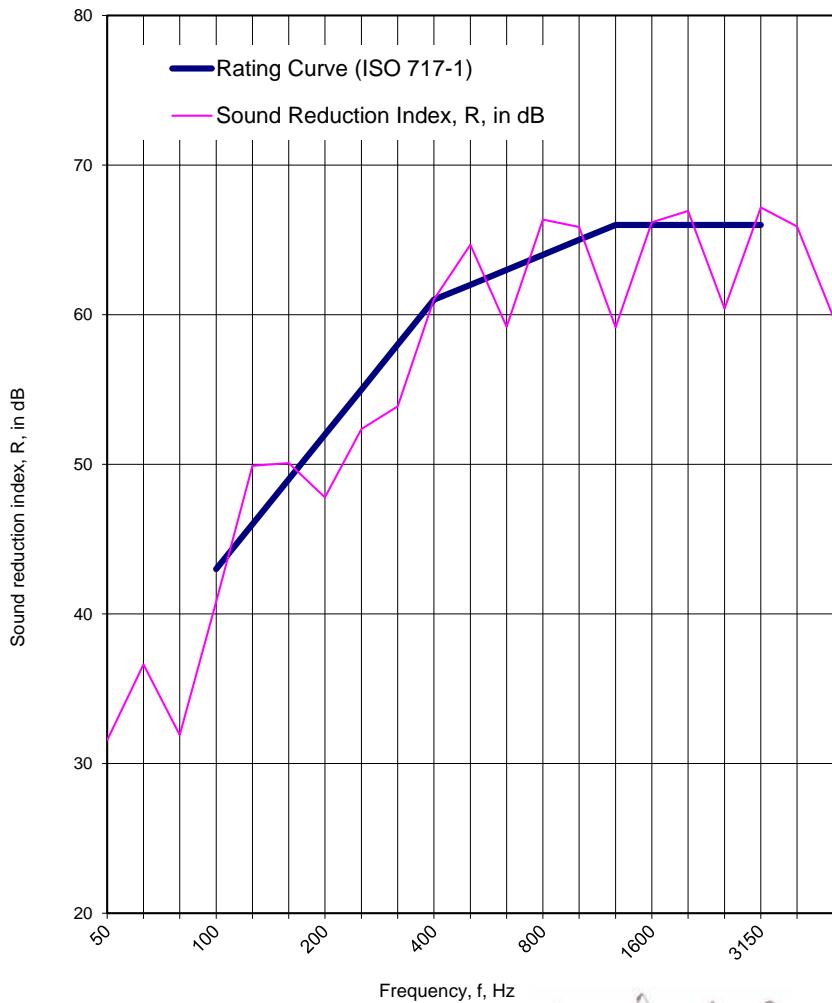
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P003

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	31.6
63*	36.6
80*	31.9
100	40.8
125	49.9
160	50.1
200	47.8
250	52.4
315	53.9
400	61.0
500	64.7
630	59.2
800	66.4
1000	65.9
1250	59.2
1600	66.2
2000	66.9
2500	60.4
3150	67.2
4000	65.9
5000	59.8
AAD	-29.4



$R_w =$	62 dB	$C_{(50 - 3150)} =$	-3 dB	$C_{tr(50 - 3150)} =$	-12 dB
$R_w + C =$	61 dB	$C_{(50 - 5000)} =$	-3 dB	$C_{tr(50 - 5000)} =$	-12 dB
$R_w + C_{tr} =$	56 dB	$C_{(100 - 5000)} =$	-1 dB	$C_{tr(100 - 5000)} =$	-6 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Test of partition wall with aperture for sealants not filled in

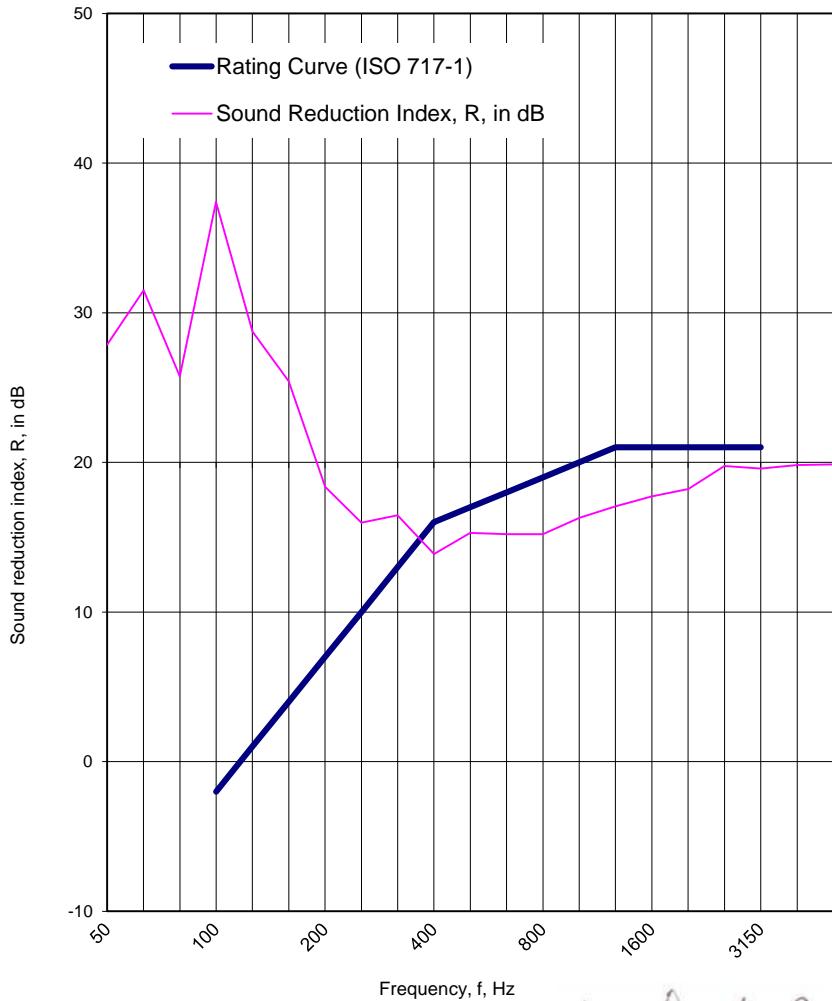
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P004

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	27.9
63*	31.5
80*	25.7
100	37.4
125	28.7
160	25.4
200	18.4
250	16.0
315	16.5
400	13.9
500	15.3
630	15.2
800	15.2
1000	16.3
1250	17.1
1600	17.7
2000	18.2
2500	19.8
3150	19.6
4000	19.8
5000	19.9
AAD	-26.8



$R_w = 17$ dB	$C_{(50 - 3150)} = 0$ dB	$C_{tr(50 - 3150)} = -1$ dB
$R_w + C = 17$ dB	$C_{(50 - 5000)} = 1$ dB	$C_{tr(50 - 5000)} = -1$ dB
$R_w + C_{tr} = 17$ dB	$C_{(100 - 5000)} = 1$ dB	$C_{tr(100 - 5000)} = -1$ dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material)

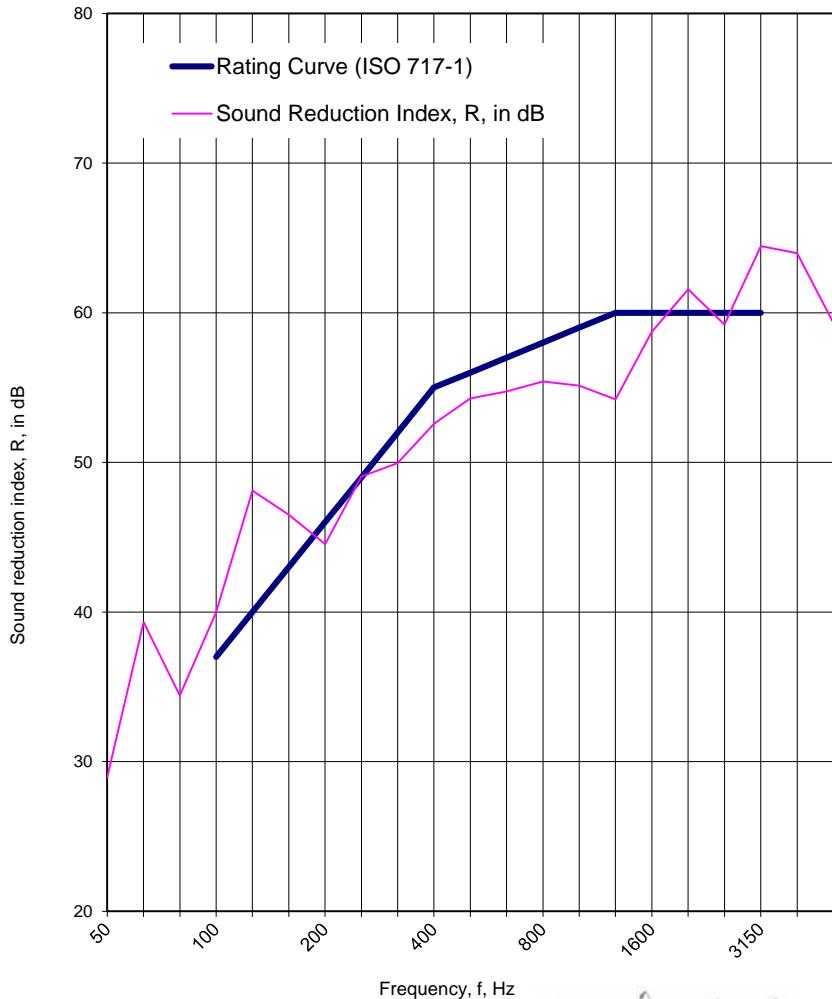
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P005

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	28.9
63*	39.3
80*	34.4
100	40.0
125	48.1
160	46.5
200	44.5
250	49.1
315	49.9
400	52.6
500	54.3
630	54.7
800	55.4
1000	55.1
1250	54.2
1600	58.7
2000	61.6
2500	59.2
3150	64.5
4000	64.0
5000	59.3
AAD	-24.3



$R_w =$	56 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-7 dB
$R_w + C =$	56 dB	$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-7 dB
$R_w + C_{tr} =$	53 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material). Plasterboard fixed to exposed cassette

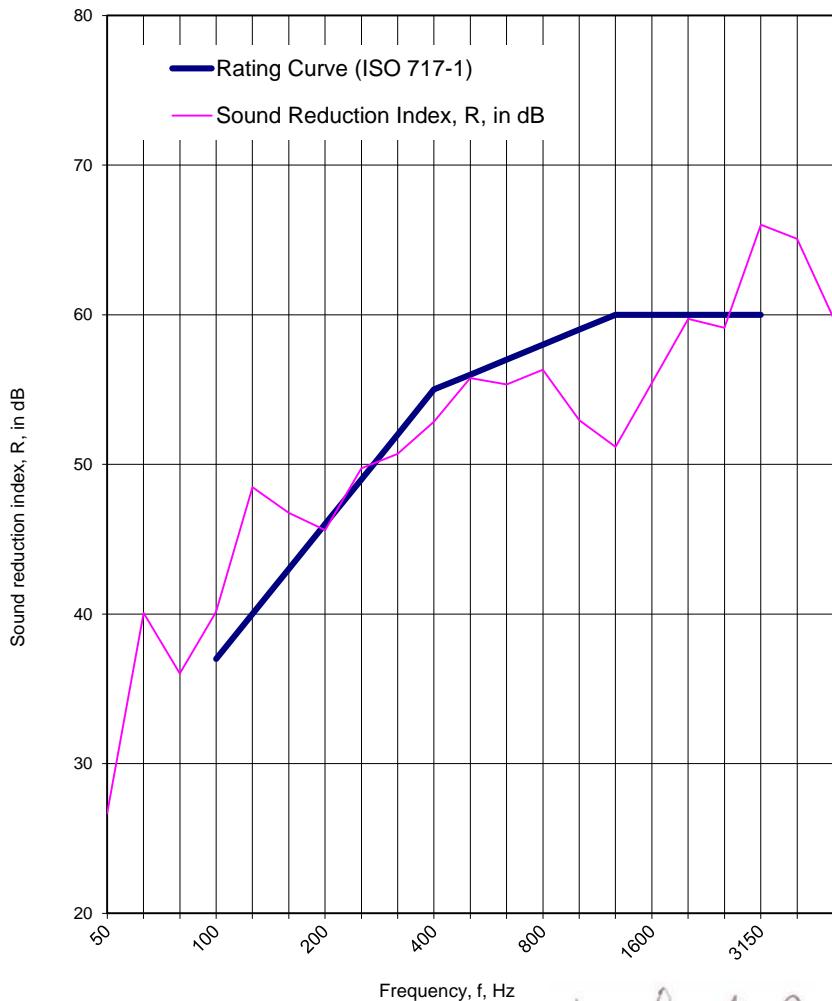
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P006

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	26.7
63*	40.1
80*	36.0
100	40.1
125	48.5
160	46.8
200	45.6
250	49.7
315	50.7
400	52.9
500	55.8
630	55.3
800	56.3
1000	52.9
1250	51.2
1600	55.4
2000	59.7
2500	59.1
3150	66.0
4000	65.1
5000	59.8
AAD	-28.0



$$R_w = 56 \text{ dB}$$

$$R_w + C = 55 \text{ dB}$$

$$R_w + C_{tr} = 52 \text{ dB}$$

$$C_{(50 - 3150)} = -2 \text{ dB}$$

$$C_{tr(50 - 3150)} = -8 \text{ dB}$$

$$C_{(50 - 5000)} = -1 \text{ dB}$$

$$C_{tr(50 - 5000)} = -8 \text{ dB}$$

$$C_{(100 - 5000)} = 0 \text{ dB}$$

$$C_{tr(100 - 5000)} = -4 \text{ dB}$$

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W100. 50mm wide x 25mm thick (no backing material)

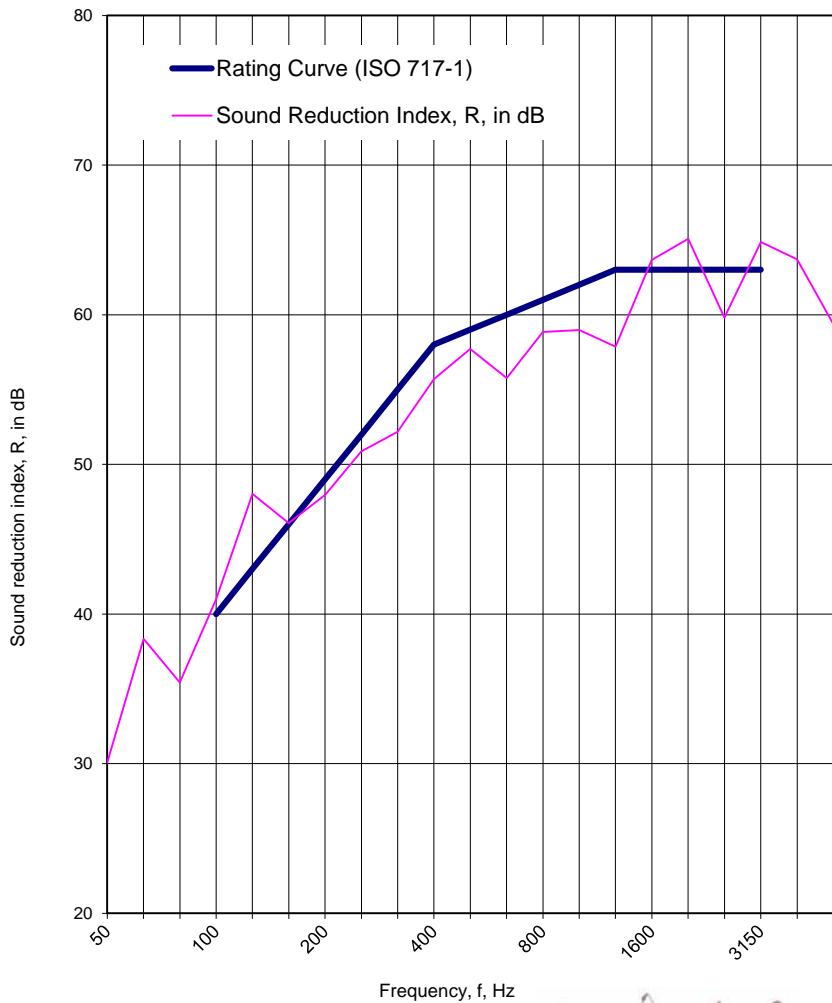
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P007

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	30.1
63*	38.3
80*	35.4
100	41.0
125	48.0
160	46.1
200	48.0
250	50.9
315	52.2
400	55.7
500	57.7
630	55.8
800	58.8
1000	59.0
1250	57.9
1600	63.7
2000	65.1
2500	59.8
3150	64.8
4000	63.7
5000	59.4
AAD	-26.3



$R_w =$	59 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-9 dB
$R_w + C =$	58 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-9 dB
$R_w + C_{tr} =$	55 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W200. 50mm wide x 25mm thick (no backing material)

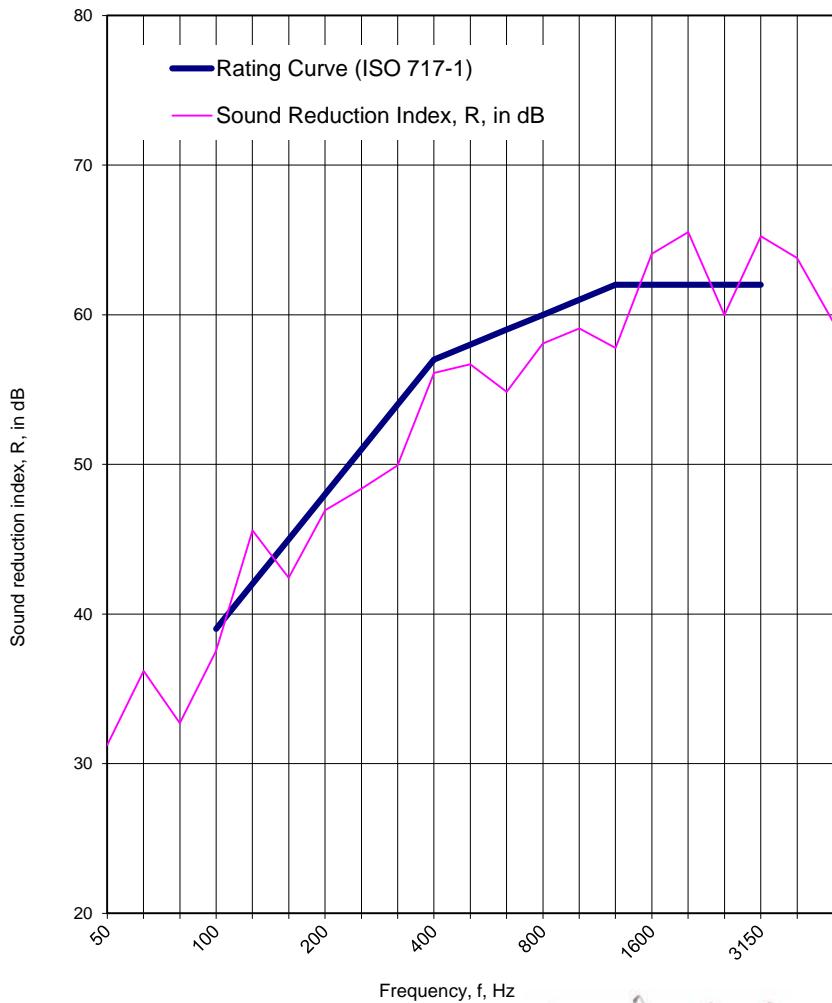
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P008

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	31.2
63*	36.2
80*	32.7
100	37.5
125	45.6
160	42.4
200	46.9
250	48.4
315	49.9
400	56.1
500	56.7
630	54.9
800	58.1
1000	59.1
1250	57.8
1600	64.1
2000	65.5
2500	60.0
3150	65.2
4000	63.8
5000	59.5
AAD	-28.3



$R_w = 58 \text{ dB}$	$C_{(50 - 3150)} = -2 \text{ dB}$	$C_{tr(50 - 3150)} = -9 \text{ dB}$
$R_w + C = 57 \text{ dB}$	$C_{(50 - 5000)} = -1 \text{ dB}$	$C_{tr(50 - 5000)} = -9 \text{ dB}$
$R_w + C_{tr} = 53 \text{ dB}$	$C_{(100 - 5000)} = 0 \text{ dB}$	$C_{tr(100 - 5000)} = -6 \text{ dB}$

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W200. 50mm wide x 25mm thick (with 70mm rockwool placed in void)

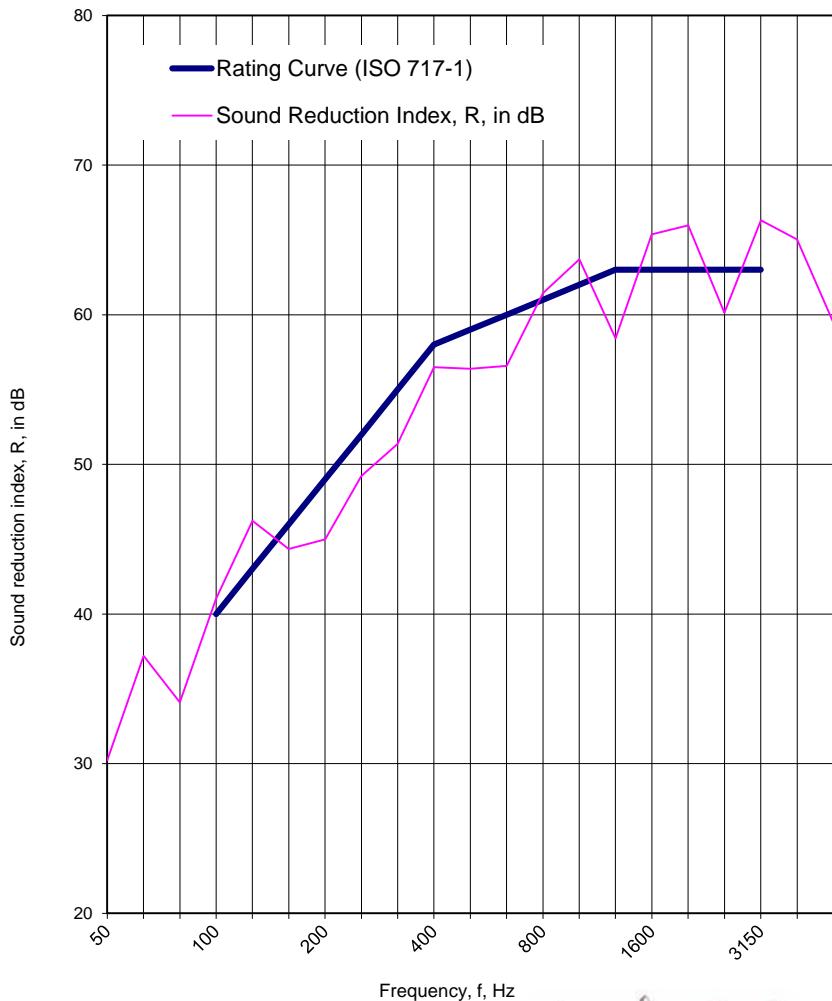
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P009

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	30.2
63*	37.2
80*	34.1
100	41.0
125	46.2
160	44.3
200	45.0
250	49.2
315	51.4
400	56.5
500	56.4
630	56.6
800	61.4
1000	63.7
1250	58.4
1600	65.4
2000	66.0
2500	60.1
3150	66.3
4000	65.0
5000	59.5
AAD	-27.1



$$R_w = 59 \text{ dB}$$

$$R_w + C = 58 \text{ dB}$$

$$R_w + C_{tr} = 54 \text{ dB}$$

$$C_{(50 - 3150)} = -2 \text{ dB}$$

$$C_{tr(50 - 3150)} = -9 \text{ dB}$$

$$C_{(50 - 5000)} = -1 \text{ dB}$$

$$C_{tr(50 - 5000)} = -9 \text{ dB}$$

$$C_{(100 - 5000)} = 0 \text{ dB}$$

$$C_{tr(100 - 5000)} = -5 \text{ dB}$$

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W250. 50mm wide x 25mm thick (no backing material)

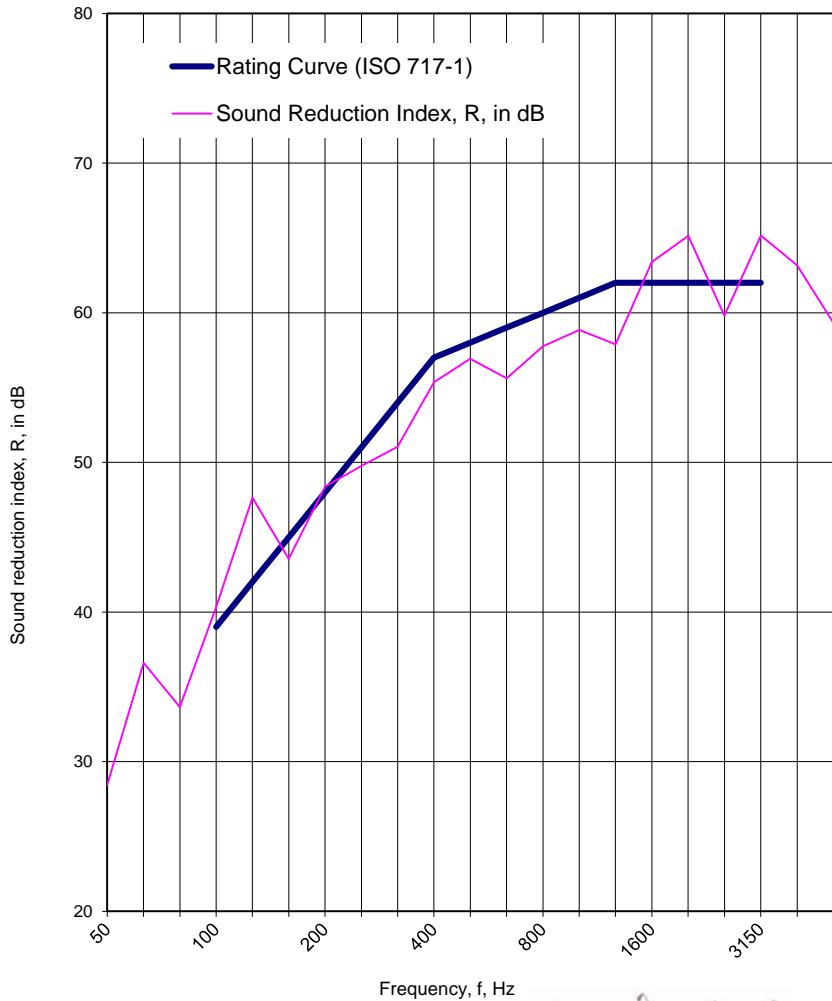
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P010

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	28.4
63*	36.6
80*	33.6
100	40.3
125	47.6
160	43.5
200	48.4
250	49.8
315	51.0
400	55.4
500	56.9
630	55.6
800	57.8
1000	58.8
1250	57.9
1600	63.4
2000	65.1
2500	59.8
3150	65.1
4000	63.2
5000	59.3
AAD	-22.4



$R_w =$	58 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-9 dB
$R_w + C =$	58 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-9 dB
$R_w + C_{tr} =$	54 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

L. B. Riach

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W100. 30mm wide x 15mm thick sealant (both sides) with PE backing material

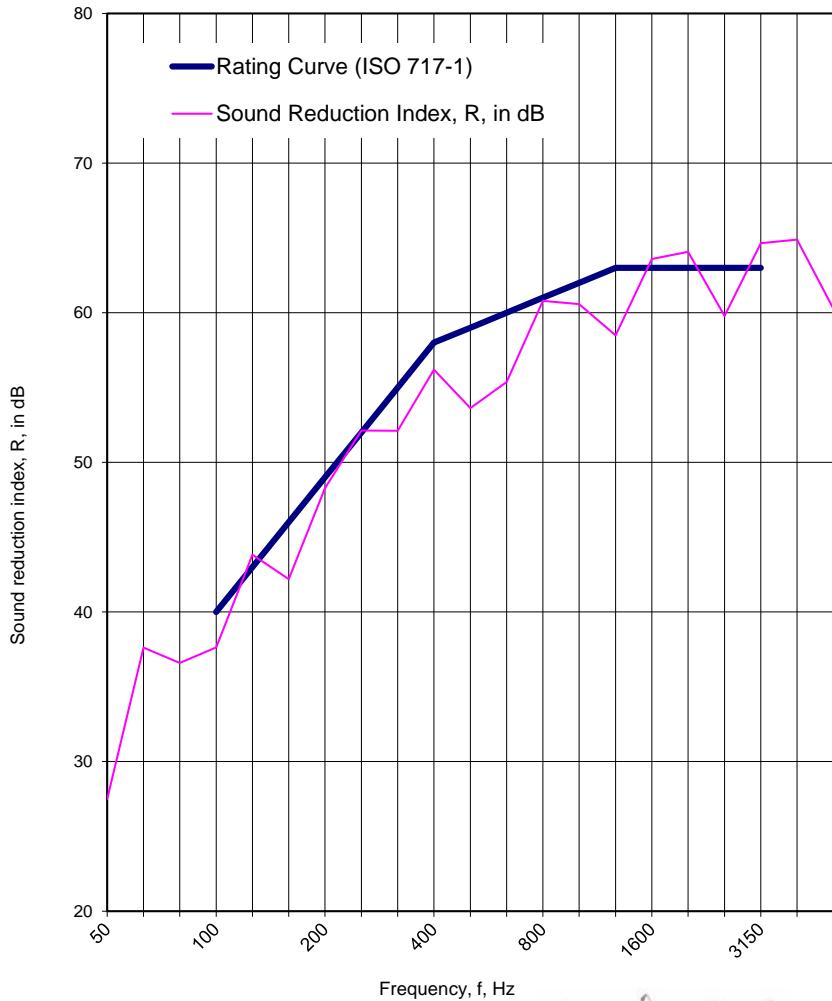
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P012

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	27.5
63*	37.6
80*	36.6
100	37.6
125	43.8
160	42.2
200	48.3
250	52.1
315	52.1
400	56.2
500	53.6
630	55.4
800	60.8
1000	60.6
1250	58.5
1600	63.6
2000	64.1
2500	59.8
3150	64.6
4000	64.9
5000	60.3
AAD	-31.0



$R_w =$	59 dB	$C_{(50 - 3150)} =$	-2 dB	$C_{tr(50 - 3150)} =$	-10 dB
$R_w + C =$	57 dB	$C_{(50 - 5000)} =$	-2 dB	$C_{tr(50 - 5000)} =$	-10 dB
$R_w + C_{tr} =$	53 dB	$C_{(100 - 5000)} =$	-1 dB	$C_{tr(100 - 5000)} =$	-6 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W150. 20mm wide x 30mm thick sealant (both sides) with 40mm Stone Mineral Wool backing

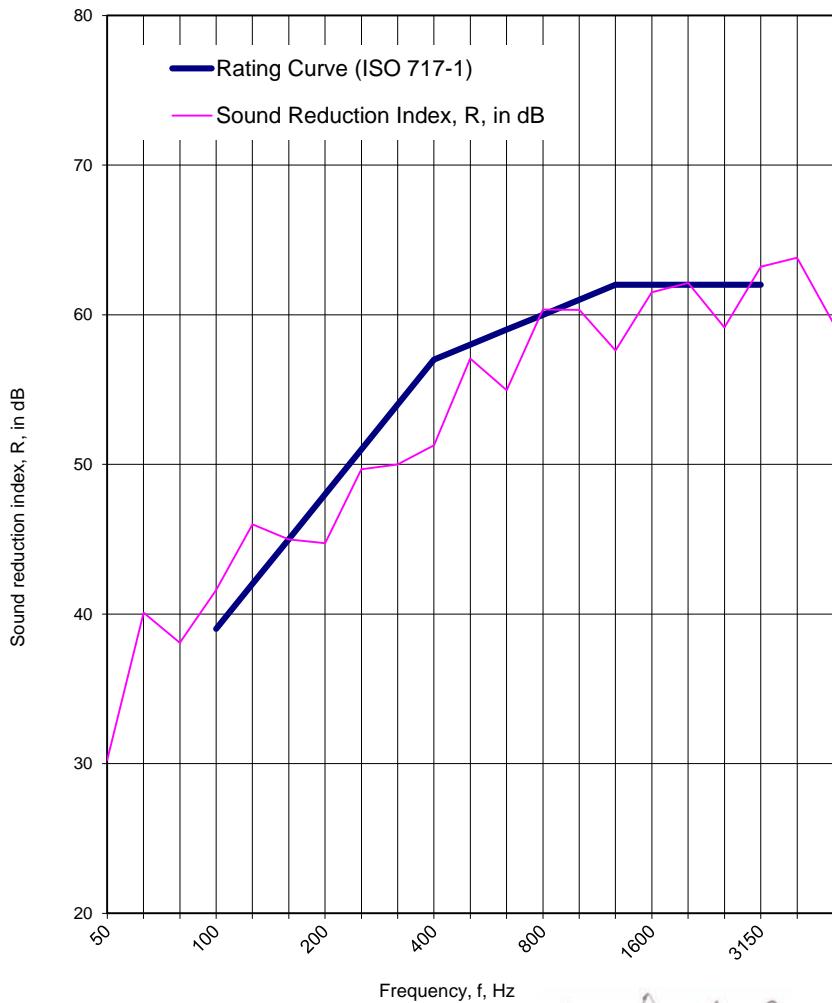
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P013

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	30.2
63*	40.1
80*	38.1
100	41.6
125	46.0
160	45.0
200	44.7
250	49.7
315	50.0
400	51.3
500	57.1
630	55.0
800	60.3
1000	60.3
1250	57.6
1600	61.5
2000	62.1
2500	59.1
3150	63.2
4000	63.8
5000	59.5
AAD	-27.7



$$R_w = 58 \text{ dB}$$

$$R_w + C = 57 \text{ dB}$$

$$R_w + C_{tr} = 54 \text{ dB}$$

$$C_{(50 - 3150)} = -1 \text{ dB} \quad C_{tr(50 - 3150)} = -8 \text{ dB}$$

$$C_{(50 - 5000)} = -1 \text{ dB} \quad C_{tr(50 - 5000)} = -8 \text{ dB}$$

$$C_{(100 - 5000)} = 0 \text{ dB} \quad C_{tr(100 - 5000)} = -5 \text{ dB}$$

L. Grant-Riach

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W200. 30mm wide x 10mm thick sealant (both sides) with PE backing material

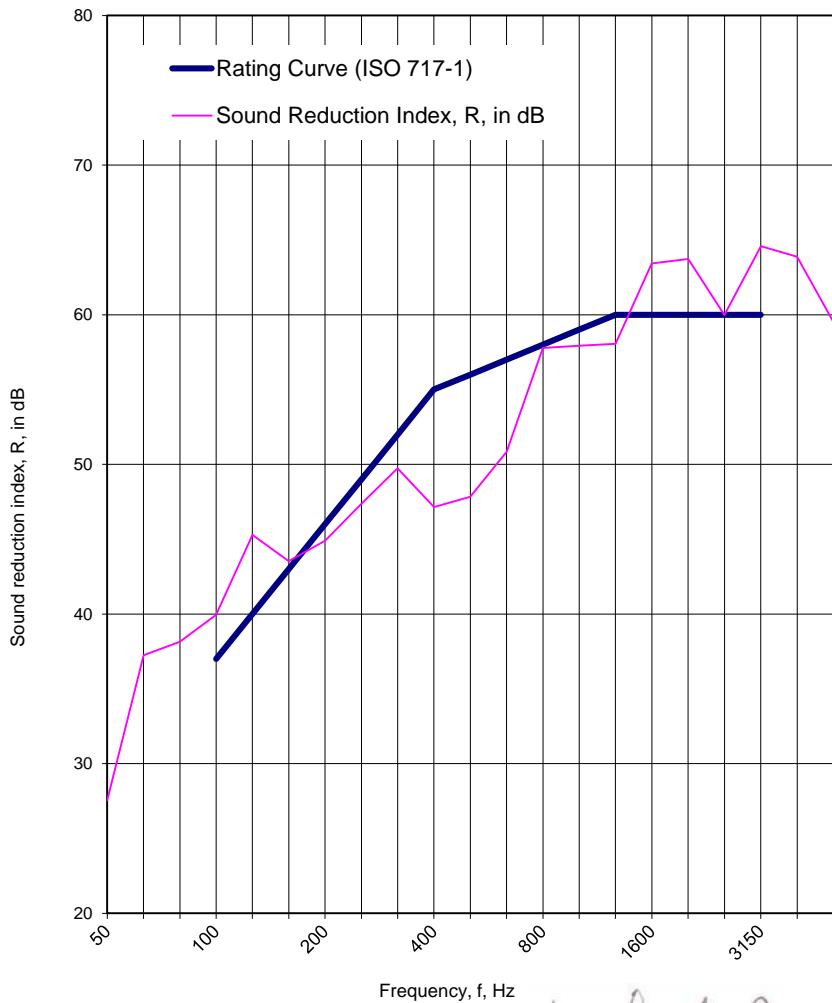
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P014

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	27.5
63*	37.2
80*	38.1
100	39.9
125	45.3
160	43.5
200	44.9
250	47.4
315	49.7
400	47.1
500	47.8
630	50.9
800	57.8
1000	57.9
1250	58.1
1600	63.4
2000	63.7
2500	60.0
3150	64.6
4000	63.9
5000	59.5
AAD	-30.4



$R_w =$	56 dB	$C_{(50 - 3150)} =$	-2 dB	$C_{tr(50 - 3150)} =$	-8 dB
$R_w + C =$	55 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-8 dB
$R_w + C_{tr} =$	51 dB	$C_{(100 - 5000)} =$	-1 dB	$C_{tr(100 - 5000)} =$	-5 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W200. 50mm wide x 5mm thick sealant (both sides) with 90mm Stone Mineral Wool backing

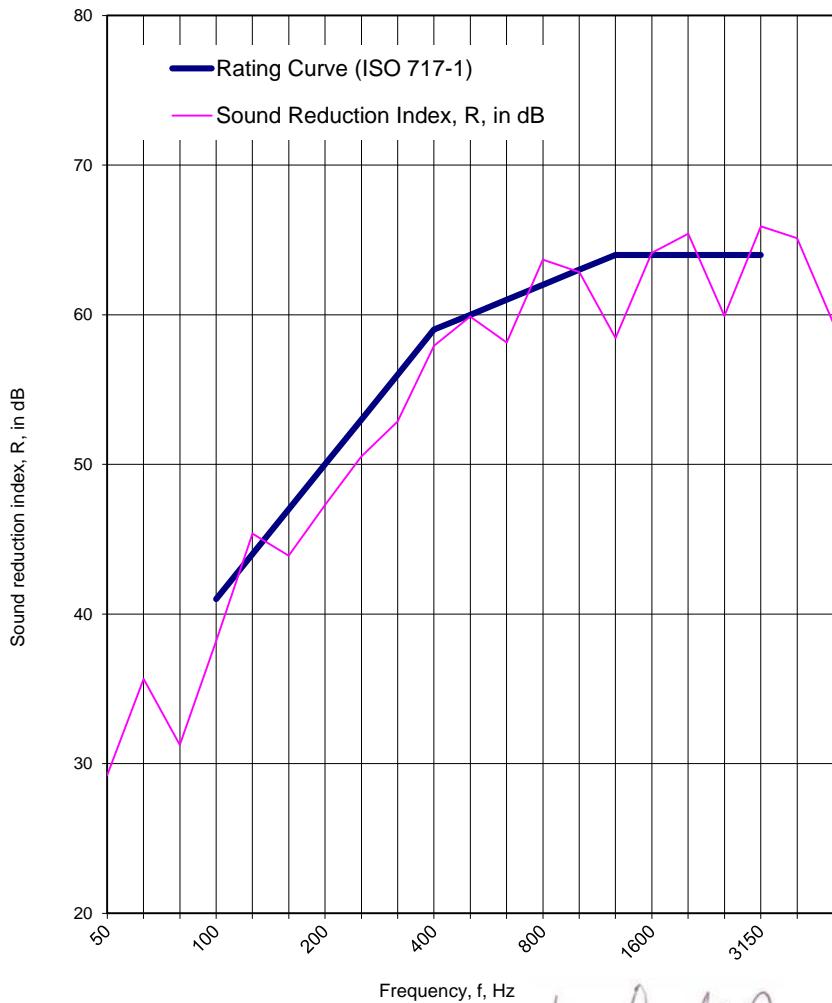
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P015

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	29.2
63*	35.7
80*	31.3
100	38.2
125	45.4
160	43.9
200	47.3
250	50.5
315	52.8
400	57.9
500	59.9
630	58.1
800	63.7
1000	62.8
1250	58.5
1600	64.1
2000	65.4
2500	59.9
3150	65.9
4000	65.1
5000	59.5
AAD	-28.1



$R_w =$	60 dB	$C_{(50 - 3150)} =$	-3 dB	$C_{tr(50 - 3150)} =$	-12 dB
$R_w + C =$	59 dB	$C_{(50 - 5000)} =$	-2 dB	$C_{tr(50 - 5000)} =$	-12 dB
$R_w + C_{tr} =$	54 dB	$C_{(100 - 5000)} =$	-1 dB	$C_{tr(100 - 5000)} =$	-6 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W250. 30mm wide x 10mm thick sealant (both sides) with PE backing material

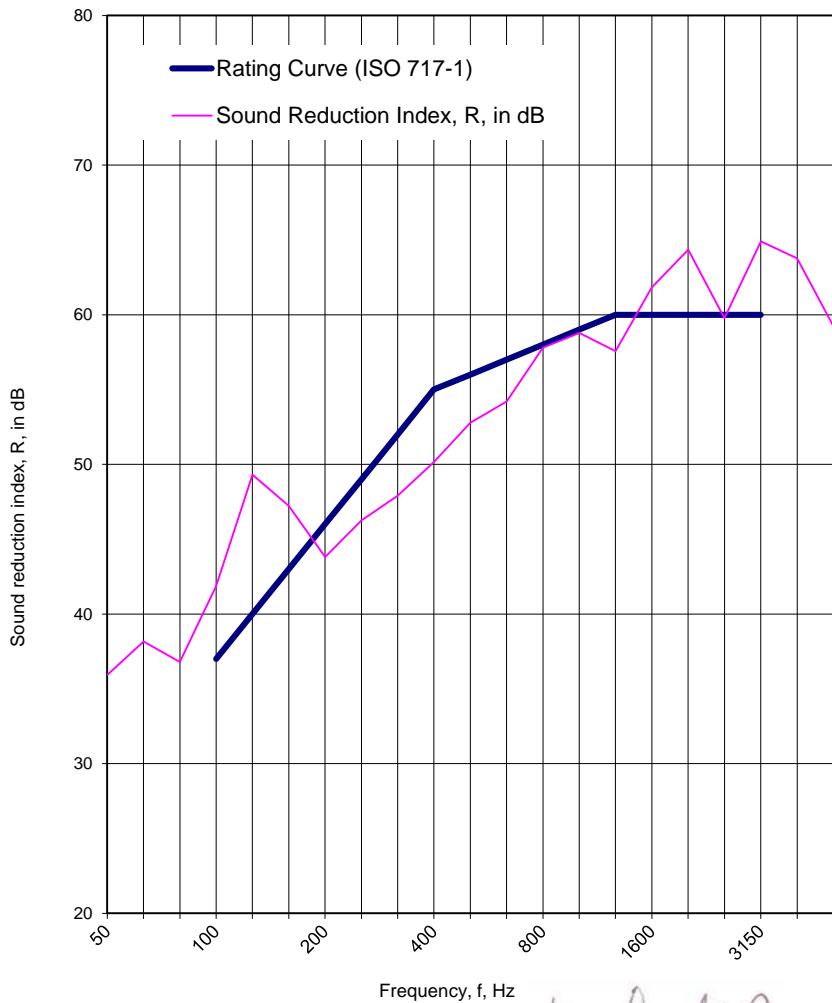
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P016

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	35.9
63*	38.2
80*	36.8
100	41.8
125	49.3
160	47.2
200	43.8
250	46.2
315	47.9
400	50.2
500	52.8
630	54.2
800	57.8
1000	58.8
1250	57.6
1600	61.8
2000	64.4
2500	59.8
3150	64.9
4000	63.8
5000	59.3
AAD	-23.0



$R_w =$	56 dB	$C_{(50 - 3150)} =$	0 dB	$C_{tr(50 - 3150)} =$	-5 dB
$R_w + C =$	56 dB	$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-5 dB
$R_w + C_{tr} =$	53 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-3 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W250. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing

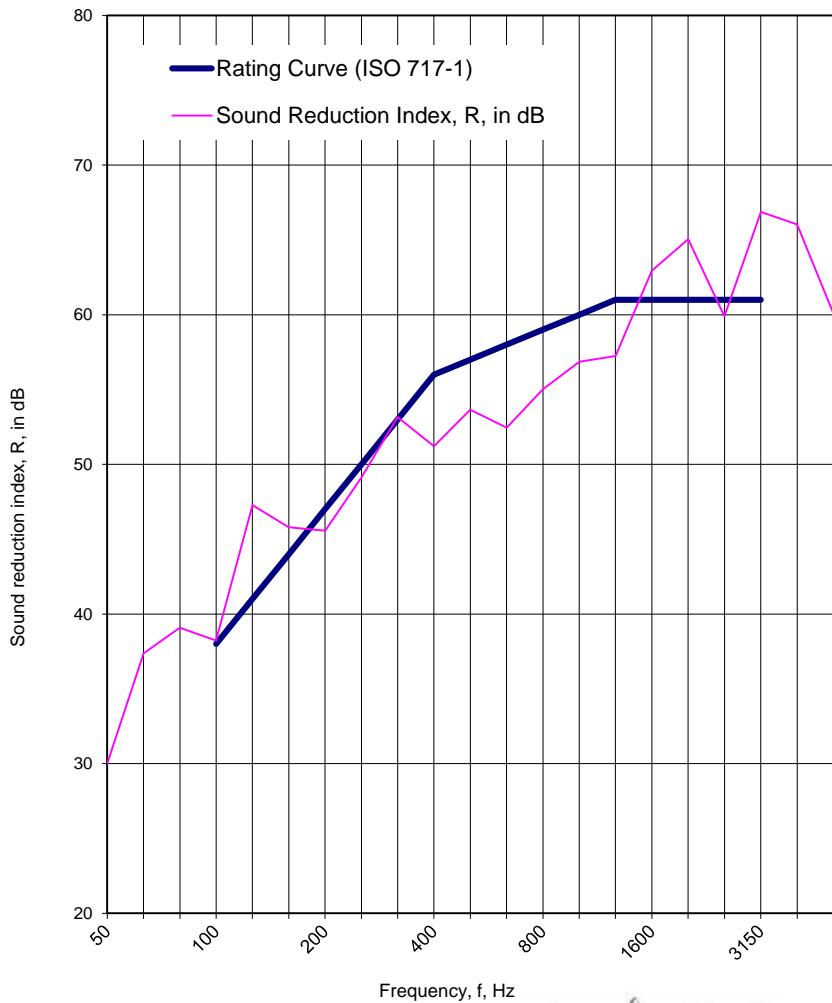
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P017

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	30.0
63*	37.4
80*	39.1
100	38.2
125	47.3
160	45.8
200	45.6
250	49.1
315	53.1
400	51.2
500	53.6
630	52.4
800	55.0
1000	56.9
1250	57.2
1600	62.9
2000	65.1
2500	59.9
3150	66.9
4000	66.0
5000	60.1
AAD	-28.0



$R_w =$	57 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-7 dB
$R_w + C =$	56 dB	$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-7 dB
$R_w + C_{tr} =$	53 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-5 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W100. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing

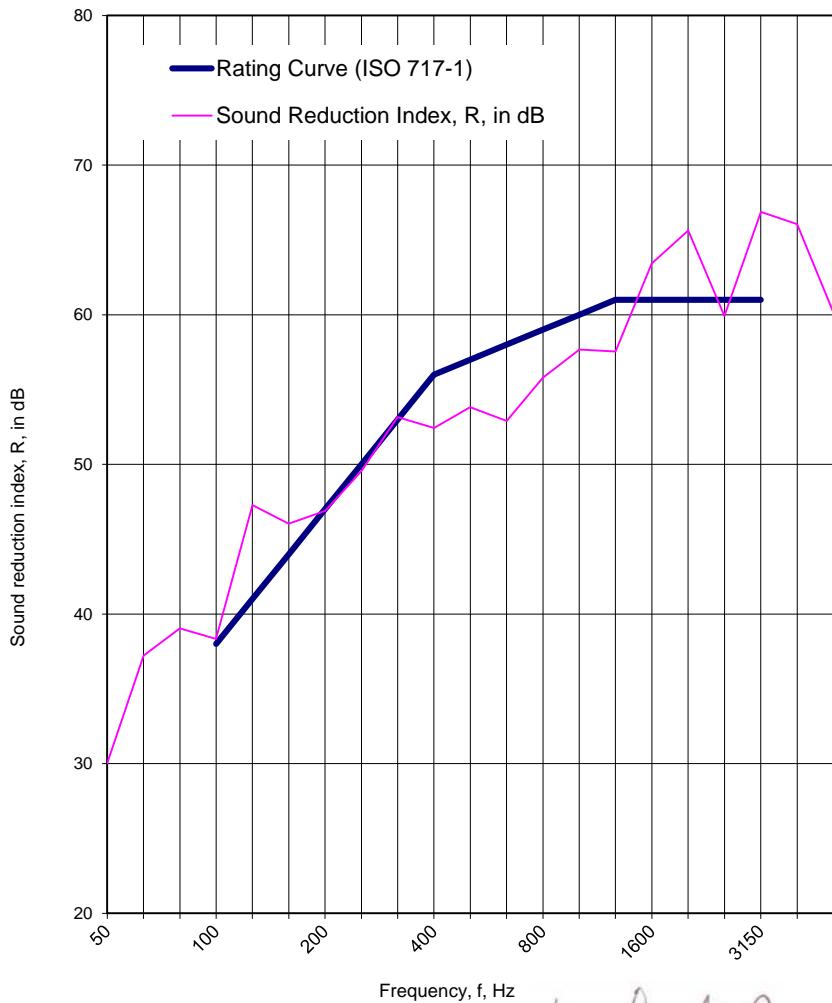
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P018

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	30.0
63*	37.2
80*	39.0
100	38.3
125	47.3
160	46.0
200	46.9
250	49.5
315	53.2
400	52.4
500	53.8
630	52.9
800	55.8
1000	57.7
1250	57.6
1600	63.4
2000	65.6
2500	59.9
3150	66.9
4000	66.0
5000	60.2
AAD	-22.5



$R_w =$	57 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-7 dB
$R_w + C =$	57 dB	$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-7 dB
$R_w + C_{tr} =$	53 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	50mm thick Sealfire W1000 compound

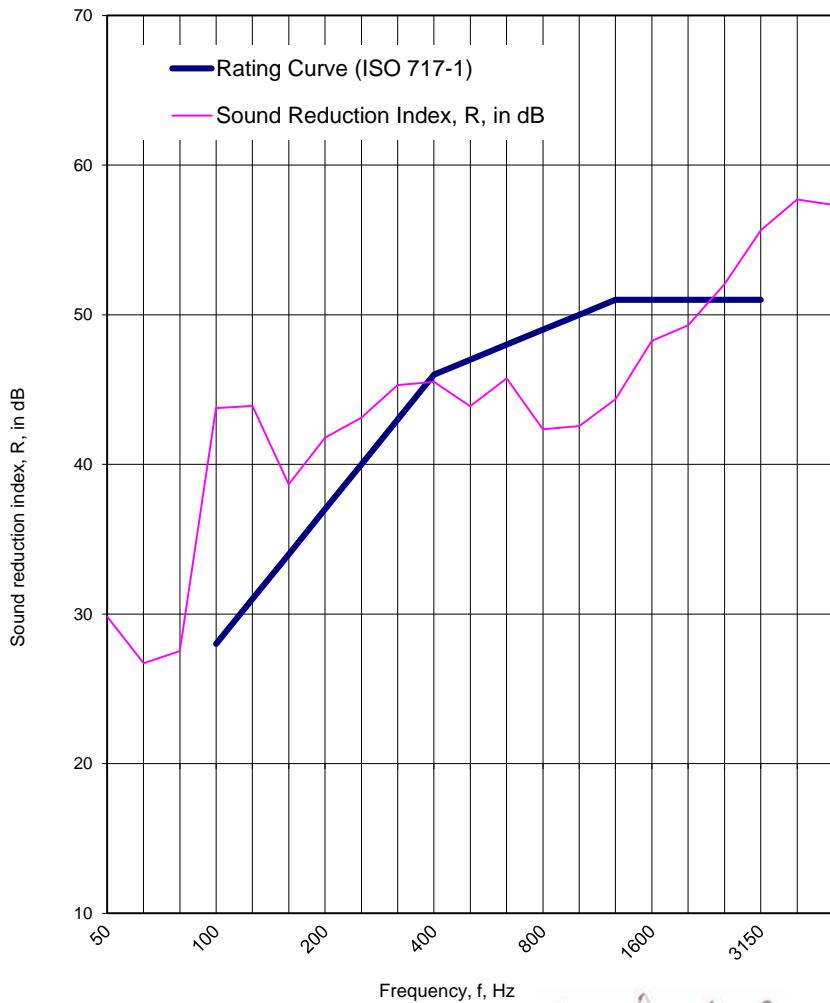
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P019

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	29.8
63*	26.7
80*	27.5
100	43.7
125	43.9
160	38.7
200	41.8
250	43.1
315	45.3
400	45.5
500	43.9
630	45.7
800	42.3
1000	42.6
1250	44.4
1600	48.3
2000	49.3
2500	52.0
3150	55.7
4000	57.7
5000	57.4
AAD	-31.0



$R_w =$	47 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-5 dB
$R_w + C =$	46 dB	$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-5 dB
$R_w + C_{tr} =$	44 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-3 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	50mm thick Sealfire W1000 compound with 50mm Stone Wool Mineral (on receive room side)

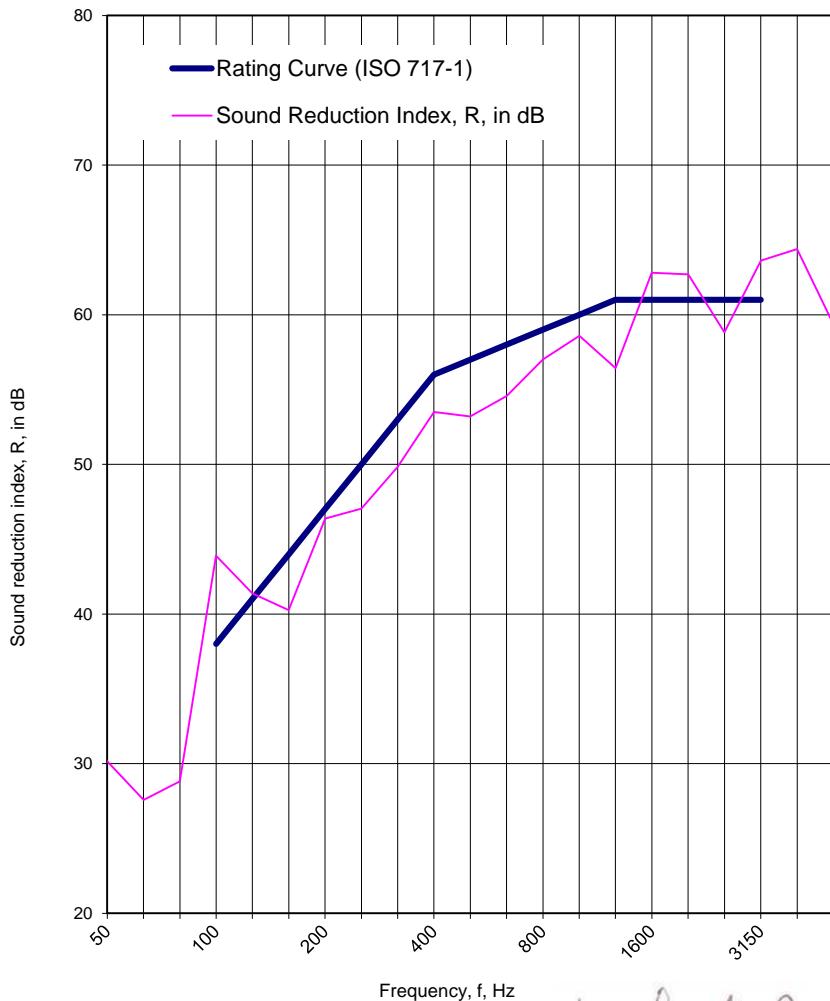
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P020

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	30.2
63*	27.6
80*	28.8
100	43.9
125	41.4
160	40.3
200	46.4
250	47.0
315	49.8
400	53.5
500	53.2
630	54.6
800	57.0
1000	58.6
1250	56.4
1600	62.8
2000	62.7
2500	58.8
3150	63.6
4000	64.4
5000	59.4
AAD	-30.4



$R_w =$	57 dB	$C_{(50 - 3150)} =$	-3 dB	$C_{tr(50 - 3150)} =$	-12 dB
$R_w + C =$	56 dB	$C_{(50 - 5000)} =$	-2 dB	$C_{tr(50 - 5000)} =$	-12 dB
$R_w + C_{tr} =$	52 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-5 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	50mm thick Sealfire W1000 compound with 50mm Stone Wool Mineral (on source room side)

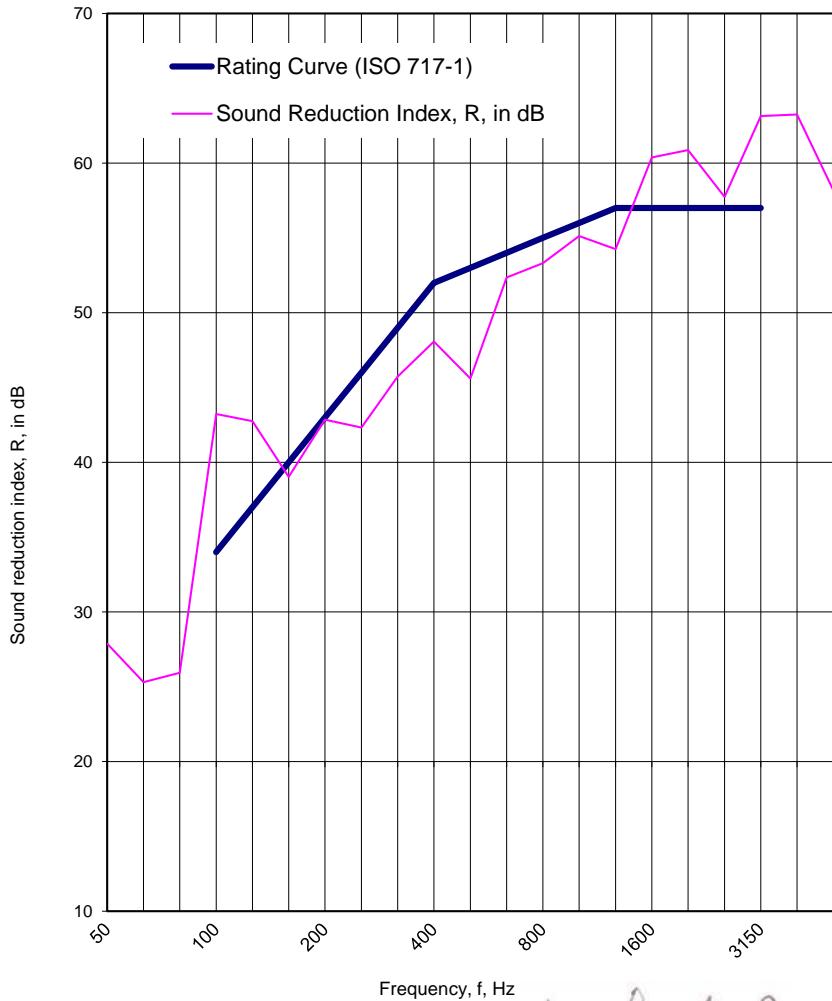
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P022

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	27.9
63*	25.3
80*	25.9
100	43.2
125	42.8
160	39.0
200	42.8
250	42.3
315	45.7
400	48.1
500	45.6
630	52.4
800	53.3
1000	55.1
1250	54.3
1600	60.4
2000	60.9
2500	57.7
3150	63.1
4000	63.2
5000	58.2
AAD	-26.3



$R_w =$	53 dB	$C_{(50 - 3150)} =$	-2 dB	$C_{tr(50 - 3150)} =$	-10 dB
$R_w + C =$	53 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-10 dB
$R_w + C_{tr} =$	49 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	100mm thick Sealfire W1000 compound

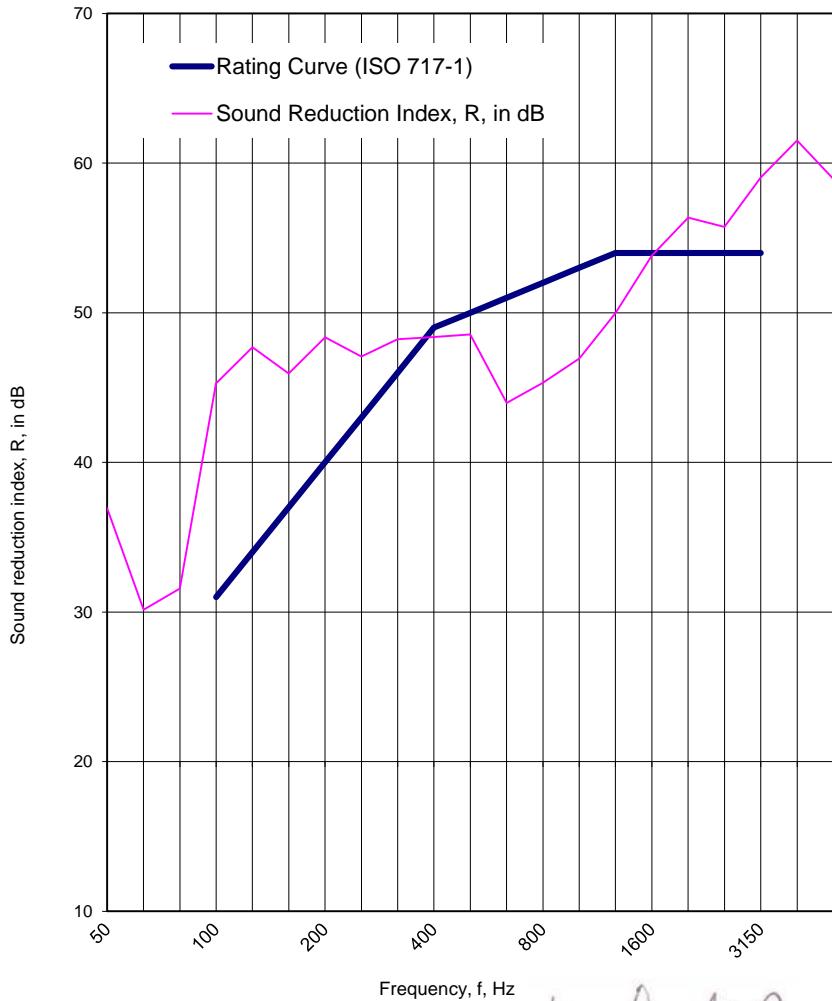
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P023

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	36.9
63*	30.2
80*	31.6
100	45.3
125	47.7
160	45.9
200	48.3
250	47.1
315	48.2
400	48.4
500	48.6
630	44.0
800	45.3
1000	46.9
1250	50.0
1600	53.8
2000	56.4
2500	55.7
3150	59.0
4000	61.5
5000	58.9
AAD	-26.0



$$R_w = 50 \text{ dB}$$

$$R_w + C = 50 \text{ dB}$$

$$R_w + C_{tr} = 48 \text{ dB}$$

$$C_{(50 - 3150)} = 0 \text{ dB} \quad C_{tr(50 - 3150)} = -4 \text{ dB}$$

$$C_{(50 - 5000)} = 0 \text{ dB} \quad C_{tr(50 - 5000)} = -4 \text{ dB}$$

$$C_{(100 - 5000)} = 0 \text{ dB} \quad C_{tr(100 - 5000)} = -2 \text{ dB}$$

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	90mm thick Sealfire W1000 compound with 50mm Stone Wool Mineral (on receive room side)

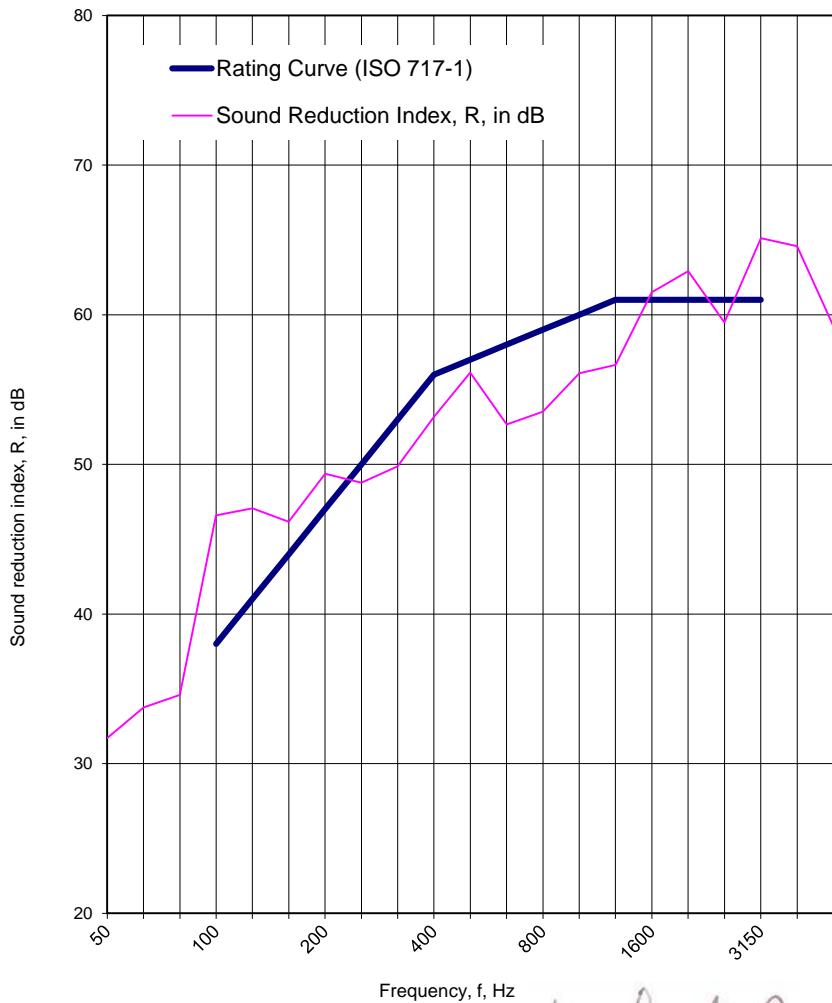
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P024

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50 ⁺	31.7
63 ⁺	33.8
80 ⁺	34.6
100	46.6
125	47.1
160	46.2
200	49.4
250	48.8
315	49.9
400	53.2
500	56.1
630	52.7
800	53.5
1000	56.1
1250	56.7
1600	61.5
2000	62.9
2500	59.5
3150	65.1
4000	64.6
5000	59.3
AAD	-28.6



$$R_w = 57 \text{ dB}$$

$$R_w + C = 57 \text{ dB}$$

$$R_w + C_{tr} = 54 \text{ dB}$$

$$C_{(50 - 3150)} = -1 \text{ dB}$$

$$C_{tr(50 - 3150)} = -8 \text{ dB}$$

$$C_{(50 - 5000)} = 0 \text{ dB}$$

$$C_{tr(50 - 5000)} = -8 \text{ dB}$$

$$C_{(100 - 5000)} = 0 \text{ dB}$$

$$C_{tr(100 - 5000)} = -3 \text{ dB}$$

Lee Grant-Riach
Senior Technical Officer

⁺ indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	90mm thick Sealfire W1000 compound with 50mm Stone Wool Mineral (on source room side)

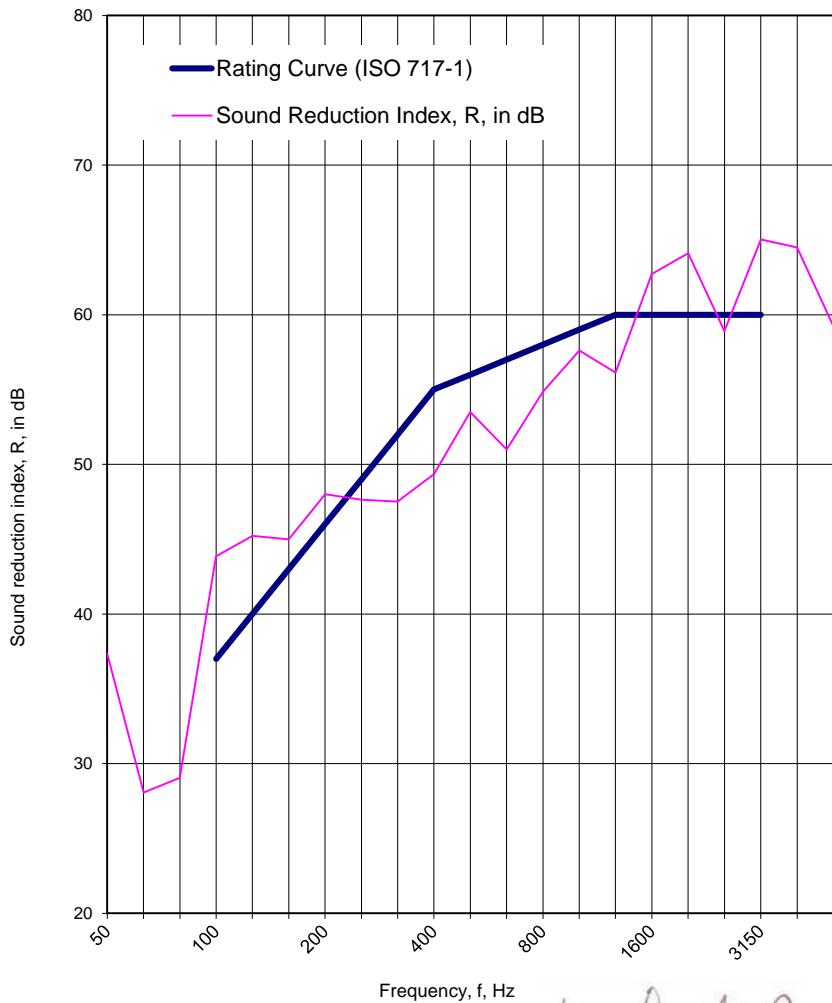
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P025

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	14.20	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	37.4
63*	28.1
80*	29.0
100	43.9
125	45.2
160	45.0
200	48.0
250	47.6
315	47.5
400	49.3
500	53.5
630	51.0
800	54.8
1000	57.6
1250	56.1
1600	62.7
2000	64.1
2500	58.9
3150	65.0
4000	64.5
5000	59.3
AAD	-29.5



$R_w =$	56 dB	$C_{(50 - 3150)} =$	-2 dB	$C_{tr(50 - 3150)} =$	-10 dB
$R_w + C =$	56 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-10 dB
$R_w + C_{tr} =$	53 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-3 dB

L. Grant-Riach

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	150mm thick Sealfire W1000 compound

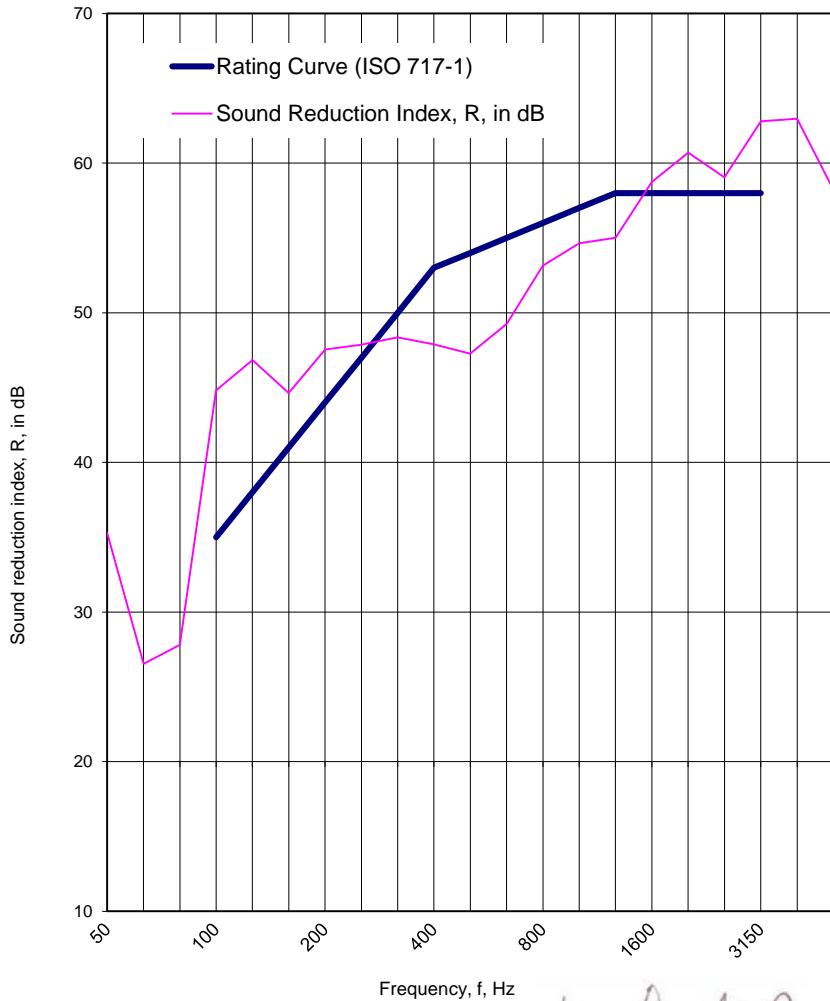
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P026

Date of Test: 12/07/2017

Source Room Volume:	82.40 m³
Receive Room Volume:	69.60 m³
Specimen Installed By:	Exova
Area of Specimen (S):	14.20 m²
Temp. in Test Rooms:	18.0 18.0 °C
Static Pressure:	99500.0 99600.0 Pa
Humidity in Test Rooms:	62.0 61.0 %

<i>f, Hz</i>	<i>R, dB</i>
50*	35.3
63*	26.5
80*	27.8
100	44.8
125	46.8
160	44.6
200	47.5
250	47.9
315	48.3
400	47.9
500	47.3
630	49.2
800	53.1
1000	54.6
1250	55.0
1600	58.7
2000	60.7
2500	59.1
3150	62.8
4000	63.0
5000	58.2
AAD	-27.5



$R_w =$	54 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-9 dB
$R_w + C =$	54 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-9 dB
$R_w + C_{tr} =$	51 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-3 dB

L. Grant-Riach

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1

Appendix 3 – Summary of Results & Test Data Sheets – Small Technical Partition 1.9m² (22 Pages)

Product Type	Sealants / Compounds		
---------------------	----------------------	--	--

Data Sheet Ref.	Variations		Test Result R_w (C;C_{tr})
WYC385361/AR1/P003	Test Description	Test of Partition wall. See Appendix 5 for construction detail	53 (-1;-4) dB
WYC385361/AR1/P004	Test Description	Test of partition wall with aperture for sealants not filled in	8 (0;0) dB
WYC385361/AR1/P005	Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material)	47 (0;-3) dB
WYC385361/AR1/P006	Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material). Plasterboard fixed to exposed cassette	47 (-1;-3) dB
WYC385361/AR1/P007	Test Description	Sealfire W100. 50mm wide x 25mm thick (no backing material)	50 (0;-5) dB
WYC385361/AR1/P008	Test Description	Sealfire W200. 50mm wide x 25mm thick (no backing material)	49 (-1;-4) dB
WYC385361/AR1/P009	Test Description	Sealfire W200. 50mm wide x 25mm thick (with 70mm rockwool placed in void)	50 (-1;-5) dB
WYC385361/AR1/P010	Test Description	Sealfire W250. 50mm wide x 25mm thick (no backing material)	50 (-1;-5) dB
WYC385361/AR1/P012	Test Description	Sealfire W100. 30mm wide x 15mm thick sealant (both sides) with PE backing material	50 (-1;-6) dB
WYC385361/AR1/P013	Test Description	Sealfire W150. 20mm wide x 30mm thick sealant (both sides) with 40mm Stone Mineral Wool backing	49 (-1;-4) dB
WYC385361/AR1/P014	Test Description	Sealfire W200. 30mm wide x 10mm thick sealant (both sides) with PE backing material	47 (-1;-4) dB
WYC385361/AR1/P015	Test Description	Sealfire W200. 50mm wide x 5mm thick sealant (both sides) with 90mm Stone Mineral Wool backing	51 (-1;-6) dB
WYC385361/AR1/P016	Test Description	Sealfire W250. 30mm wide x 10mm thick sealant (both sides) with PE backing material	48 (-1;-4) dB
WYC385361/AR1/P017	Test Description	Sealfire W250. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing	48 (0;-4) dB
WYC385361/AR1/P018	Test Description	Sealfire W100. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing	49 (-1;-5) dB
WYC385361/AR1/P019	Test Description	50mm thick Sealfire W1000 Compound	38 (0;-2) dB
WYC385361/AR1/P020	Test Description	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)	48 (-1;-4) dB
WYC385361/AR1/P022	Test Description	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)	44 (0;-3) dB
WYC385361/AR1/P023	Test Description	100mm thick Sealfire W1000 Compound	42 (-1;-3) dB
WYC385361/AR1/P024	Test Description	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)	48 (0;-3) dB
WYC385361/AR1/P025	Test Description	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)	47 (0;-3) dB
WYC385361/AR1/P026	Test Description	150mm thick Sealfire W1000 Compound	45 (0,-2) dB



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	N/A
Material Type	N/A
Variations:	
Test Description	Test of Partition wall. See Appendix 2 for construction detail

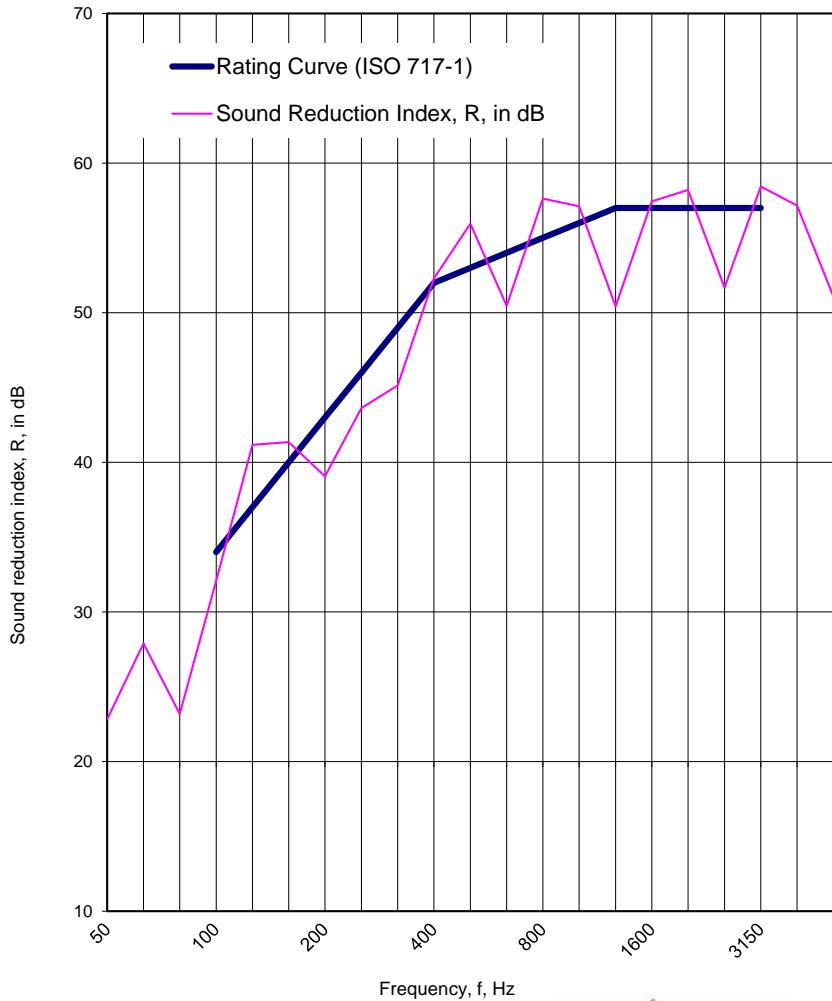
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P003

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

<i>f, Hz</i>	<i>R, dB</i>
50*	22.8
63*	27.9
80*	23.2
100	32.1
125	41.2
160	41.4
200	39.1
250	43.6
315	45.1
400	52.3
500	55.9
630	50.5
800	57.6
1000	57.1
1250	50.4
1600	57.4
2000	58.2
2500	51.7
3150	58.4
4000	57.2
5000	51.1
AAD	-27.5



$R_w = 53$ dB	$C_{(50 - 3150)} = -3$ dB	$C_{tr(50 - 3150)} = -12$ dB
$R_w + C = 52$ dB	$C_{(50 - 5000)} = -2$ dB	$C_{tr(50 - 5000)} = -12$ dB
$R_w + C_{tr} = 48$ dB	$C_{(100 - 5000)} = -1$ dB	$C_{tr(100 - 5000)} = -5$ dB

L. Grant-Riach

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	N/A
Material Type	N/A
Variations:	
Test Description	Test of partition wall with aperture for sealants not filled in

For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P004

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	19.1
63*	22.8
80*	17.0
100	28.7
125	20.0
160	16.7
200	9.6
250	7.2
315	7.7
400	5.1
500	6.5
630	6.5
800	6.5
1000	7.6
1250	8.3
1600	9.0
2000	9.5
2500	11.0
3150	10.9
4000	11.1
5000	11.1
AAD	-24.2



$$\begin{aligned}
 R_w &= 8 \text{ dB} \\
 R_w + C &= 8 \text{ dB} \\
 R_w + C_{tr} &= 8 \text{ dB}
 \end{aligned}$$

$$\begin{aligned}
 C_{(50 - 3150)} &= 0 \text{ dB} & C_{tr(50 - 3150)} &= 0 \text{ dB} \\
 C_{(50 - 5000)} &= 1 \text{ dB} & C_{tr(50 - 5000)} &= 0 \text{ dB} \\
 C_{(100 - 5000)} &= 1 \text{ dB} & C_{tr(100 - 5000)} &= 0 \text{ dB}
 \end{aligned}$$

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material)

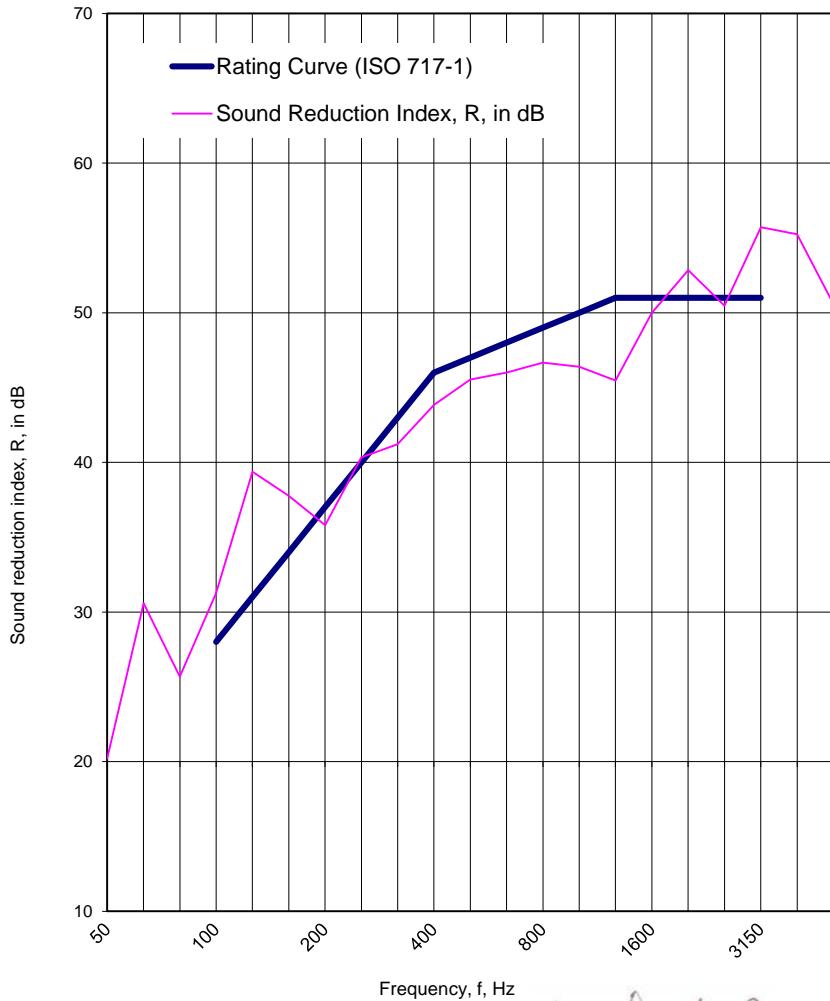
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P005

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	20.2
63*	30.6
80*	25.7
100	31.2
125	39.4
160	37.8
200	35.8
250	40.3
315	41.2
400	43.8
500	45.5
630	46.0
800	46.7
1000	46.4
1250	45.5
1600	50.0
2000	52.8
2500	50.5
3150	55.7
4000	55.2
5000	50.6
AAD	-21.7



$R_w =$	47 dB	$C_{(50 - 3150)} =$	0 dB	$C_{tr(50 - 3150)} =$	-7 dB
$R_w + C =$	47 dB	$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-7 dB
$R_w + C_{tr} =$	44 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-3 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material). Plasterboard fixed to exposed cassette

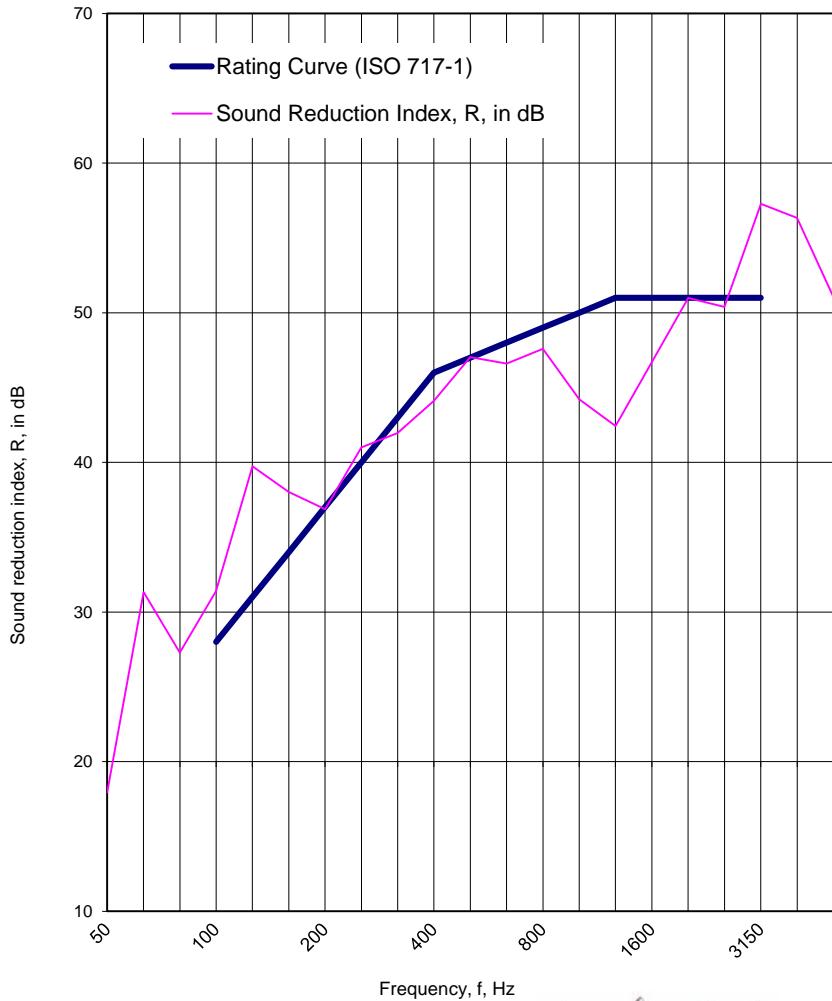
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P006

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	17.9
63*	31.3
80*	27.3
100	31.4
125	39.7
160	38.0
200	36.9
250	41.0
315	42.0
400	44.1
500	47.0
630	46.6
800	47.6
1000	44.2
1250	42.4
1600	46.7
2000	51.0
2500	50.4
3150	57.3
4000	56.3
5000	51.1
AAD	-25.1



$R_w =$	47 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-8 dB
$R_w + C =$	46 dB	$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-8 dB
$R_w + C_{tr} =$	44 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W100. 50mm wide x 25mm thick (no backing material)

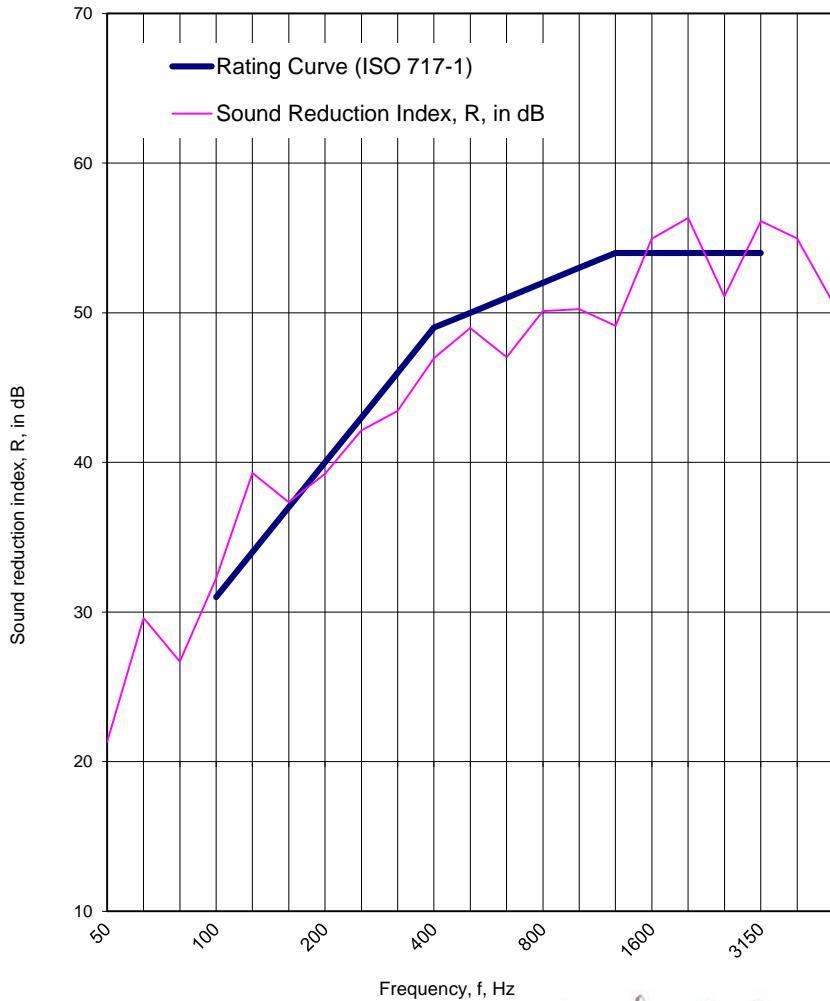
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P007

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	21.3
63*	29.6
80*	26.7
100	32.2
125	39.3
160	37.3
200	39.2
250	42.1
315	43.4
400	47.0
500	49.0
630	47.0
800	50.1
1000	50.2
1250	49.1
1600	54.9
2000	56.3
2500	51.1
3150	56.1
4000	55.0
5000	50.6
AAD	-23.7



$R_w = 50$ dB	$C_{(50 - 3150)} = -1$ dB	$C_{tr(50 - 3150)} = -9$ dB
$R_w + C = 50$ dB	$C_{(50 - 5000)} = -1$ dB	$C_{tr(50 - 5000)} = -9$ dB
$R_w + C_{tr} = 46$ dB	$C_{(100 - 5000)} = 0$ dB	$C_{tr(100 - 5000)} = -4$ dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W200. 50mm wide x 25mm thick (no backing material)

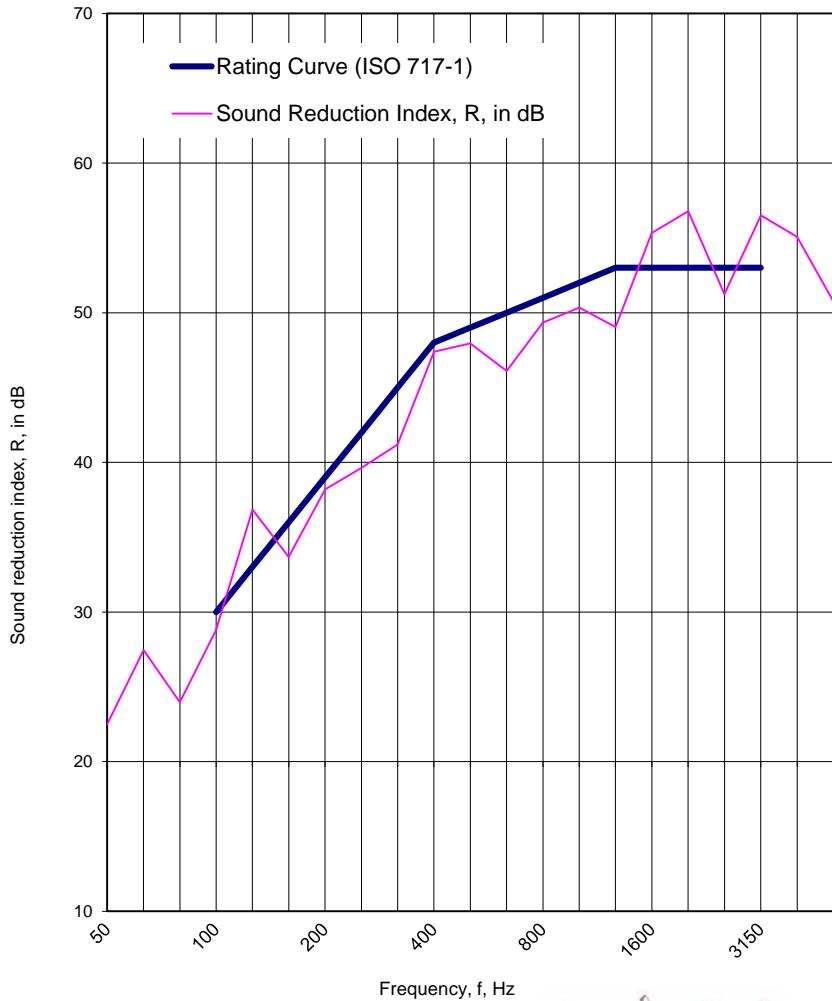
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P008

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	22.5
63*	27.5
80*	24.0
100	28.8
125	36.9
160	33.7
200	38.2
250	39.6
315	41.2
400	47.4
500	47.9
630	46.1
800	49.3
1000	50.3
1250	49.0
1600	55.3
2000	56.8
2500	51.2
3150	56.5
4000	55.1
5000	50.8
AAD	-25.1



$R_w =$	49 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-9 dB
$R_w + C =$	48 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-9 dB
$R_w + C_{tr} =$	44 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-5 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W200. 50mm wide x 25mm thick (with 70mm rockwool placed in void)

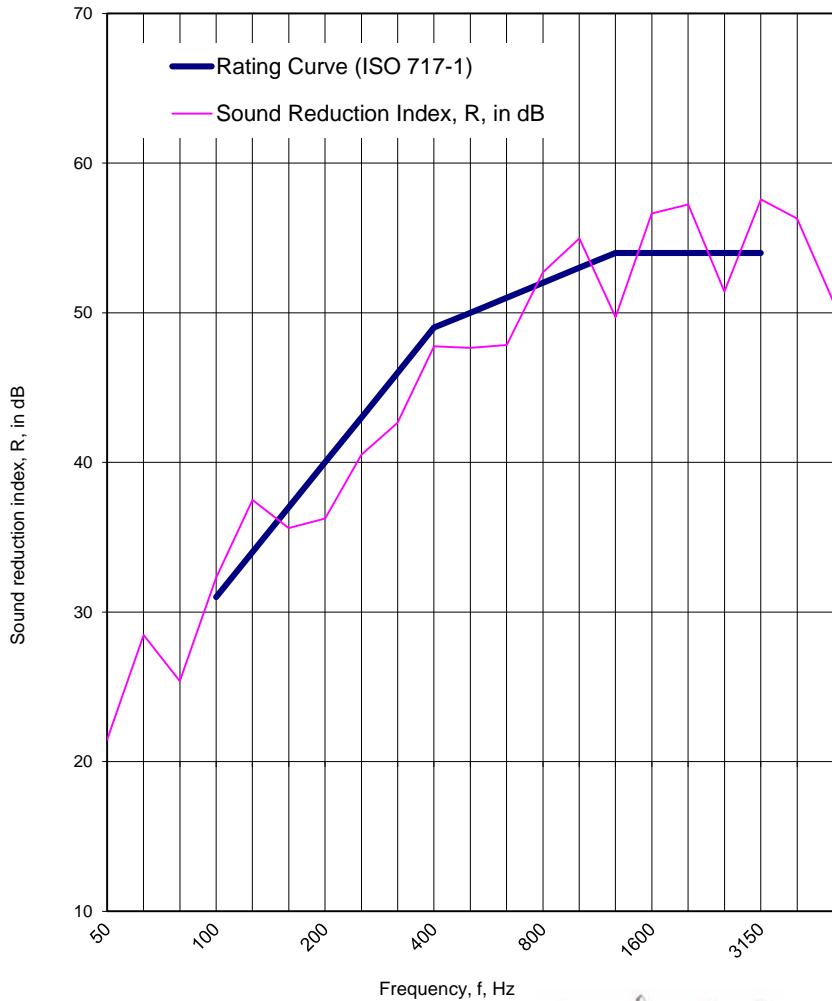
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P009

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

<i>f, Hz</i>	<i>R, dB</i>
50 ⁺	21.5
63 ⁺	28.5
80 ⁺	25.4
100	32.3
125	37.5
160	35.6
200	36.2
250	40.5
315	42.6
400	47.8
500	47.7
630	47.8
800	52.7
1000	55.0
1250	49.7
1600	56.6
2000	57.2
2500	51.4
3150	57.6
4000	56.3
5000	50.8
AAD	-24.7



$R_w = 50$ dB	$C_{(50 - 3150)} = -1$ dB	$C_{tr(50 - 3150)} = -9$ dB
$R_w + C = 49$ dB	$C_{(50 - 5000)} = -1$ dB	$C_{tr(50 - 5000)} = -9$ dB
$R_w + C_{tr} = 45$ dB	$C_{(100 - 5000)} = 0$ dB	$C_{tr(100 - 5000)} = -5$ dB

Lee Grant-Riach
Senior Technical Officer

⁺ indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W250. 50mm wide x 25mm thick (no backing material)

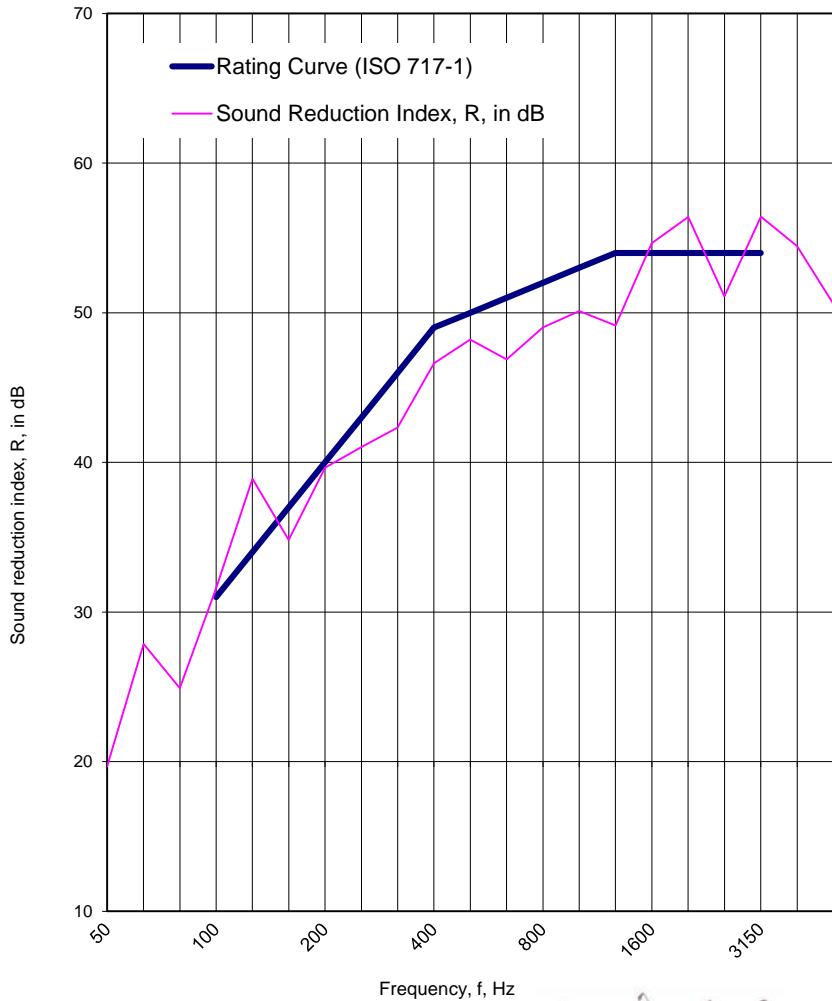
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P010

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	19.7
63*	27.9
80*	24.9
100	31.6
125	38.9
160	34.8
200	39.7
250	41.0
315	42.3
400	46.6
500	48.2
630	46.9
800	49.0
1000	50.1
1250	49.2
1600	54.6
2000	56.4
2500	51.1
3150	56.4
4000	54.4
5000	50.6
AAD	-30.1



$R_w =$	50 dB	$C_{(50 - 3150)} =$	-2 dB	$C_{tr(50 - 3150)} =$	-10 dB
$R_w + C =$	49 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-10 dB
$R_w + C_{tr} =$	45 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-5 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Retest - Sealfire W100. 30mm wide x 15mm thick sealant (both sides) with PE backing material

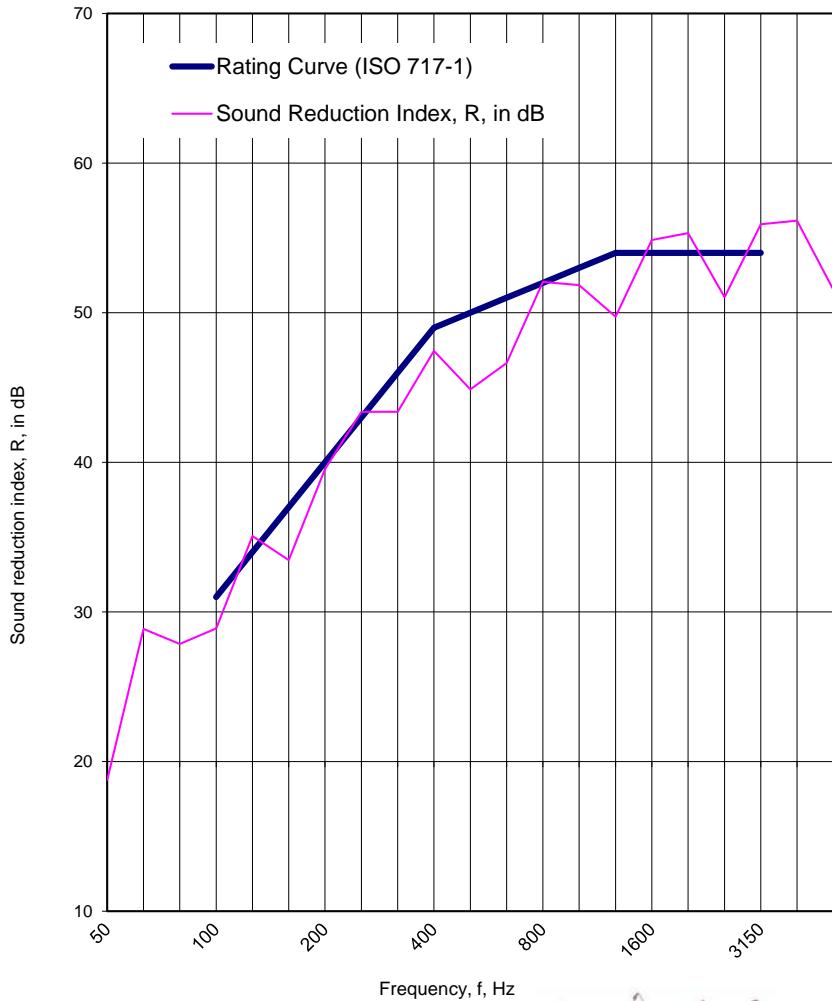
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P012

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50 ⁺	18.8
63 ⁺	28.9
80 ⁺	27.9
100	28.9
125	35.1
160	33.5
200	39.5
250	43.4
315	43.4
400	47.5
500	44.9
630	46.6
800	52.1
1000	51.8
1250	49.7
1600	54.9
2000	55.3
2500	51.0
3150	55.9
4000	56.2
5000	51.5
AAD	-28.1



$R_w = 50$ dB	$C_{(50 - 3150)} = -2$ dB	$C_{tr(50 - 3150)} = -10$ dB
$R_w + C = 49$ dB	$C_{(50 - 5000)} = -1$ dB	$C_{tr(50 - 5000)} = -10$ dB
$R_w + C_{tr} = 44$ dB	$C_{(100 - 5000)} = -1$ dB	$C_{tr(100 - 5000)} = -6$ dB

Lee Grant-Riach
Senior Technical Officer

⁺ indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W150. 20mm wide x 30mm thick sealant (both sides) with 40mm Stone Mineral Wool backing

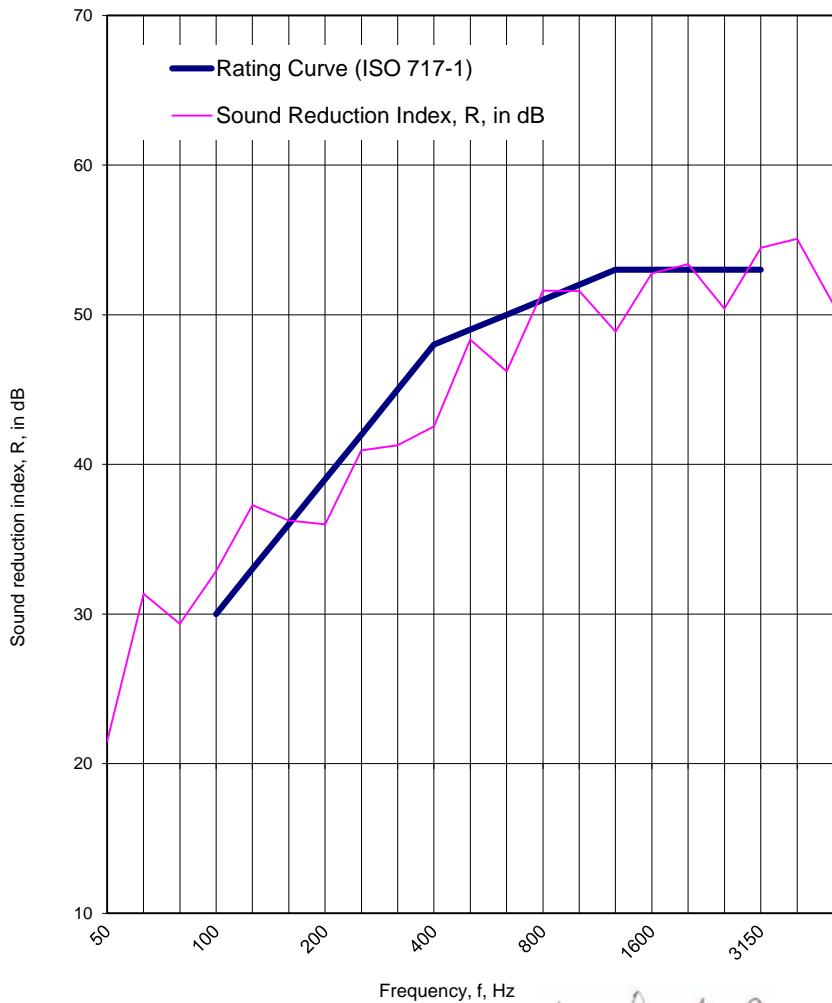
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P013

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	21.5
63*	31.3
80*	29.3
100	32.8
125	37.3
160	36.3
200	36.0
250	40.9
315	41.3
400	42.5
500	48.3
630	46.2
800	51.6
1000	51.6
1250	48.9
1600	52.8
2000	53.4
2500	50.4
3150	54.5
4000	55.1
5000	50.7
AAD	-25.1



$R_w =$	49 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-7 dB
$R_w + C =$	48 dB	$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-7 dB
$R_w + C_{tr} =$	45 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W200. 30mm wide x 10mm thick sealant (both sides) with PE backing material

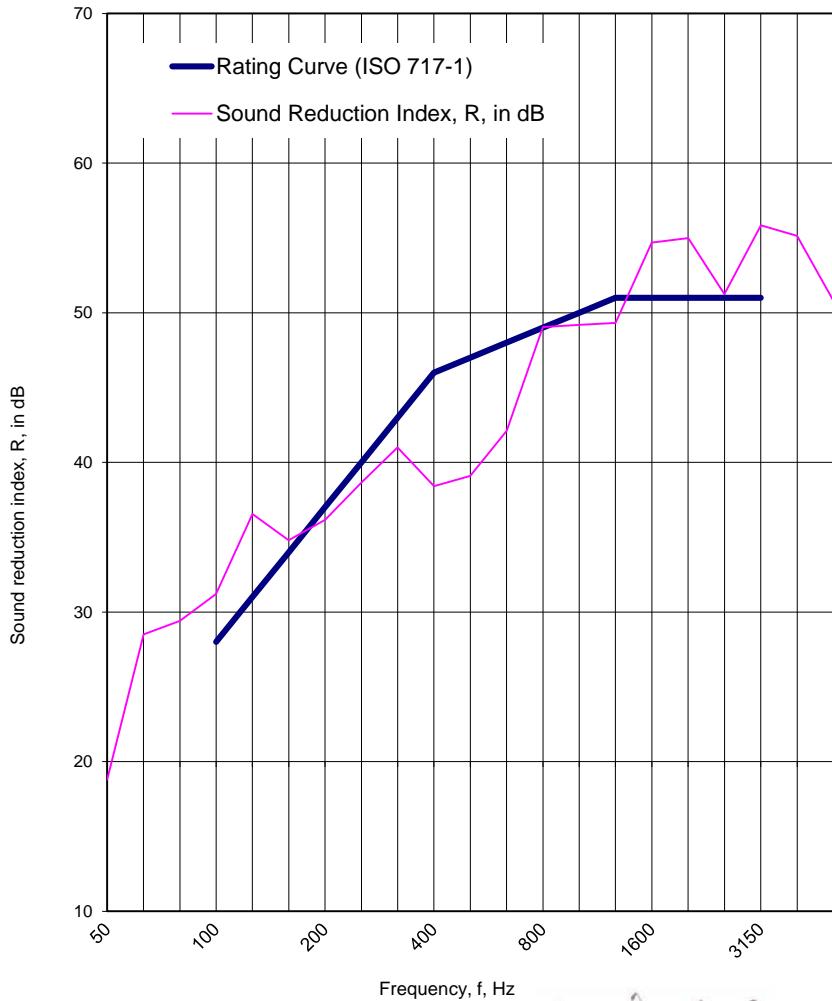
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P014

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50 ⁺	18.8
63 ⁺	28.5
80 ⁺	29.4
100	31.2
125	36.6
160	34.8
200	36.2
250	38.6
315	41.0
400	38.4
500	39.1
630	42.1
800	49.0
1000	49.2
1250	49.3
1600	54.7
2000	55.0
2500	51.2
3150	55.8
4000	55.1
5000	50.8
AAD	-28.1



$R_w =$	47 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-8 dB
$R_w + C =$	46 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-8 dB
$R_w + C_{tr} =$	43 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

Lee Grant-Riach
Senior Technical Officer

⁺ indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W200. 50mm wide x 5mm thick sealant (both sides) with 90mm Stone Mineral Wool backing

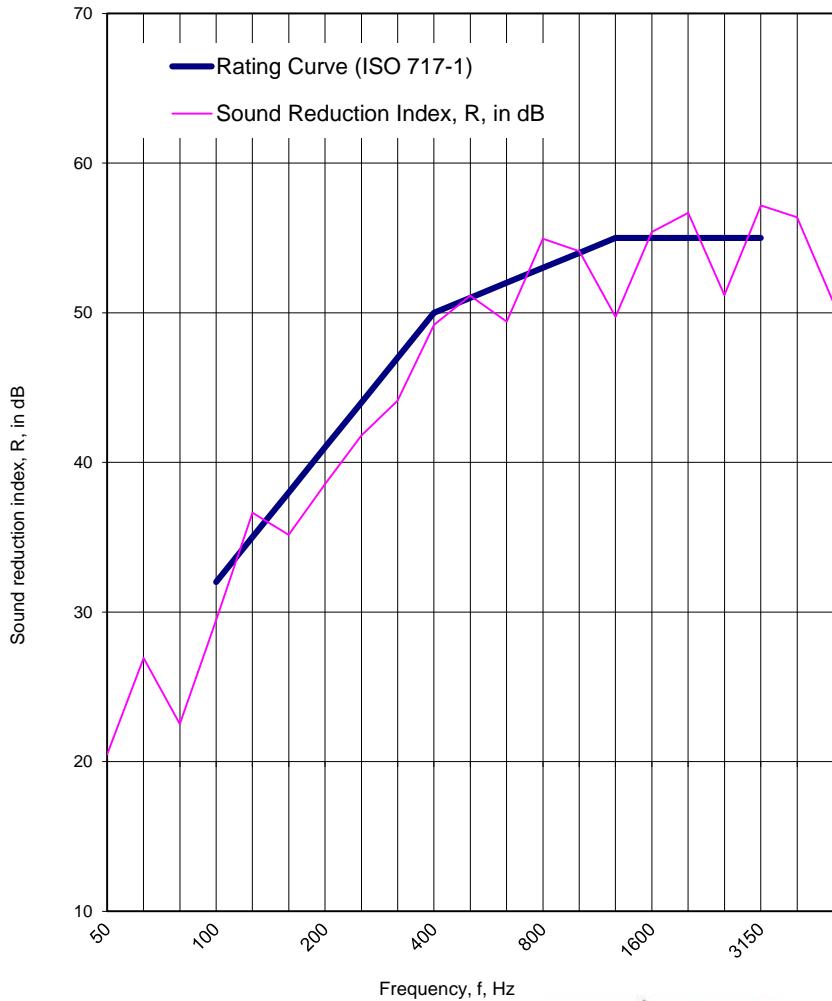
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P015

Date of Test: 12/07/2017

Source Room Volume: 82.40 m³
Receive Room Volume: 69.60 m³
Specimen Installed By: Exova
Area of Specimen (S): 1.90 m²
Temp. in Test Rooms: Sour. 18.0 Rec. 18.0 °C
Static Pressure: 99500.0 99600.0 Pa
Humidity in Test Rooms: 62.0 61.0 %

f, Hz	R, dB
50 ⁺	20.5
63 ⁺	26.9
80 ⁺	22.5
100	29.4
125	36.6
160	35.2
200	38.6
250	41.8
315	44.1
400	49.2
500	51.1
630	49.4
800	54.9
1000	54.1
1250	49.7
1600	55.4
2000	56.7
2500	51.2
3150	57.2
4000	56.4
5000	50.7
AAD	-25.5



$R_w =$	51 dB	$C_{(50 - 3150)} =$	-3 dB	$C_{tr(50 - 3150)} =$	-12 dB
$R_w + C =$	50 dB	$C_{(50 - 5000)} =$	-2 dB	$C_{tr(50 - 5000)} =$	-12 dB
$R_w + C_{tr} =$	45 dB	$C_{(100 - 5000)} =$	-1 dB	$C_{tr(100 - 5000)} =$	-6 dB

Lee Grant-Riach
Senior Technical Officer

⁺ indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W250. 30mm wide x 10mm thick sealant (both sides) with PE backing material

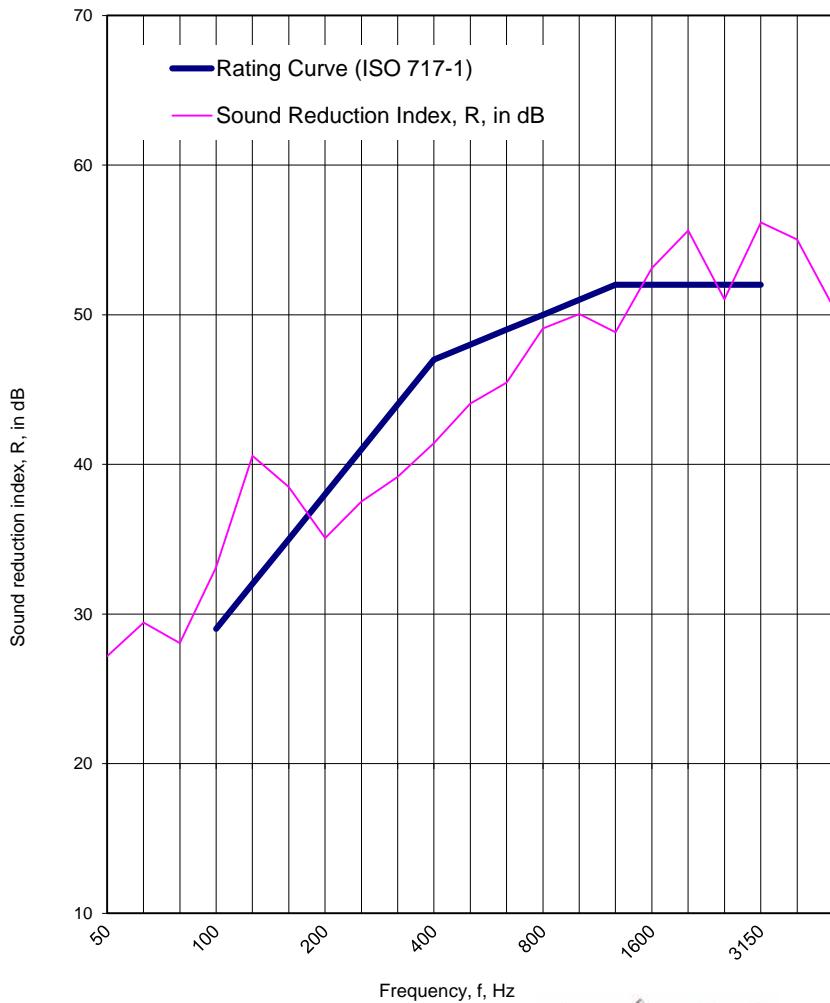
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P016

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	27.2
63*	29.4
80*	28.1
100	33.1
125	40.6
160	38.5
200	35.1
250	37.5
315	39.2
400	41.4
500	44.0
630	45.5
800	49.1
1000	50.0
1250	48.8
1600	53.1
2000	55.6
2500	51.0
3150	56.2
4000	55.0
5000	50.5
AAD	-30.4



$R_w = 48$ dB	$C_{(50 - 3150)} = -1$ dB	$C_{tr(50 - 3150)} = -6$ dB
$R_w + C = 47$ dB	$C_{(50 - 5000)} = 0$ dB	$C_{tr(50 - 5000)} = -6$ dB
$R_w + C_{tr} = 44$ dB	$C_{(100 - 5000)} = 0$ dB	$C_{tr(100 - 5000)} = -4$ dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W250. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing

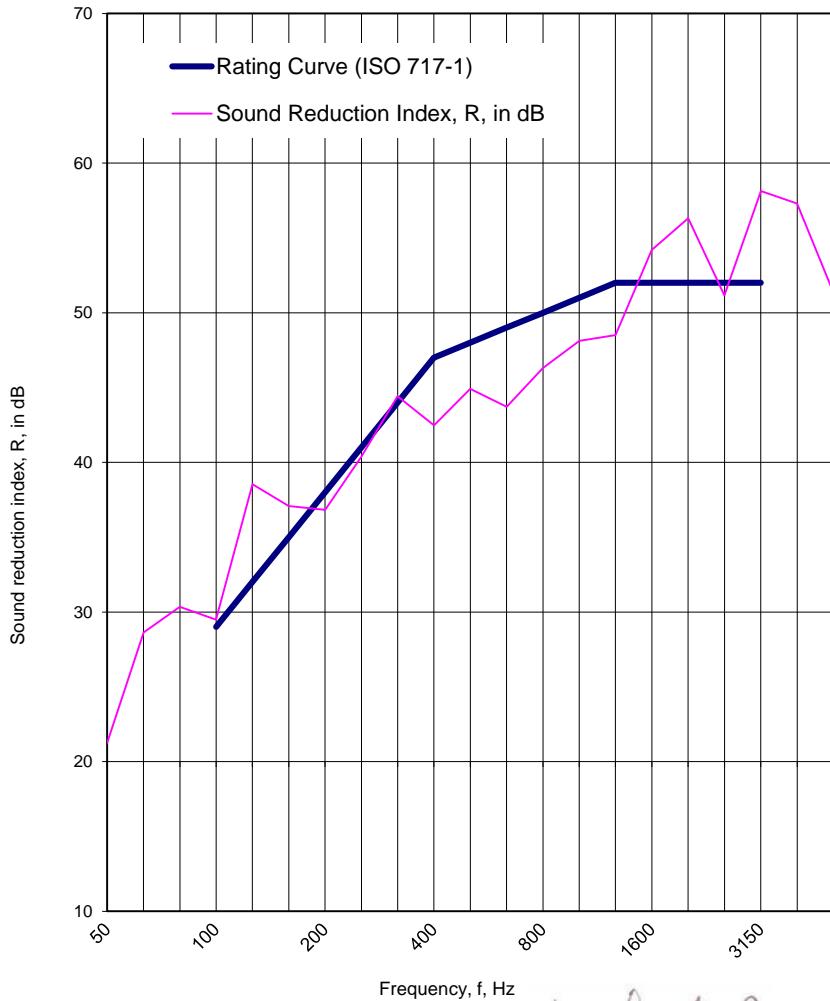
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P017

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	21.3
63*	28.6
80*	30.4
100	29.5
125	38.5
160	37.1
200	36.8
250	40.4
315	44.4
400	42.5
500	44.9
630	43.7
800	46.3
1000	48.1
1250	48.5
1600	54.2
2000	56.3
2500	51.2
3150	58.1
4000	57.3
5000	51.4
AAD	-25.6



$R_w = 48$ dB	$C_{(50 - 3150)} = -1$ dB	$C_{tr(50 - 3150)} = -7$ dB
$R_w + C = 48$ dB	$C_{(50 - 5000)} = 0$ dB	$C_{tr(50 - 5000)} = -7$ dB
$R_w + C_{tr} = 44$ dB	$C_{(100 - 5000)} = 0$ dB	$C_{tr(100 - 5000)} = -4$ dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Sealants
Material Type	Sealants
Variations:	
Test Description	Sealfire W100. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing

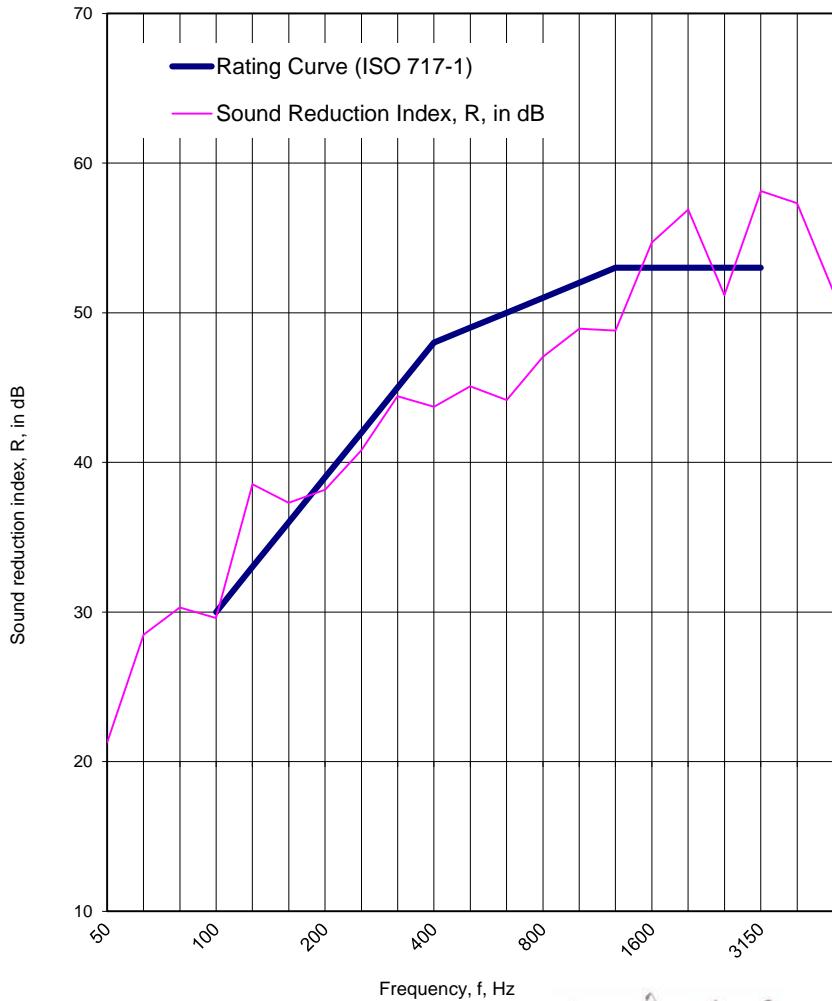
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P018

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	21.3
63*	28.5
80*	30.3
100	29.6
125	38.5
160	37.3
200	38.2
250	40.8
315	44.4
400	43.7
500	45.1
630	44.2
800	47.1
1000	48.9
1250	48.8
1600	54.7
2000	56.9
2500	51.2
3150	58.1
4000	57.3
5000	51.4
AAD	-30.1



$R_w =$	49 dB	$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-8 dB
$R_w + C =$	48 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-8 dB
$R_w + C_{tr} =$	44 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-5 dB

L. Grant-Riach

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	50mm thick Sealfire W1000 compound

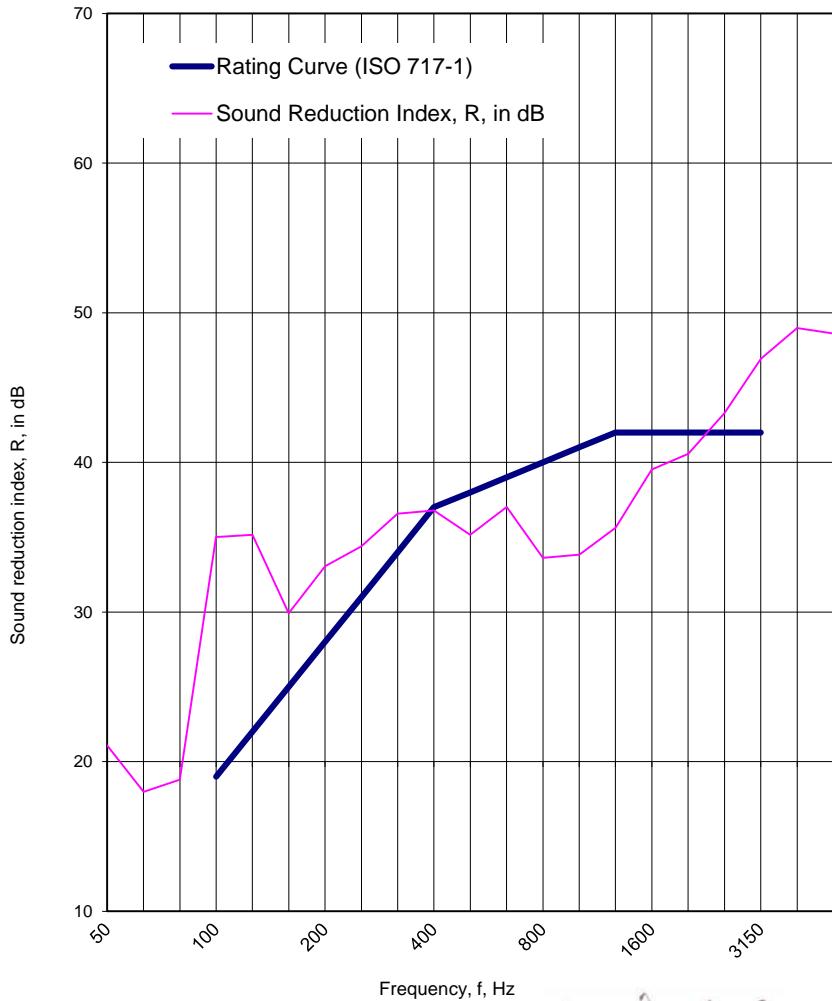
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P019

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	21.1
63*	18.0
80*	18.8
100	35.0
125	35.2
160	29.9
200	33.1
250	34.4
315	36.6
400	36.8
500	35.2
630	37.0
800	33.6
1000	33.8
1250	35.6
1600	39.5
2000	40.6
2500	43.3
3150	46.9
4000	49.0
5000	48.6
AAD	-28.9



$$\begin{aligned}
 R_w &= 38 \text{ dB} \\
 R_w + C &= 38 \text{ dB} \\
 R_w + C_{tr} &= 36 \text{ dB}
 \end{aligned}$$

$$\begin{aligned}
 C_{(50 - 3150)} &= -1 \text{ dB} & C_{tr(50 - 3150)} &= -5 \text{ dB} \\
 C_{(50 - 5000)} &= 0 \text{ dB} & C_{tr(50 - 5000)} &= -5 \text{ dB} \\
 C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -2 \text{ dB}
 \end{aligned}$$

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	50mm thick Sealfire W1000 compound with 50mm Stone Wool Mineral (on receive room side)

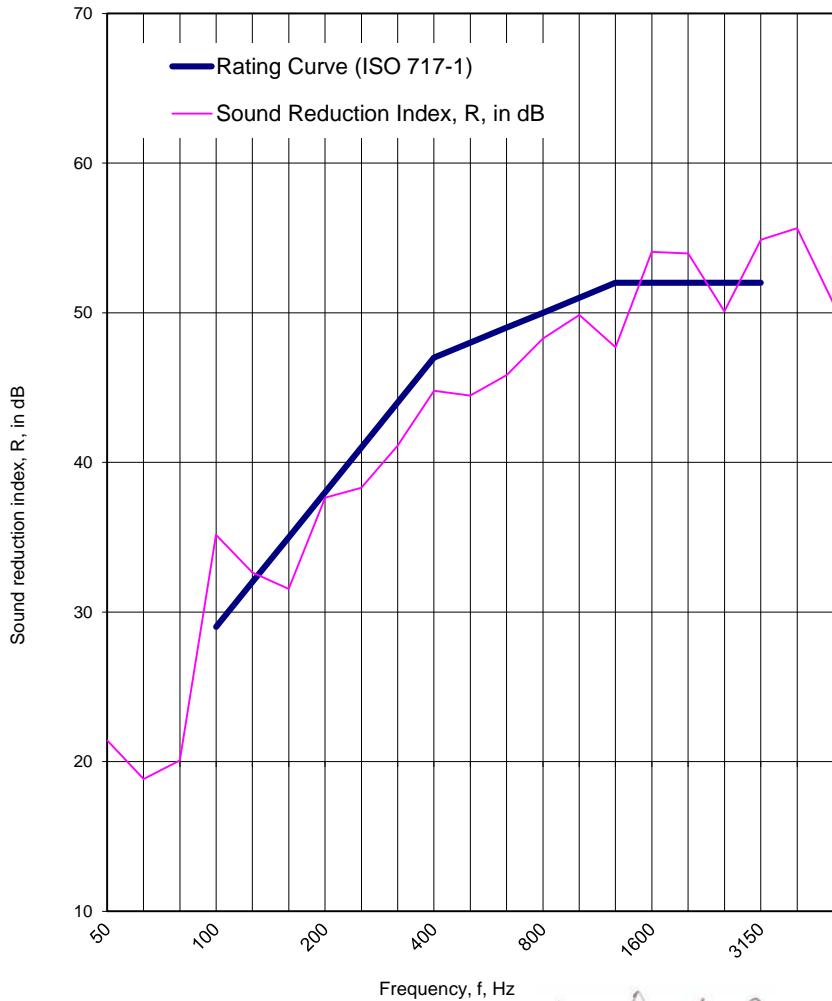
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P020

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

<i>f, Hz</i>	<i>R, dB</i>
50 ⁺	21.4
63 ⁺	18.8
80 ⁺	20.1
100	35.2
125	32.6
160	31.5
200	37.6
250	38.3
315	41.1
400	44.8
500	44.5
630	45.8
800	48.3
1000	49.9
1250	47.7
1600	54.1
2000	54.0
2500	50.1
3150	54.9
4000	55.7
5000	50.7
AAD	-27.5



$R_w = 48 \text{ dB}$	$C_{(50 - 3150)} = -2 \text{ dB}$	$C_{tr(50 - 3150)} = -11 \text{ dB}$
$R_w + C = 47 \text{ dB}$	$C_{(50 - 5000)} = -2 \text{ dB}$	$C_{tr(50 - 5000)} = -11 \text{ dB}$
$R_w + C_{tr} = 44 \text{ dB}$	$C_{(100 - 5000)} = 0 \text{ dB}$	$C_{tr(100 - 5000)} = -5 \text{ dB}$

Lee Grant-Riach
Senior Technical Officer

⁺ indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	50mm thick Sealfire W1000 compound with 50mm Stone Wool Mineral (on source room side)

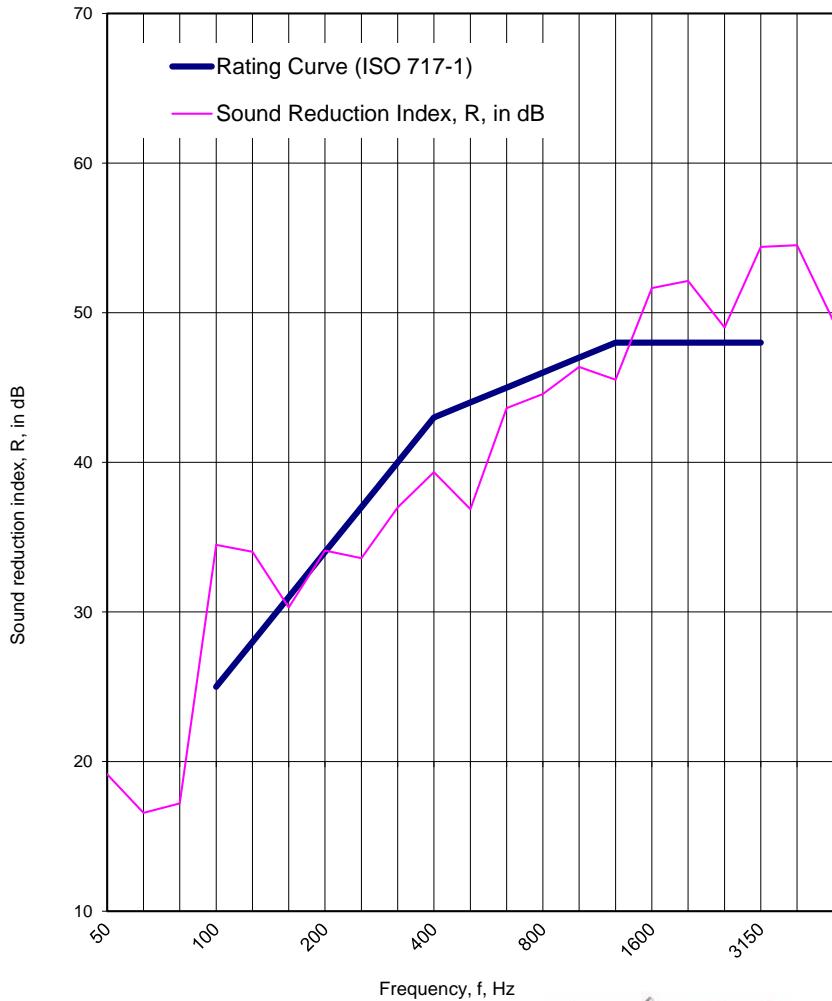
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P022

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	19.1
63*	16.6
80*	17.2
100	34.5
125	34.0
160	30.3
200	34.1
250	33.6
315	37.0
400	39.3
500	36.9
630	43.6
800	44.6
1000	46.4
1250	45.5
1600	51.6
2000	52.1
2500	49.0
3150	54.4
4000	54.5
5000	49.4
AAD	-23.8



$R_w =$	44 dB	$C_{(50 - 3150)} =$	-2 dB	$C_{tr(50 - 3150)} =$	-10 dB
$R_w + C =$	44 dB	$C_{(50 - 5000)} =$	-1 dB	$C_{tr(50 - 5000)} =$	-10 dB
$R_w + C_{tr} =$	41 dB	$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-4 dB

L. Grant-Riach

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	100mm thick Sealfire W1000 compound

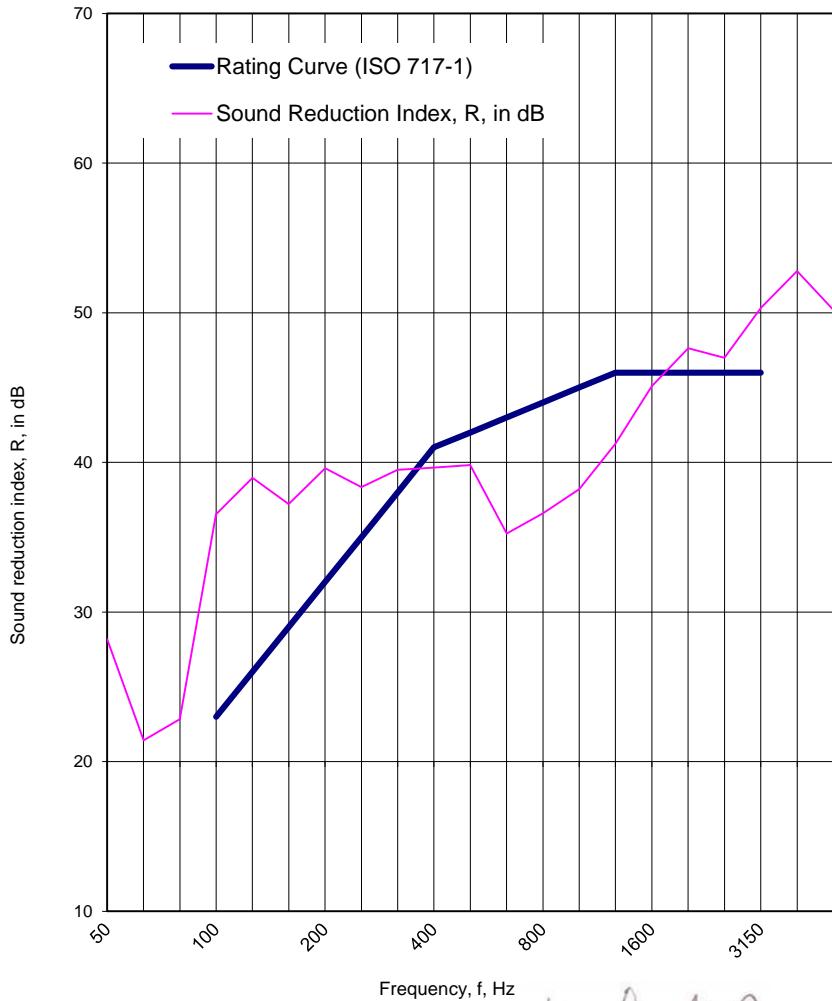
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P023

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f , Hz	R , dB
50*	28.2
63*	21.4
80*	22.8
100	36.5
125	39.0
160	37.2
200	39.6
250	38.3
315	39.5
400	39.6
500	39.8
630	35.2
800	36.6
1000	38.2
1250	41.2
1600	45.1
2000	47.6
2500	47.0
3150	50.3
4000	52.8
5000	50.2
AAD	-31.2



$R_w = 42$ dB	$C_{(50 - 3150)} = -1$ dB	$C_{tr(50 - 3150)} = -5$ dB
$R_w + C = 41$ dB	$C_{(50 - 5000)} = 0$ dB	$C_{tr(50 - 5000)} = -5$ dB
$R_w + C_{tr} = 39$ dB	$C_{(100 - 5000)} = 0$ dB	$C_{tr(100 - 5000)} = -3$ dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	90mm thick Sealfire W1000 compound with 50mm Stone Wool Mineral (on receive room side)

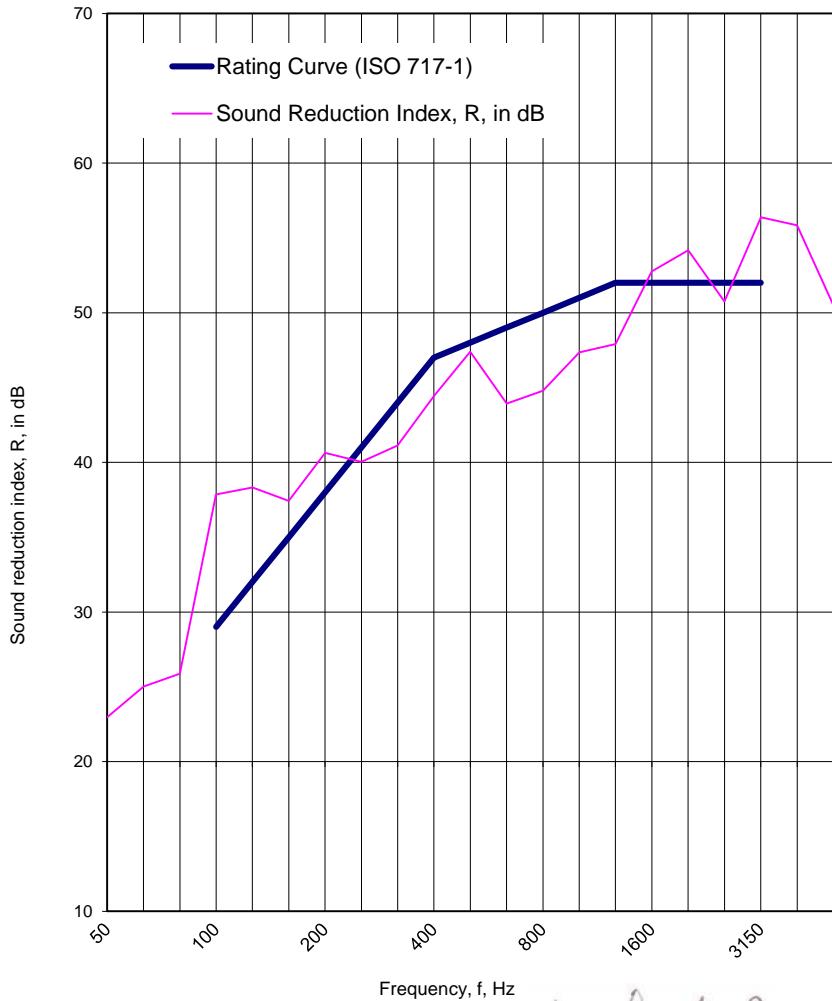
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P024

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
	Sour.	Rec.
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	23.0
63*	25.0
80*	25.9
100	37.9
125	38.3
160	37.4
200	40.6
250	40.0
315	41.1
400	44.4
500	47.4
630	43.9
800	44.8
1000	47.4
1250	47.9
1600	52.8
2000	54.2
2500	50.8
3150	56.4
4000	55.9
5000	50.5
AAD	-26.3



$$R_w = 48 \text{ dB}$$

$$R_w + C = 48 \text{ dB}$$

$$R_w + C_{tr} = 45 \text{ dB}$$

$$C_{(50 - 3150)} = -1 \text{ dB}$$

$$C_{tr(50 - 3150)} = -7 \text{ dB}$$

$$C_{(50 - 5000)} = 0 \text{ dB}$$

$$C_{tr(50 - 5000)} = -7 \text{ dB}$$

$$C_{(100 - 5000)} = 0 \text{ dB}$$

$$C_{tr(100 - 5000)} = -3 \text{ dB}$$

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	90mm thick Sealfire W1000 compound with 50mm Stone Wool Mineral (on source room side)

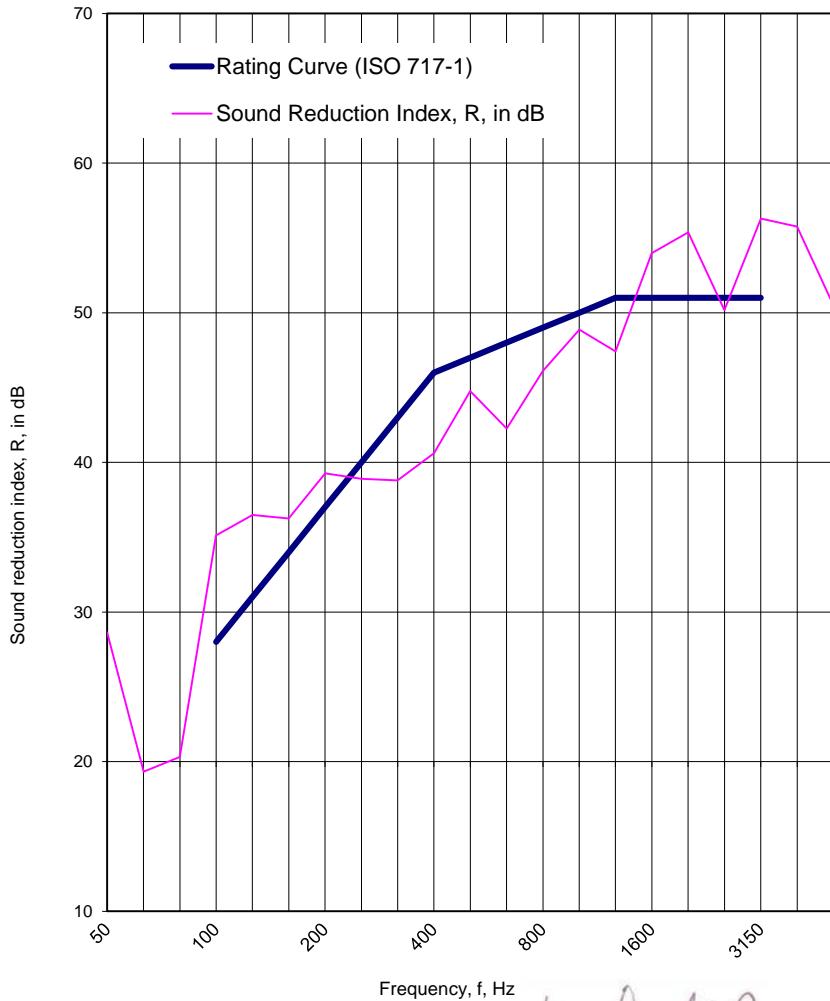
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P025

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 $^{\circ}C$
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	28.6
63*	19.3
80*	20.3
100	35.1
125	36.5
160	36.3
200	39.3
250	38.9
315	38.8
400	40.6
500	44.8
630	42.3
800	46.1
1000	48.9
1250	47.4
1600	54.0
2000	55.4
2500	50.2
3150	56.3
4000	55.8
5000	50.5
AAD	-27.1



$$R_w = 47 \text{ dB}$$

$$R_w + C = 47 \text{ dB}$$

$$R_w + C_{tr} = 44 \text{ dB}$$

$$C_{(50 - 3150)} = -1 \text{ dB} \quad C_{tr(50 - 3150)} = -10 \text{ dB}$$

$$C_{(50 - 5000)} = -1 \text{ dB} \quad C_{tr(50 - 5000)} = -10 \text{ dB}$$

$$C_{(100 - 5000)} = 0 \text{ dB} \quad C_{tr(100 - 5000)} = -3 \text{ dB}$$

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Sponsor:	Wurth Oy
Product Name/Desc.	See Variation
Product Type	Compound
Material Type	Compound
Variations:	
Test Description	150mm thick Sealfire W1000 compound

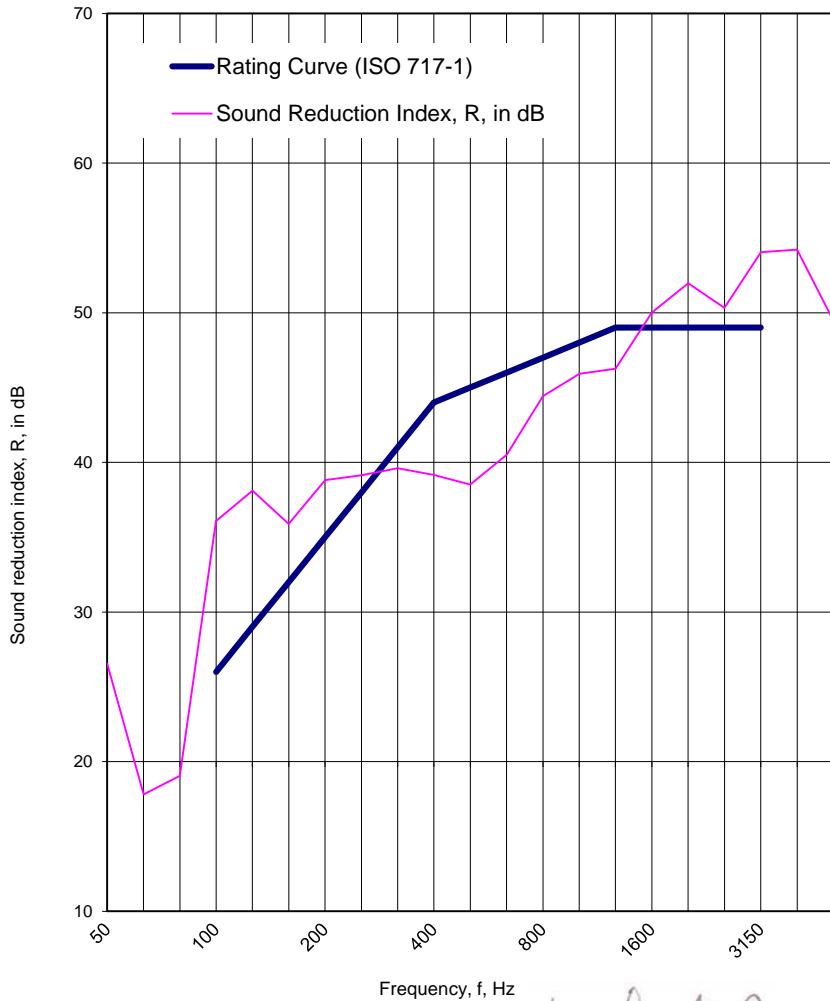
For detailed technical specification, please refer to Section 2 of the report

Data sheet Ref. WYC385361/AR1/P026

Date of Test: 12/07/2017

Source Room Volume:	82.40	m^3
Receive Room Volume:	69.60	m^3
Specimen Installed By:	Exova	
Area of Specimen (S):	1.90	m^2
Temp. in Test Rooms:	18.0	18.0 °C
Static Pressure:	99500.0	99600.0 Pa
Humidity in Test Rooms:	62.0	61.0 %

f, Hz	R, dB
50*	26.5
63*	17.8
80*	19.1
100	36.1
125	38.1
160	35.9
200	38.8
250	39.1
315	39.6
400	39.2
500	38.5
630	40.5
800	44.4
1000	45.9
1250	46.3
1600	50.0
2000	52.0
2500	50.3
3150	54.1
4000	54.2
5000	49.5
AAD	-25.6



$R_w = 45$ dB	$C_{(50 - 3150)} = -1$ dB	$C_{tr(50 - 3150)} = -9$ dB
$R_w + C = 45$ dB	$C_{(50 - 5000)} = 0$ dB	$C_{tr(50 - 5000)} = -9$ dB
$R_w + C_{tr} = 43$ dB	$C_{(100 - 5000)} = 0$ dB	$C_{tr(100 - 5000)} = -2$ dB

Lee Grant-Riach
Senior Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1

Appendix 4 – Summary of Results & Test Data Sheets – Dnew (22 Pages)

Product Type	Sealants / Compounds
---------------------	----------------------

Data Sheet Ref.	Variations	Test Result D_{new} (C;C_{tr})
WYC385361/AR1/P003	Test Description	Test of Partition wall. See Appendix 5 for construction detail
WYC385361/AR1/P004	Test Description	Test of partition wall with aperture for sealants not filled in
WYC385361/AR1/P005	Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material)
WYC385361/AR1/P006	Test Description	Sealfire W150. 50mm wide x 25mm thick (no backing material). Plasterboard fixed to exposed cassette
WYC385361/AR1/P007	Test Description	Sealfire W100. 50mm wide x 25mm thick (no backing material)
WYC385361/AR1/P008	Test Description	Sealfire W200. 50mm wide x 25mm thick (no backing material)
WYC385361/AR1/P009	Test Description	Sealfire W200. 50mm wide x 25mm thick (with 70mm rockwool placed in void)
WYC385361/AR1/P010	Test Description	Sealfire W250. 50mm wide x 25mm thick (no backing material)
WYC385361/AR1/P012	Test Description	Sealfire W100. 30mm wide x 15mm thick sealant (both sides) with PE backing material
WYC385361/AR1/P013	Test Description	Sealfire W150. 20mm wide x 30mm thick sealant (both sides) with 40mm Stone Mineral Wool backing
WYC385361/AR1/P014	Test Description	Sealfire W200. 30mm wide x 10mm thick sealant (both sides) with PE backing material
WYC385361/AR1/P015	Test Description	Sealfire W200. 50mm wide x 5mm thick sealant (both sides) with 90mm Stone Mineral Wool backing
WYC385361/AR1/P016	Test Description	Sealfire W250. 30mm wide x 10mm thick sealant (both sides) with PE backing material
WYC385361/AR1/P017	Test Description	Sealfire W250. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing
WYC385361/AR1/P018	Test Description	Sealfire W100. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing
WYC385361/AR1/P019	Test Description	50mm thick Sealfire W1000 Compound
WYC385361/AR1/P020	Test Description	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)
WYC385361/AR1/P022	Test Description	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)
WYC385361/AR1/P023	Test Description	100mm thick Sealfire W1000 Compound
WYC385361/AR1/P024	Test Description	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)
WYC385361/AR1/P025	Test Description	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)
WYC385361/AR1/P026	Test Description	150mm thick Sealfire W1000 Compound



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Partition Wall

Ref. No.: WYC385361/AR1/P003

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 88.80 m³

Static Pressure: 99500.0 Pa

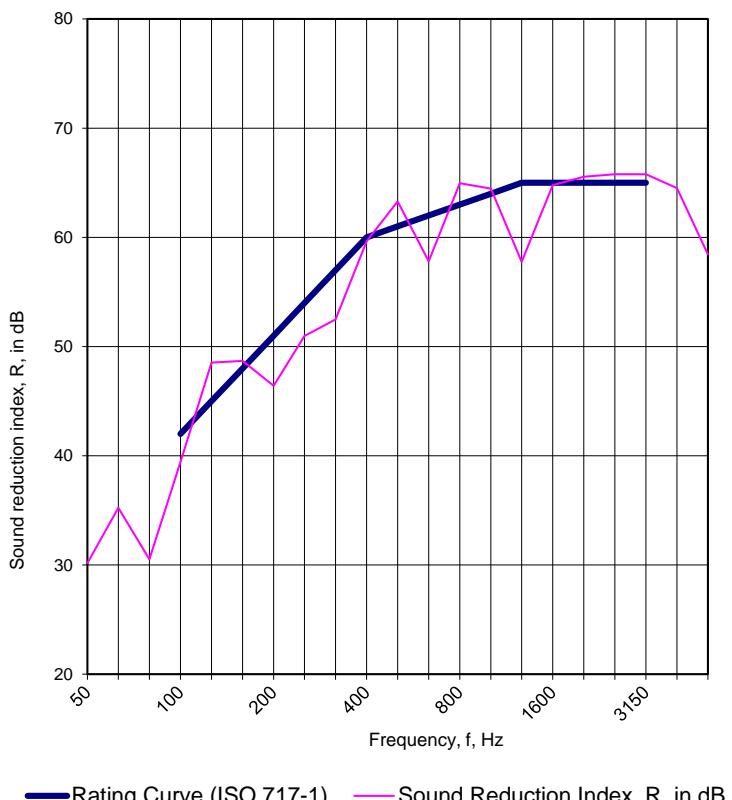
Receive Room Volume: 67.50 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Test of Partition wall. See Appendix 2 for construction detail

f, Hz	R, dB
50*	30.2
63*	35.2
80*	30.5
100	39.4
125	48.5
160	48.7
200	46.4
250	51.0
315	52.5
400	59.6
500	63.3
630	57.8
800	65.0
1000	64.5
1250	57.8
1600	64.8
2000	65.5
2500	65.8
3150	65.8
4000	64.5
5000	58.4
AAD	-26.7

Frequency range for rating in accordance with ISO 717-1



$$\begin{aligned}D_{n,e,w} &= 61 \text{ dB} \\D_{n,e,w} + C &= 60 \text{ dB} \\D_{n,e,w} + C_{tr} &= 55 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -3 \text{ dB} & C_{tr(50 - 3150)} &= -13 \text{ dB} \\C_{(50 - 5000)} &= -3 \text{ dB} & C_{tr(50 - 5000)} &= -13 \text{ dB} \\C_{(100 - 5000)} &= -1 \text{ dB} & C_{tr(100 - 5000)} &= -6 \text{ dB}\end{aligned}$$

L. Grant-Riach
Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1

**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Partition Wall

Ref. No.: WYC385361/AR1/P004

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

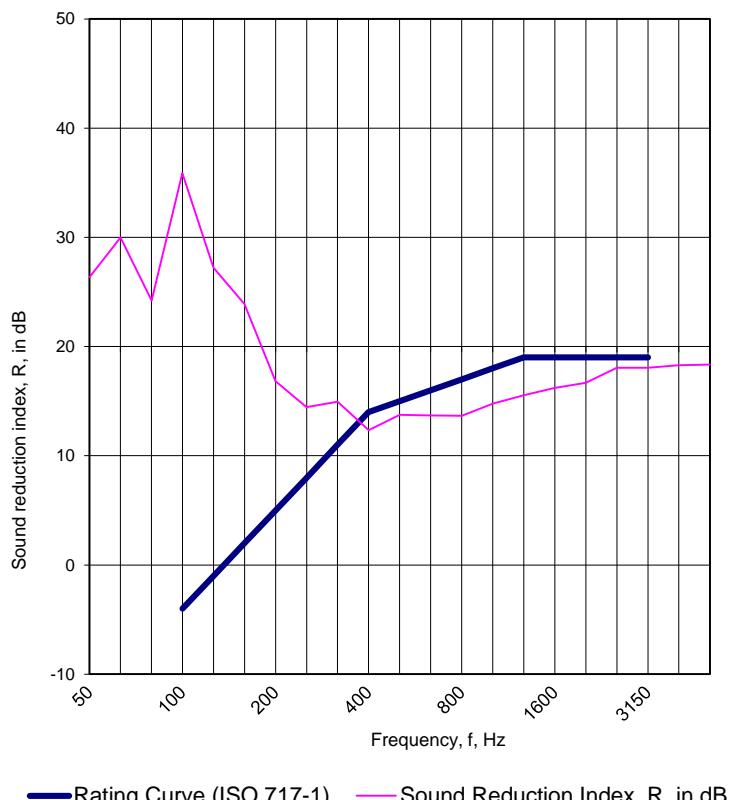
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Test of partition wall with aperture for sealants not filled in

f, Hz	R, dB
50*	26.4
63*	30.0
80*	24.2
100	35.9
125	27.2
160	23.9
200	16.8
250	14.4
315	14.9
400	12.3
500	13.8
630	13.7
800	13.7
1000	14.8
1250	15.5
1600	16.2
2000	16.7
2500	18.1
3150	18.1
4000	18.3
5000	18.3
AAD	-22.2



$$\begin{aligned} D_{n,e,w} &= 15 \text{ dB} \\ D_{n,e,w} + C &= 16 \text{ dB} \\ D_{n,e,w} + C_{tr} &= 15 \text{ dB} \end{aligned}$$

$$\begin{aligned} C_{(50 - 3150)} &= 1 \text{ dB} & C_{tr(50 - 3150)} &= 0 \text{ dB} \\ C_{(50 - 5000)} &= 1 \text{ dB} & C_{tr(50 - 5000)} &= 0 \text{ dB} \\ C_{(100 - 5000)} &= 1 \text{ dB} & C_{tr(100 - 5000)} &= 0 \text{ dB} \end{aligned}$$

L. Grant-Riach
Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



Test Specimen Name: Sealfire W150

Ref. No.: WYC385361/AR1/P005

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

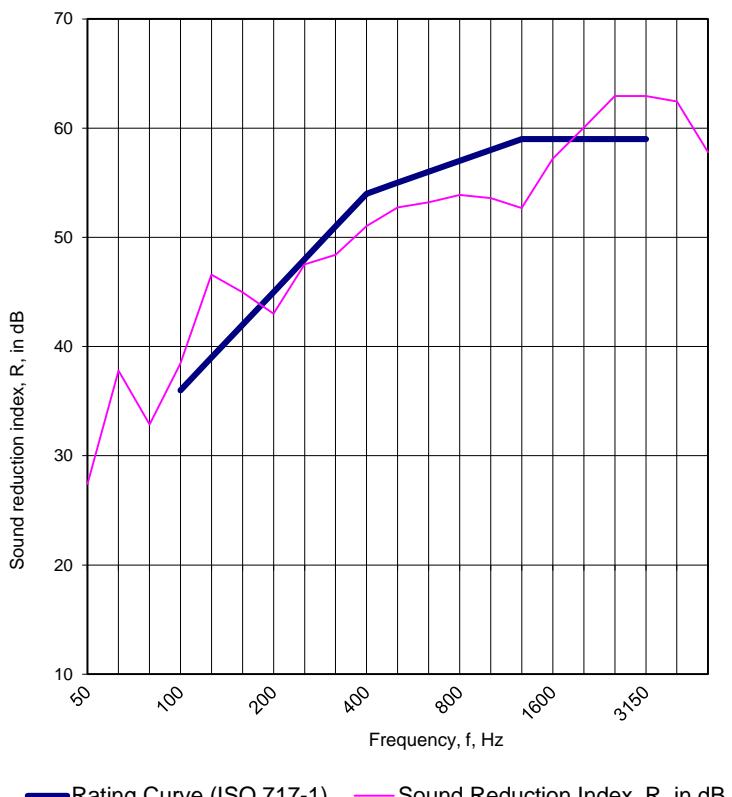
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W150. 50mm wide x 25mm thick (no backing material)

f, Hz	R, dB
50*	27.4
63*	37.8
80*	32.9
100	38.4
125	46.6
160	45.0
200	43.0
250	47.5
315	48.4
400	51.0
500	52.7
630	53.2
800	53.9
1000	53.6
1250	52.7
1600	57.2
2000	60.1
2500	62.9
3150	62.9
4000	62.5
5000	57.8
AAD	-28.7



$$\begin{aligned}D_{n,e,w} &= 55 \text{ dB} \\D_{n,e,w} + C &= 54 \text{ dB} \\D_{n,e,w} + C_{tr} &= 51 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -1 \text{ dB} & C_{tr(50 - 3150)} &= -8 \text{ dB} \\C_{(50 - 5000)} &= 0 \text{ dB} & C_{tr(50 - 5000)} &= -8 \text{ dB} \\C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -4 \text{ dB}\end{aligned}$$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W150

Ref. No.: WYC385361/AR1/P006

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

Static Pressure: 99500.0 Pa

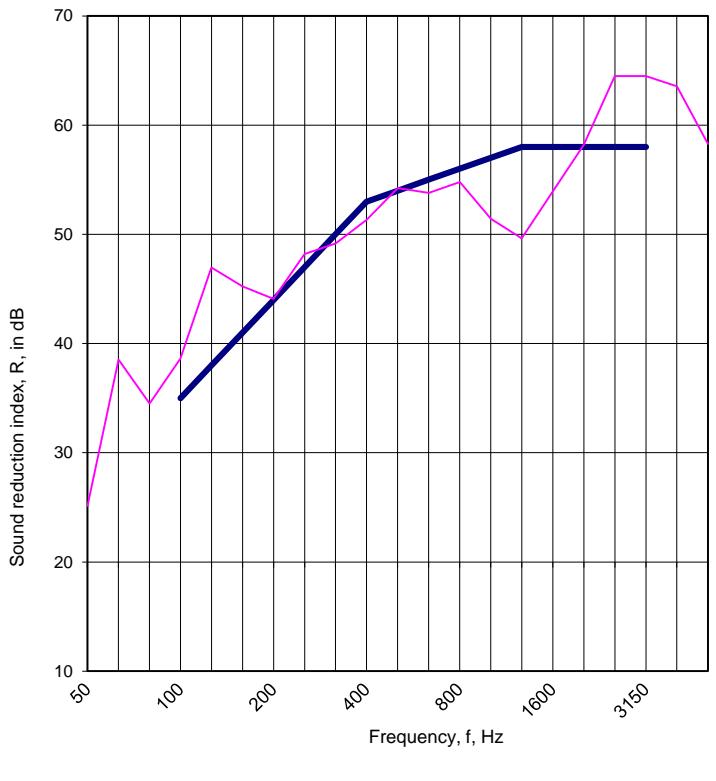
Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W150 . 50mm wide x 25mm thick (no backing material). Plasterboard fixed to exposed cassette

f, Hz	R, dB
50*	25.1
63*	38.5
80*	34.5
100	38.6
125	47.0
160	45.2
200	44.1
250	48.2
315	49.2
400	51.3
500	54.2
630	53.8
800	54.8
1000	51.4
1250	49.6
1600	53.9
2000	58.2
2500	64.5
3150	64.5
4000	63.5
5000	58.3
AAD	-22.9

Frequency range for rating in accordance with ISO 717-1



$D_{n,e,w} =$	54 dB
$D_{n,e,w} + C =$	54 dB
$D_{n,e,w} + C_{tr} =$	51 dB

$C_{(50 - 3150)} =$	-1 dB	$C_{tr(50 - 3150)} =$	-7 dB
$C_{(50 - 5000)} =$	0 dB	$C_{tr(50 - 5000)} =$	-7 dB
$C_{(100 - 5000)} =$	0 dB	$C_{tr(100 - 5000)} =$	-3 dB

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W100

Ref. No.: WYC385361/AR1/P007

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

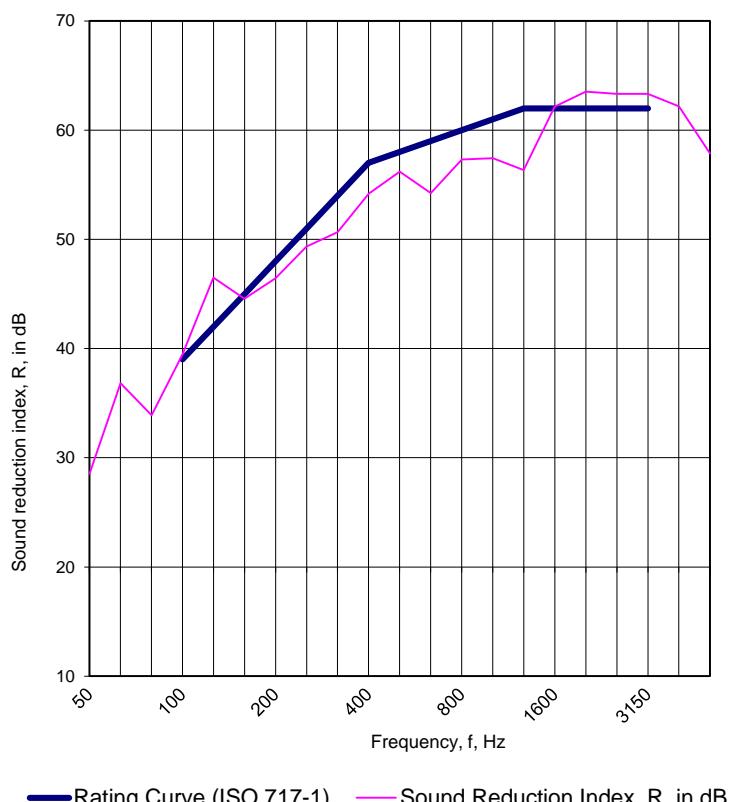
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

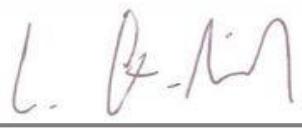
Test Specimen Description: Sealfire W100. 50mm wide x 25mm thick (no backing material)

f, Hz	R, dB
50*	28.5
63*	36.8
80*	33.9
100	39.4
125	46.5
160	44.6
200	46.4
250	49.3
315	50.7
400	54.2
500	56.2
630	54.2
800	57.3
1000	57.4
1250	56.3
1600	62.1
2000	63.5
2500	63.3
3150	63.3
4000	62.2
5000	57.9
AAD	-28.3



$$\begin{aligned}D_{n,e,w} &= 58 \text{ dB} \\D_{n,e,w} + C &= 57 \text{ dB} \\D_{n,e,w} + C_{tr} &= 53 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -2 \text{ dB} & C_{tr(50 - 3150)} &= -9 \text{ dB} \\C_{(50 - 5000)} &= -1 \text{ dB} & C_{tr(50 - 5000)} &= -9 \text{ dB} \\C_{(100 - 5000)} &= -1 \text{ dB} & C_{tr(100 - 5000)} &= -5 \text{ dB}\end{aligned}$$


Lee Grant-Riach

Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W200

Ref. No.: WYC385361/AR1/P008

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

Static Pressure: 99500.0 Pa

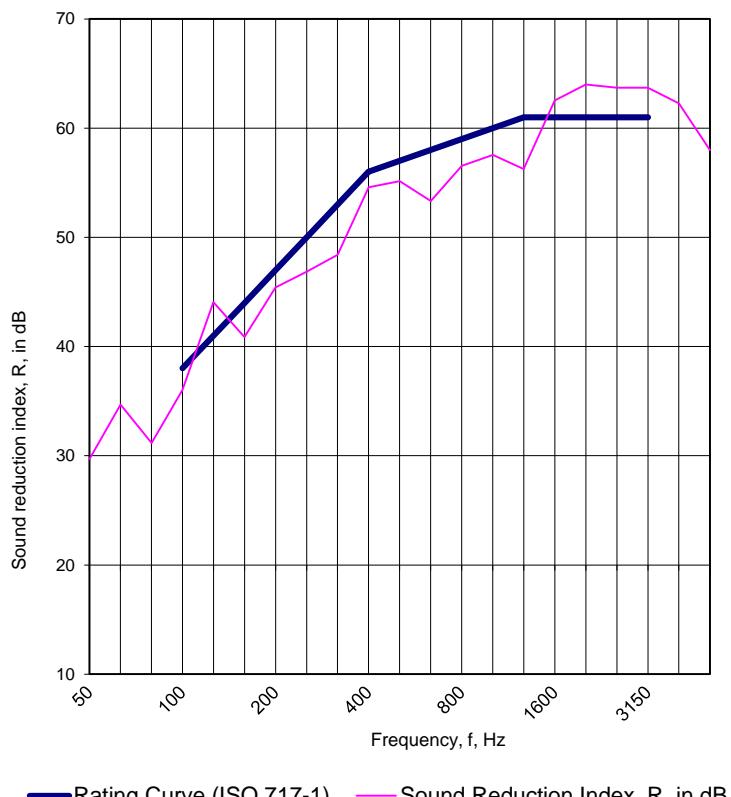
Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W200. 50mm wide x 25mm thick (no backing material)

f, Hz	R, dB
50*	29.7
63*	34.7
80*	31.2
100	36.0
125	44.1
160	40.9
200	45.4
250	46.8
315	48.4
400	54.6
500	55.2
630	53.3
800	56.6
1000	57.6
1250	56.2
1600	62.5
2000	64.0
2500	63.7
3150	63.7
4000	62.3
5000	58.0
AAD	-32.0

Frequency range for rating in accordance with ISO 717-1



— Rating Curve (ISO 717-1) — Sound Reduction Index, R, in dB

$$\begin{aligned}D_{n,e,w} &= 57 \text{ dB} \\D_{n,e,w} + C &= 56 \text{ dB} \\D_{n,e,w} + C_{tr} &= 51 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -2 \text{ dB} & C_{tr(50 - 3150)} &= -10 \text{ dB} \\C_{(50 - 5000)} &= -1 \text{ dB} & C_{tr(50 - 5000)} &= -10 \text{ dB} \\C_{(100 - 5000)} &= -1 \text{ dB} & C_{tr(100 - 5000)} &= -6 \text{ dB}\end{aligned}$$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W200

Ref. No.: WYC385361/AR1/P009

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

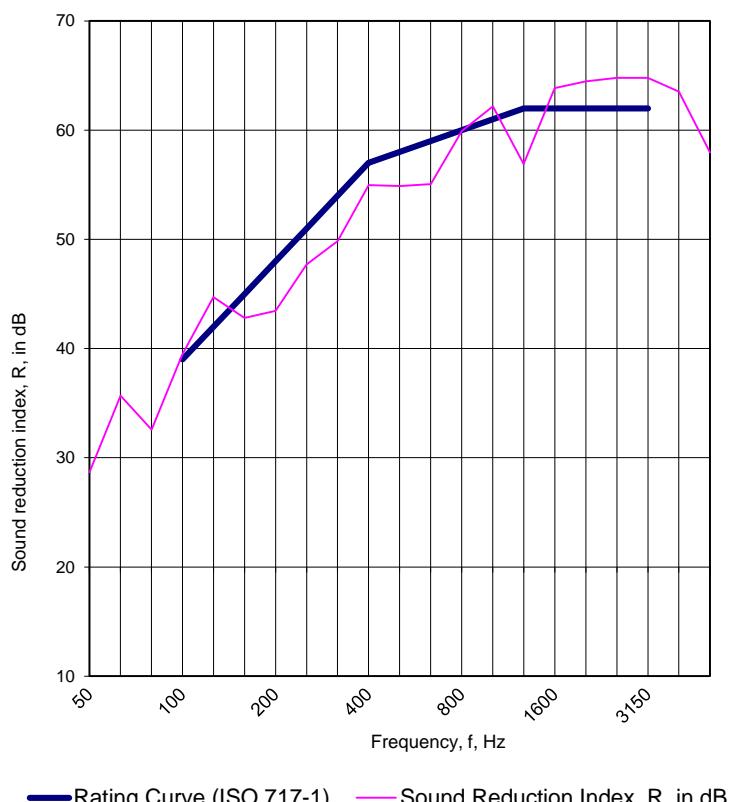
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W200. 50mm wide x 25mm thick (with 70mm rockwool placed in void)

f, Hz	R, dB
50*	28.7
63*	35.7
80*	32.6
100	39.5
125	44.7
160	42.8
200	43.5
250	47.7
315	49.8
400	55.0
500	54.9
630	55.1
800	59.9
1000	62.2
1250	56.9
1600	63.8
2000	64.5
2500	64.8
3150	64.8
4000	63.5
5000	58.0
AAD	-28.5



D_{n,e,w} = 58 dB
D_{n,e,w}+C = 57 dB
D_{n,e,w}+C_{tr} = 53 dB

C_(50 - 3150) = -2 dB **C_{tr (50 - 3150)} = -10 dB**
C_(50 - 5000) = -1 dB **C_{tr (50 - 5000)} = -10 dB**
C_(100 - 5000) = -1 dB **C_{tr (100 - 5000)} = -6 dB**


Lee Grant-Riach

Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



Test Specimen Name: Sealfire W250

Ref. No.: WYC385361/AR1/P010

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

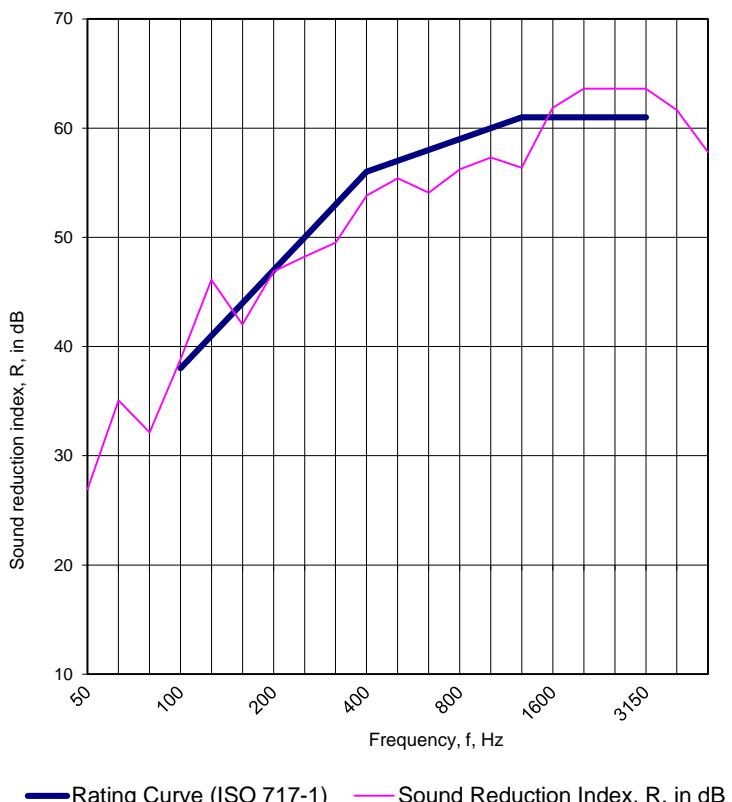
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W250. 50mm wide x 25mm thick (no backing material)

f, Hz	R, dB
50*	26.9
63*	35.1
80*	32.1
100	38.8
125	46.1
160	42.0
200	46.9
250	48.2
315	49.5
400	53.8
500	55.4
630	54.1
800	56.2
1000	57.3
1250	56.4
1600	61.9
2000	63.6
2500	63.6
3150	63.6
4000	61.7
5000	57.8
AAD	-25.1



$$\begin{aligned}D_{n,e,w} &= 57 \text{ dB} \\D_{n,e,w} + C &= 56 \text{ dB} \\D_{n,e,w} + C_{tr} &= 52 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -2 \text{ dB} & C_{tr(50 - 3150)} &= -10 \text{ dB} \\C_{(50 - 5000)} &= -1 \text{ dB} & C_{tr(50 - 5000)} &= -10 \text{ dB} \\C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -5 \text{ dB}\end{aligned}$$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: BMT/WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W100

Ref. No.: WYC385361/AR1/P012

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

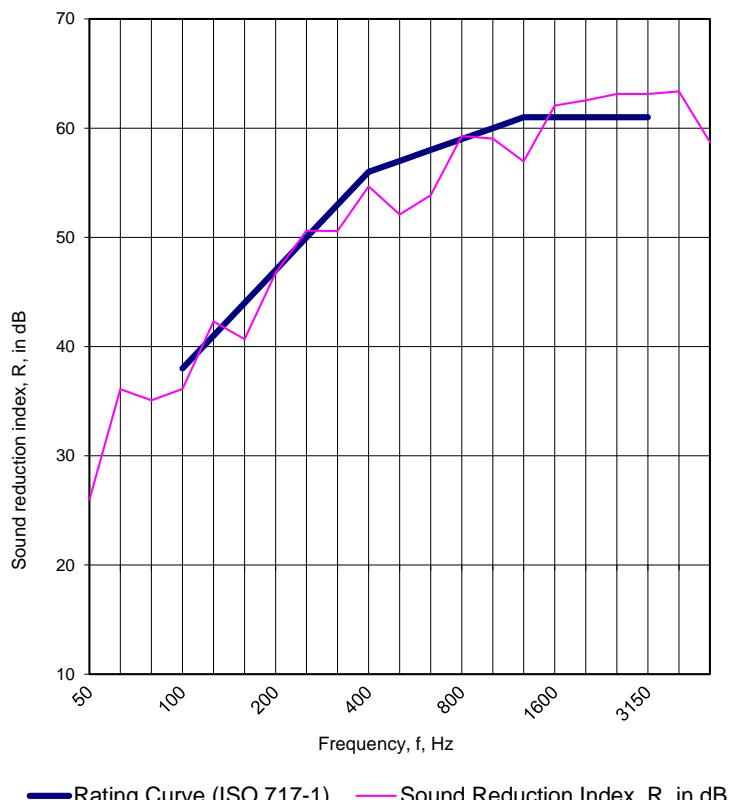
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W100. 30mm wide x 15mm thick sealant (both sides) with PE backing material

f, Hz	R, dB
50*	26.0
63*	36.1
80*	35.1
100	36.1
125	42.3
160	40.7
200	46.8
250	50.6
315	50.6
400	54.7
500	52.1
630	53.9
800	59.3
1000	59.1
1250	57.0
1600	62.1
2000	62.5
2500	63.1
3150	63.1
4000	63.4
5000	58.7
AAD	-23.2



$$\begin{aligned}D_{n,e,w} &= 57 \text{ dB} \\D_{n,e,w} + C &= 56 \text{ dB} \\D_{n,e,w} + C_{tr} &= 51 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -2 \text{ dB} & C_{tr(50 - 3150)} &= -10 \text{ dB} \\C_{(50 - 5000)} &= -1 \text{ dB} & C_{tr(50 - 5000)} &= -10 \text{ dB} \\C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -6 \text{ dB}\end{aligned}$$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



Test Specimen Name: Sealfire W150

Ref. No.: WYC385361/AR1/P013

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 88.80 m³

Static Pressure: 99500.0 Pa

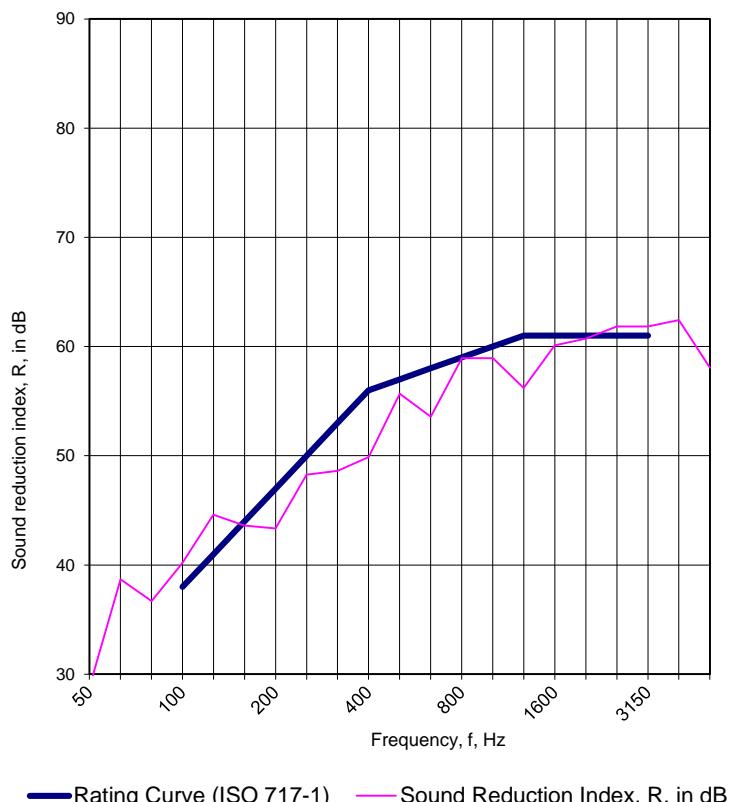
Receive Room Volume: 67.50 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W150. 20mm wide x 30mm thick sealant (both sides) with 40mm Stone Mineral Wool backing

f, Hz	R, dB
50*	28.8
63*	38.7
80*	36.7
100	40.2
125	44.6
160	43.6
200	43.3
250	48.3
315	48.6
400	49.9
500	55.7
630	53.6
800	58.9
1000	58.9
1250	56.2
1600	60.1
2000	60.7
2500	61.8
3150	61.8
4000	62.4
5000	58.1
AAD	-29.1

Frequency range for rating in accordance with ISO 717-1



$$\begin{aligned}D_{n,e,w} &= 57 \text{ dB} \\D_{n,e,w} + C &= 56 \text{ dB} \\D_{n,e,w} + C_{tr} &= 52 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -2 \text{ dB} & C_{tr(50 - 3150)} &= -8 \text{ dB} \\C_{(50 - 5000)} &= -1 \text{ dB} & C_{tr(50 - 5000)} &= -8 \text{ dB} \\C_{(100 - 5000)} &= -1 \text{ dB} & C_{tr(100 - 5000)} &= -5 \text{ dB}\end{aligned}$$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1

**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W200

Ref. No.: WYC385361/AR1/P014

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

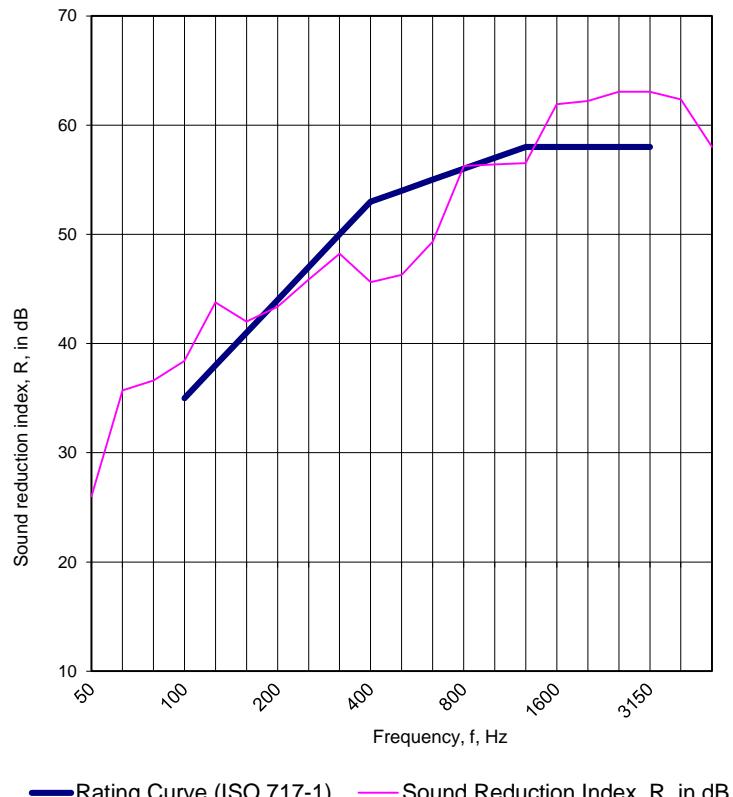
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W200. 30mm wide x 10mm thick sealant (both sides) with PE backing material

f, Hz	R, dB
50*	26.0
63*	35.7
80*	36.6
100	38.4
125	43.8
160	42.0
200	43.4
250	45.8
315	48.2
400	45.6
500	46.3
630	49.3
800	56.2
1000	56.4
1250	56.5
1600	61.9
2000	62.2
2500	63.1
3150	63.1
4000	62.4
5000	58.0
AAD	-26.4



D_{n,e,w} = 54 dB
D_{n,e,w}+C = 53 dB
D_{n,e,w}+C_{tr} = 50 dB

C_(50 - 3150) = -1 dB **C_{tr (50 - 3150)} = -7 dB**
C_(50 - 5000) = 0 dB **C_{tr (50 - 5000)} = -7 dB**
C_(100 - 5000) = 0 dB **C_{tr (100 - 5000)} = -4 dB**


Lee Grant-Riach

Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



Test Specimen Name: Sealfire W200

Ref. No.: WYC385361/AR1/P015

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

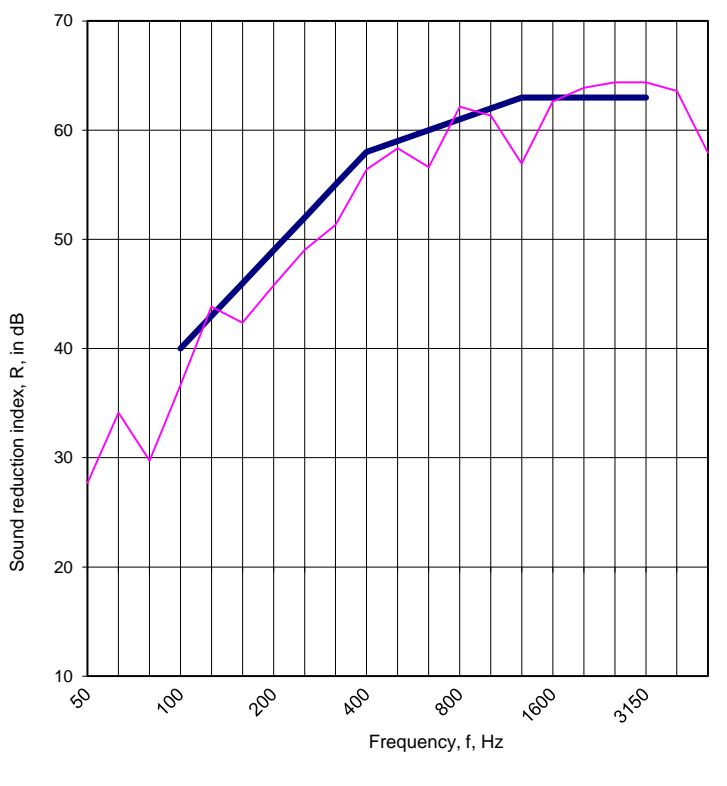
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W200. 50mm wide x 5mm thick sealant (both sides) with 90mm Stone Mineral Wool backing

f, Hz	R, dB
50*	27.7
63*	34.1
80*	29.7
100	36.6
125	43.8
160	42.4
200	45.8
250	49.0
315	51.3
400	56.4
500	58.3
630	56.6
800	62.2
1000	61.3
1250	56.9
1600	62.6
2000	63.9
2500	64.4
3150	64.4
4000	63.6
5000	57.9
AAD	-29.7



$$\begin{aligned}D_{n,e,w} &= 59 \text{ dB} \\D_{n,e,w} + C &= 57 \text{ dB} \\D_{n,e,w} + C_{tr} &= 52 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -3 \text{ dB} & C_{tr(50 - 3150)} &= -12 \text{ dB} \\C_{(50 - 5000)} &= -2 \text{ dB} & C_{tr(50 - 5000)} &= -12 \text{ dB} \\C_{(100 - 5000)} &= -1 \text{ dB} & C_{tr(100 - 5000)} &= -7 \text{ dB}\end{aligned}$$


Lee Grant-Riach

Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W250

Ref. No.: WYC385361/AR1/P016

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

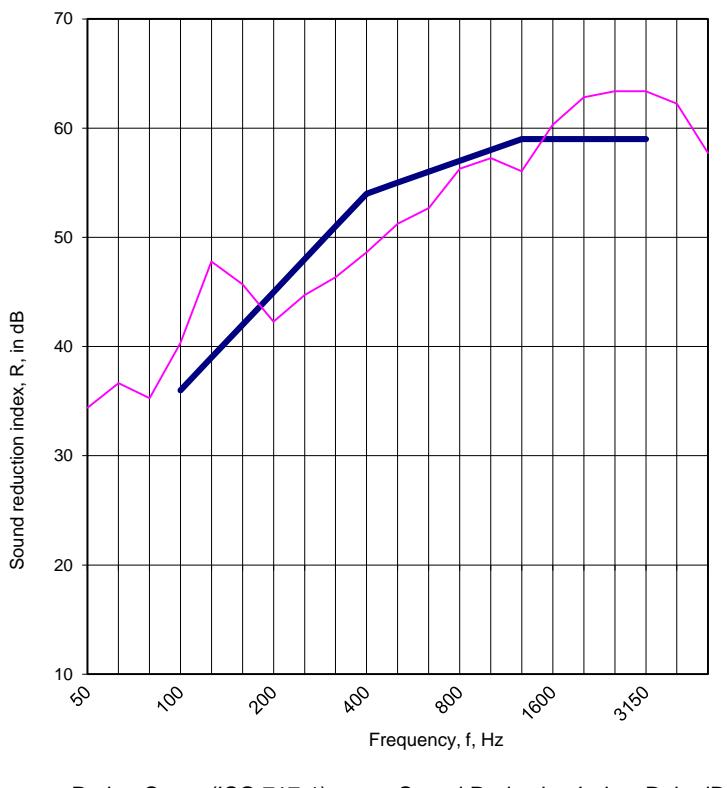
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W250. 30mm wide x 10mm thick sealant (both sides) with PE backing material

f, Hz	R, dB
50*	34.4
63*	36.6
80*	35.3
100	40.3
125	47.8
160	45.7
200	42.3
250	44.7
315	46.4
400	48.6
500	51.3
630	52.7
800	56.3
1000	57.3
1250	56.0
1600	60.3
2000	62.8
2500	63.4
3150	63.4
4000	62.2
5000	57.7
AAD	-27.5



$$\begin{aligned}D_{n,e,w} &= 55 \text{ dB} \\D_{n,e,w} + C &= 55 \text{ dB} \\D_{n,e,w} + C_{tr} &= 51 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -1 \text{ dB} & C_{tr(50 - 3150)} &= -6 \text{ dB} \\C_{(50 - 5000)} &= 0 \text{ dB} & C_{tr(50 - 5000)} &= -6 \text{ dB} \\C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -4 \text{ dB}\end{aligned}$$


Lee Grant-Riach

Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W250

Ref. No.: WYC385361/AR1/P017

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

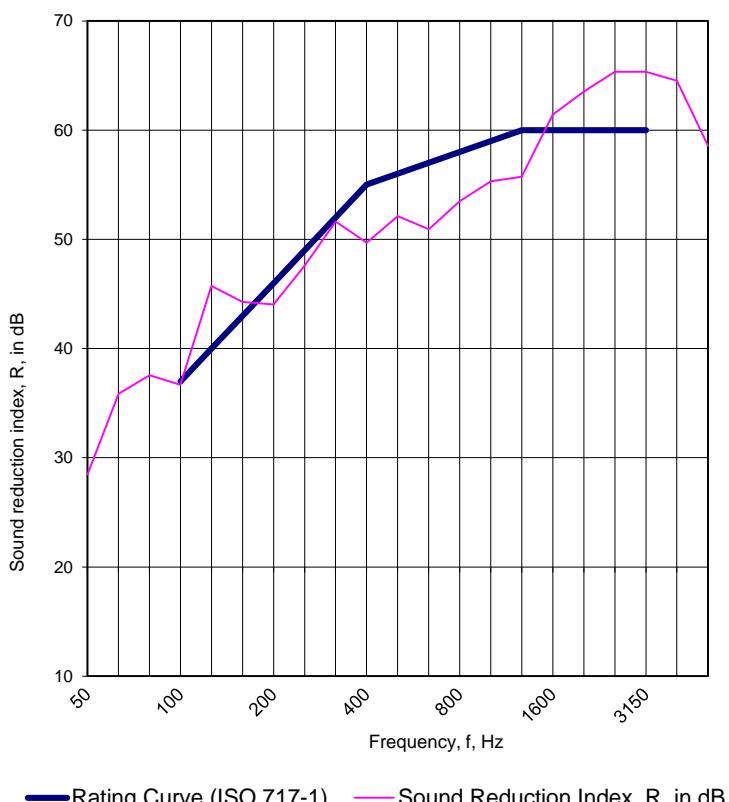
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W250. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing

f, Hz	R, dB
50*	28.5
63*	35.8
80*	37.6
100	36.7
125	45.7
160	44.3
200	44.0
250	47.6
315	51.6
400	49.7
500	52.1
630	50.9
800	53.5
1000	55.3
1250	55.7
1600	61.4
2000	63.5
2500	65.3
3150	65.3
4000	64.5
5000	58.6
AAD	-31.8



$$\begin{aligned}D_{n,e,w} &= 56 \text{ dB} \\D_{n,e,w} + C &= 55 \text{ dB} \\D_{n,e,w} + C_{tr} &= 51 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -1 \text{ dB} & C_{tr(50 - 3150)} &= -8 \text{ dB} \\C_{(50 - 5000)} &= -1 \text{ dB} & C_{tr(50 - 5000)} &= -8 \text{ dB} \\C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -5 \text{ dB}\end{aligned}$$

L. Grant-Riach
Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



Test Specimen Name: Sealfire W100

Ref. No.: WYC385361/AR1/P018

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

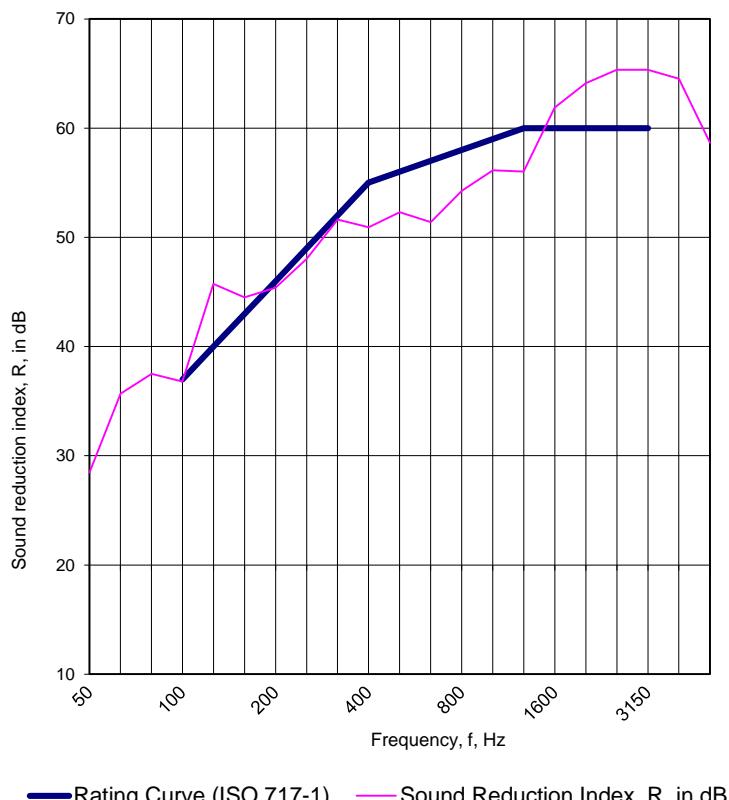
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: Sealfire W100. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing

f, Hz	R, dB
50*	28.5
63*	35.7
80*	37.5
100	36.8
125	45.7
160	44.5
200	45.4
250	48.0
315	51.6
400	50.9
500	52.3
630	51.4
800	54.3
1000	56.2
1250	56.0
1600	61.9
2000	64.1
2500	65.3
3150	65.3
4000	64.5
5000	58.7
AAD	-26.1



$$\begin{aligned}D_{n,e,w} &= 56 \text{ dB} \\D_{n,e,w} + C &= 56 \text{ dB} \\D_{n,e,w} + C_{tr} &= 52 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -1 \text{ dB} & C_{tr(50 - 3150)} &= -8 \text{ dB} \\C_{(50 - 5000)} &= 0 \text{ dB} & C_{tr(50 - 5000)} &= -8 \text{ dB} \\C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -5 \text{ dB}\end{aligned}$$


Lee Grant-Riach

Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W1000 Compound

Ref. No.: WYC385361/AR1/P019

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

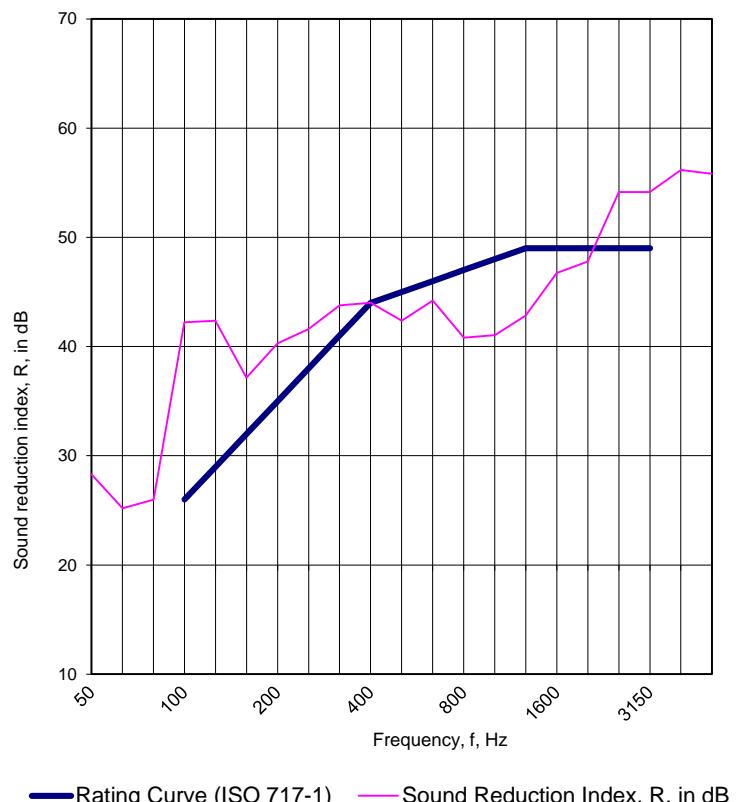
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: 50mm thick Sealfire W1000 Compound

f, Hz	R, dB
50*	28.3
63*	25.2
80*	26.0
100	42.2
125	42.4
160	37.1
200	40.3
250	41.6
315	43.8
400	44.0
500	42.4
630	44.2
800	40.8
1000	41.0
1250	42.8
1600	46.7
2000	47.8
2500	54.1
3150	54.1
4000	56.2
5000	55.8
AAD	-27.2



$$\begin{aligned}D_{n,e,w} &= 45 \text{ dB} \\D_{n,e,w} + C &= 45 \text{ dB} \\D_{n,e,w} + C_{tr} &= 43 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= 0 \text{ dB} & C_{tr(50 - 3150)} &= -5 \text{ dB} \\C_{(50 - 5000)} &= 0 \text{ dB} & C_{tr(50 - 5000)} &= -5 \text{ dB} \\C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -2 \text{ dB}\end{aligned}$$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: Sealfire W1000 Compound

Ref. No.: WYC385361/AR1/P020

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

Static Pressure: 99500.0 Pa

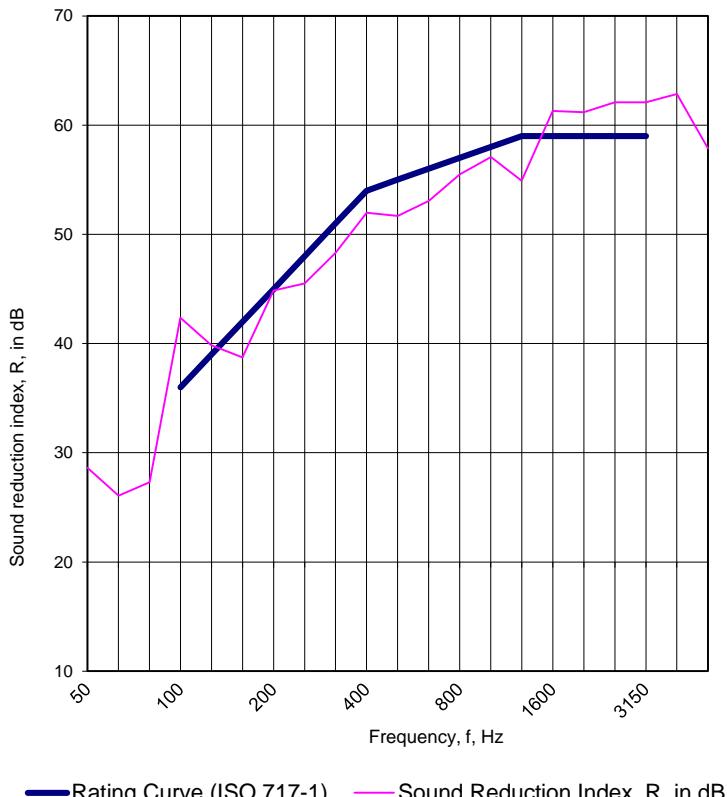
Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: 50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)

f, Hz	R, dB
50*	28.6
63*	26.1
80*	27.3
100	42.4
125	39.8
160	38.7
200	44.9
250	45.5
315	48.3
400	52.0
500	51.7
630	53.1
800	55.5
1000	57.1
1250	54.9
1600	61.3
2000	61.2
2500	62.1
3150	62.1
4000	62.9
5000	57.9
AAD	-23.4

Frequency range for rating in accordance with ISO 717-1



$$D_{n,e,w} = 55 \text{ dB}$$

$$D_{n,e,w} + C = 55 \text{ dB}$$

$$D_{n,e,w} + C_{tr} = 51 \text{ dB}$$

$$C_{(50 - 3150)} = -2 \text{ dB} \quad C_{tr(50 - 3150)} = -11 \text{ dB}$$

$$C_{(50 - 5000)} = -1 \text{ dB} \quad C_{tr(50 - 5000)} = -11 \text{ dB}$$

$$C_{(100 - 5000)} = 0 \text{ dB} \quad C_{tr(100 - 5000)} = -4 \text{ dB}$$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: 50mm thick Sealfire W1000 Compound

Ref. No.: WYC385361/AR1/P022

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

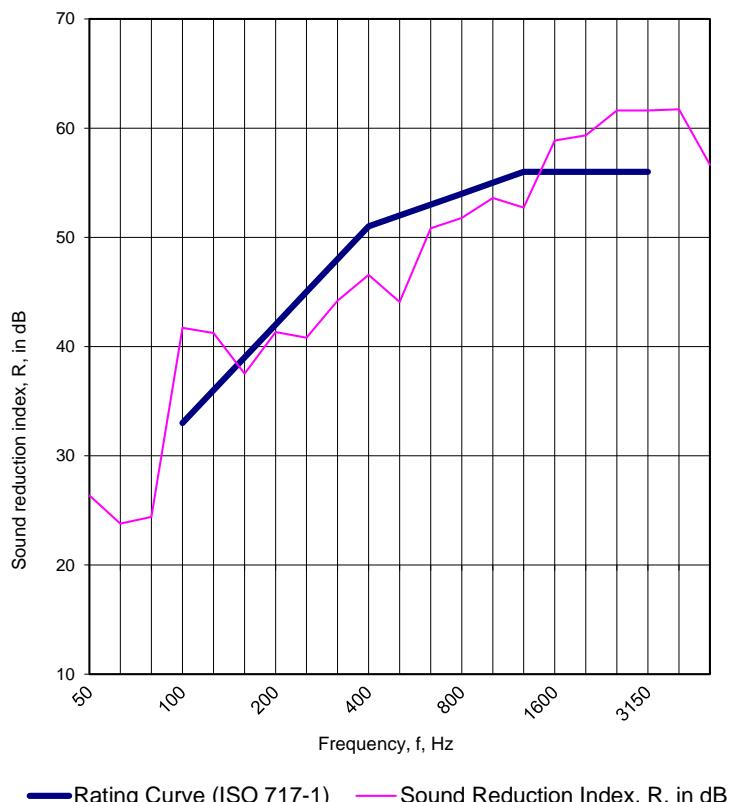
Static Pressure: 99500.0 Pa

Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: 50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)

f, Hz	R, dB
50*	26.4
63*	23.8
80*	24.4
100	41.7
125	41.2
160	37.5
200	41.3
250	40.8
315	44.2
400	46.6
500	44.1
630	50.8
800	51.8
1000	53.6
1250	52.7
1600	58.9
2000	59.3
2500	61.6
3150	61.6
4000	61.7
5000	56.6
AAD	-31.6



$$\begin{aligned}D_{n,e,w} &= 52 \text{ dB} \\D_{n,e,w} + C &= 51 \text{ dB} \\D_{n,e,w} + C_{tr} &= 48 \text{ dB}\end{aligned}$$

$$\begin{aligned}C_{(50 - 3150)} &= -2 \text{ dB} & C_{tr(50 - 3150)} &= -11 \text{ dB} \\C_{(50 - 5000)} &= -1 \text{ dB} & C_{tr(50 - 5000)} &= -11 \text{ dB} \\C_{(100 - 5000)} &= 0 \text{ dB} & C_{tr(100 - 5000)} &= -4 \text{ dB}\end{aligned}$$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



Test Specimen Name: 100mm thick Sealfire W1000 Compound

Ref. No.: WYC385361/AR1/P023

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 88.80 m³

Static Pressure: 99500.0 Pa

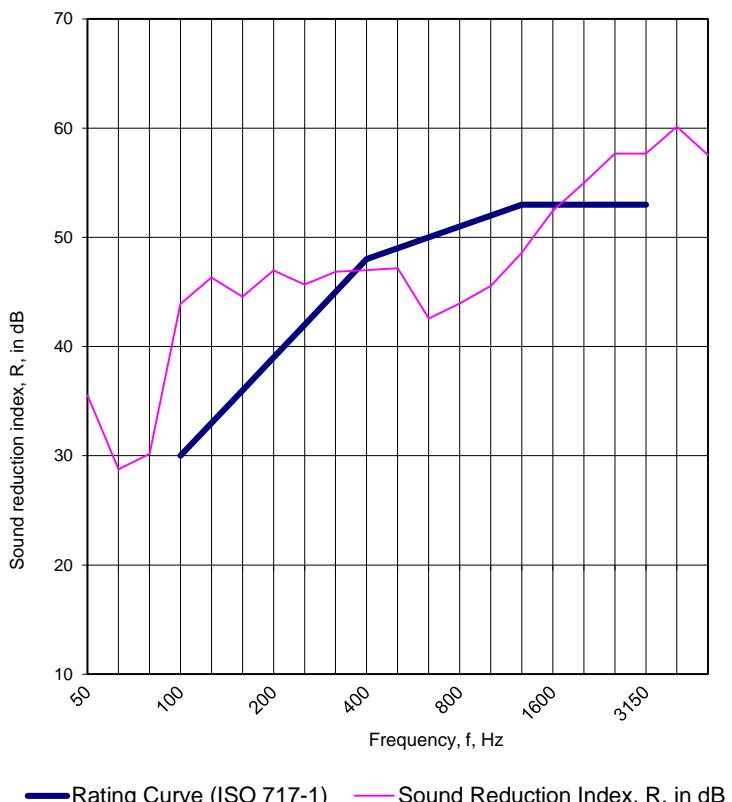
Receive Room Volume: 67.50 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: 100mm thick Sealfire W1000 Compound

f, Hz	R, dB
50*	35.5
63*	28.8
80*	30.2
100	43.9
125	46.3
160	44.6
200	47.0
250	45.7
315	46.8
400	47.0
500	47.2
630	42.6
800	43.9
1000	45.6
1250	48.6
1600	52.4
2000	55.0
2500	57.7
3150	57.7
4000	60.1
5000	57.6
AAD	-28.8

Frequency range for rating in accordance with ISO 717-1



D_{n,e,w} = 49 dB
D_{n,e,w}+C = 49 dB
D_{n,e,w}+C_{tr} = 47 dB

C_(50 - 3150) = -1 dB **C_{tr (50 - 3150)} = -5 dB**
C_(50 - 5000) = 0 dB **C_{tr (50 - 5000)} = -5 dB**
C_(100 - 5000) = 0 dB **C_{tr (100 - 5000)} = -3 dB**

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1

**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



Test Specimen Name: 90mm thick Sealfire W1000 Compound

Ref. No.: WYC385361/AR1/P024

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

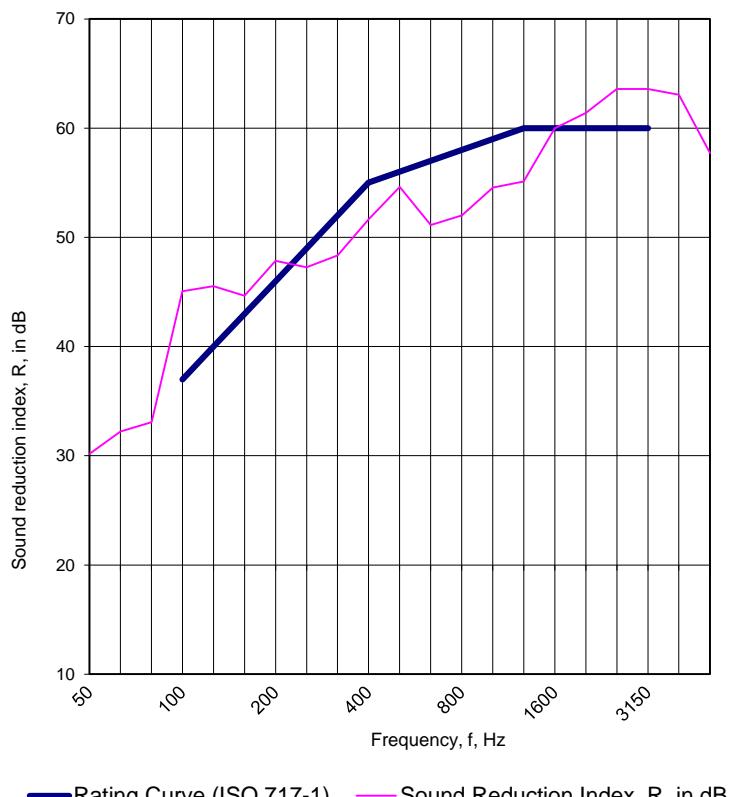
Source Room Volume: 82.40 m³
Receive Room Volume: 69.60 m³

Static Pressure: 99500.0 Pa

Humidity in Test Rooms: 62.0 %

Test Specimen Description: 90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)

f, Hz	R, dB
50*	30.2
63*	32.2
80*	33.1
100	45.1
125	45.5
160	44.6
200	47.8
250	47.3
315	48.3
400	51.7
500	54.6
630	51.1
800	52.0
1000	54.6
1250	55.1
1600	60.0
2000	61.4
2500	63.6
3150	63.6
4000	63.1
5000	57.7
AAD	-31.3



D_{n,e,w} = 56 dB
D_{n,e,w}+C = 55 dB
D_{n,e,w}+C_{tr} = 52 dB

C_(50 - 3150) = -1 dB **C_{tr (50 - 3150)} = -8 dB**
C_(50 - 5000) = -1 dB **C_{tr (50 - 5000)} = -8 dB**
C_(100 - 5000) = 0 dB **C_{tr (100 - 5000)} = -4 dB**

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: 90mm thick Sealfire W1000 Compound

Ref. No.: WYC385361/AR1/P025

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

Static Pressure: 99500.0 Pa

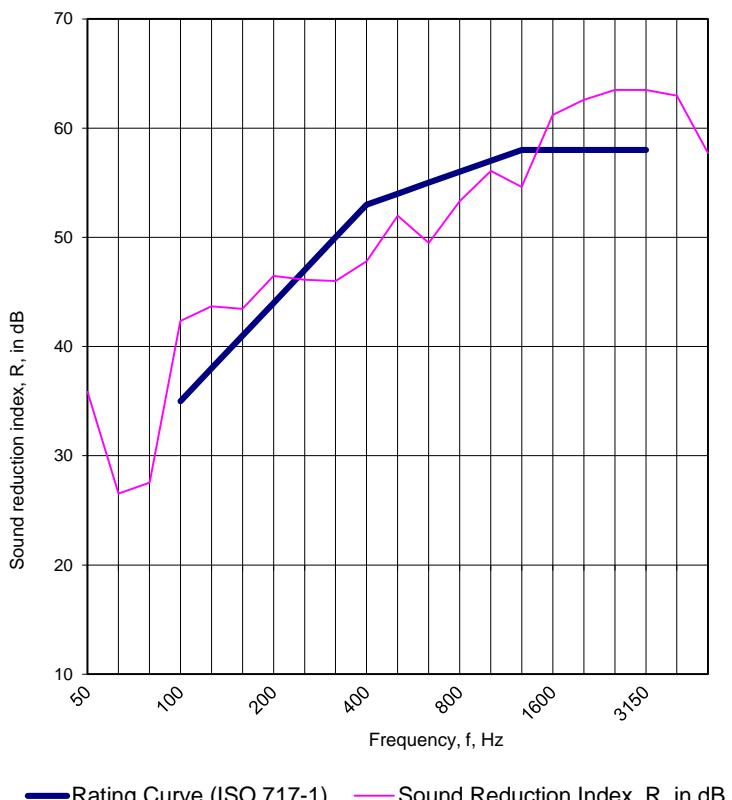
Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: 90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)

f, Hz	R, dB
50*	35.9
63*	26.5
80*	27.5
100	42.3
125	43.7
160	43.5
200	46.5
250	46.1
315	46.0
400	47.8
500	52.0
630	49.5
800	53.3
1000	56.1
1250	54.6
1600	61.2
2000	62.6
2500	63.5
3150	63.5
4000	63.0
5000	57.7
AAD	-24.6

Frequency range for rating in accordance with ISO 717-1



— Rating Curve (ISO 717-1) — Sound Reduction Index, R, in dB

$D_{n,e,w} = 54 \text{ dB}$
 $D_{n,e,w} + C = 54 \text{ dB}$
 $D_{n,e,w} + C_{tr} = 51 \text{ dB}$

$C_{(50 - 3150)} = -1 \text{ dB}$ $C_{tr(50 - 3150)} = -9 \text{ dB}$
 $C_{(50 - 5000)} = 0 \text{ dB}$ $C_{tr(50 - 5000)} = -9 \text{ dB}$
 $C_{(100 - 5000)} = 0 \text{ dB}$ $C_{tr(100 - 5000)} = -3 \text{ dB}$

Lee Grant-Riach
Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

Report for: Wurth Oy

Report Ref: WYC385361/AR1



**Laboratory measurement to
BS EN ISO 10140-2 -
Airborne Sound Insulation of**



1762

Test Specimen Name: 150mm thick Sealfire W1000 Compound

Ref. No.: WYC385361/AR1/P026

Sponsor: Wurth Oy

Date of Test: 12/07/2017

Test Specimen Installed By: Exova

Temperature in Test Rooms: 18.0 °C

Source Room Volume: 82.40 m³

Static Pressure: 99500.0 Pa

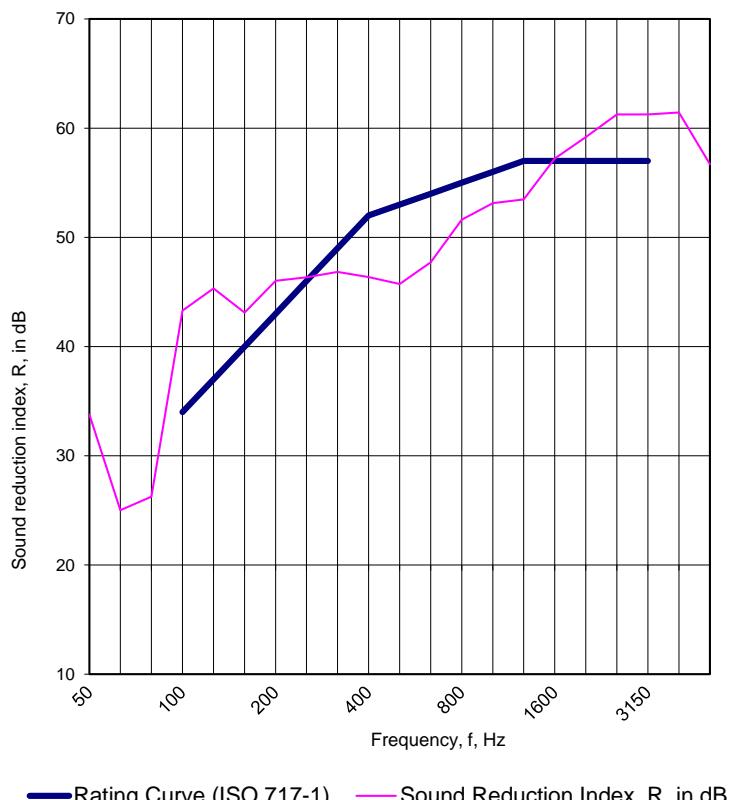
Receive Room Volume: 69.60 m³

Humidity in Test Rooms: 62.0 %

Test Specimen Description: 150mm thick Sealfire W1000 Compound

f, Hz	R, dB
50*	33.8
63*	25.0
80*	26.3
100	43.3
125	45.3
160	43.1
200	46.0
250	46.3
315	46.8
400	46.4
500	45.7
630	47.7
800	51.6
1000	53.1
1250	53.5
1600	57.2
2000	59.2
2500	61.3
3150	61.3
4000	61.4
5000	56.7
AAD	-31.1

Frequency range for rating in accordance with ISO 717-1



— Rating Curve (ISO 717-1) — Sound Reduction Index, R, in dB

$D_{n,e,w} = 53 \text{ dB}$
 $D_{n,e,w} + C = 52 \text{ dB}$
 $D_{n,e,w} + C_{tr} = 50 \text{ dB}$

$C_{(50 - 3150)} = -2 \text{ dB}$ $C_{tr(50 - 3150)} = -10 \text{ dB}$
 $C_{(50 - 5000)} = -1 \text{ dB}$ $C_{tr(50 - 5000)} = -10 \text{ dB}$
 $C_{(100 - 5000)} = 0 \text{ dB}$ $C_{tr(100 - 5000)} = -3 \text{ dB}$


Lee Grant-Riach

Technical Officer

* indicates that the frequency is outside of our UKAS accreditation and is for information only

The legal validity of this report can only be claimed on presentation of the complete report

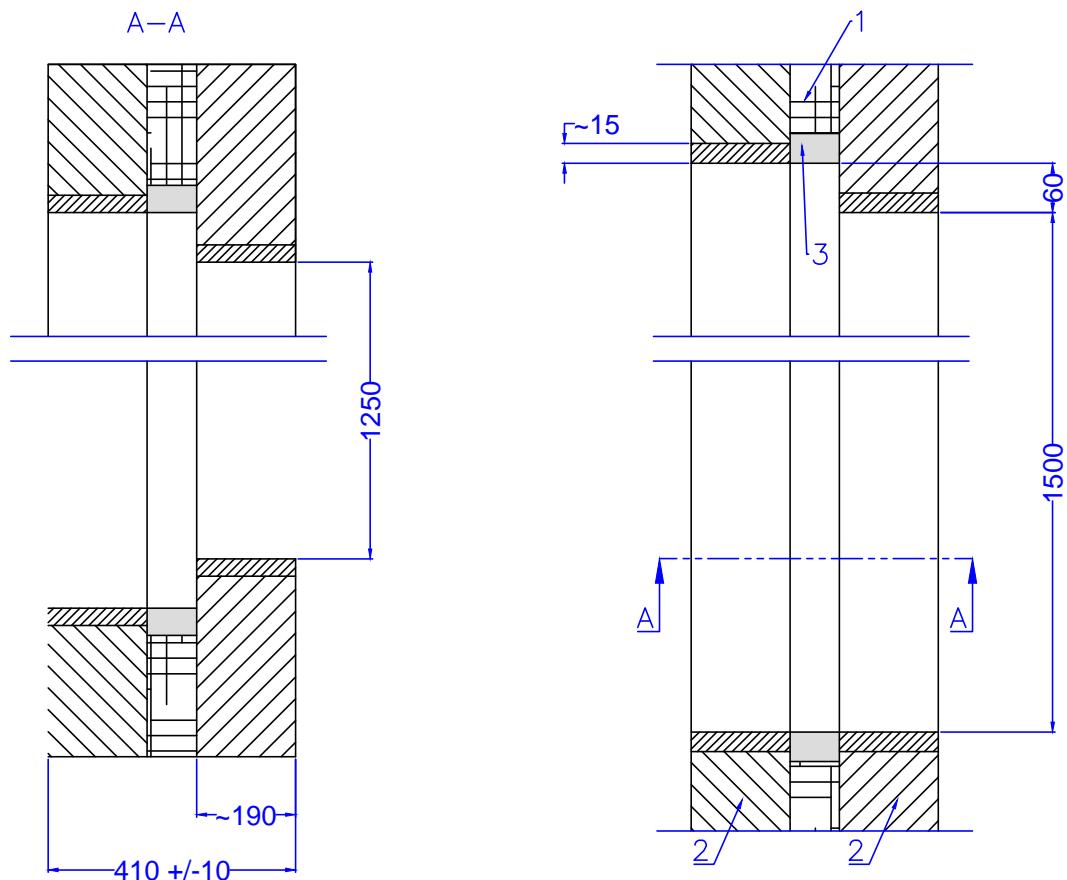
Report for: Wurth Oy

Report Ref: WYC385361/AR1

Appendix 5 – Exova Drawings (23 Pages)

Product Type	Sealants / Compounds
Figure Number Drawing Description	
1	Supporting Construction Detail as per BS ISO 10140-5 Clause 3.3.3
2	Test of Partition wall
3	Test of partition wall with aperture for sealants not filled in
4	Sealfire W150. 50mm wide x 25mm thick (no backing material)
5	Sealfire W150. 50mm wide x 25mm thick (no backing material). Plasterboard fixed to exposed cassette
6	Sealfire W100. 50mm wide x 25mm thick (no backing material)
7	Sealfire W200. 50mm wide x 25mm thick (no backing material)
8	Sealfire W200. 50mm wide x 25mm thick (with 70mm rockwool placed in void)
9	Sealfire W250. 50mm wide x 25mm thick (no backing material)
10	Sealfire W100. 30mm wide x 15mm thick sealant (both sides) with PE backing material
11	Sealfire W150. 20mm wide x 30mm thick sealant (both sides) with 40mm Stone Mineral Wool backing
12	Sealfire W200. 30mm wide x 10mm thick sealant (both sides) with PE backing material
13	Sealfire W200. 50mm wide x 5mm thick sealant (both sides) with 90mm Stone Mineral Wool backing
14	Sealfire W250. 30mm wide x 10mm thick sealant (both sides) with PE backing material
15	Sealfire W250. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing
16	Sealfire W100. 100mm wide x 10mm thick sealant (both sides) with 80mm Stone Mineral Wool backing
17	50mm thick Sealfire W1000 Compound
18	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)
19	50mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)
20	100mm thick Sealfire W1000 Compound
21	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on receive room side)
22	90mm thick Sealfire W1000 Compound with 50mm Stone Wool Mineral (on source room side)
23	150mm thick Sealfire W1000 Compound

Construction of the specific small-sized test opening



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn 17/08/17	Drawn By LGR	Scale Not to Scale All dimensions in mm unless otherwise stated
------------------------	-----------------	---

Project No.
WYC 385361/AR1

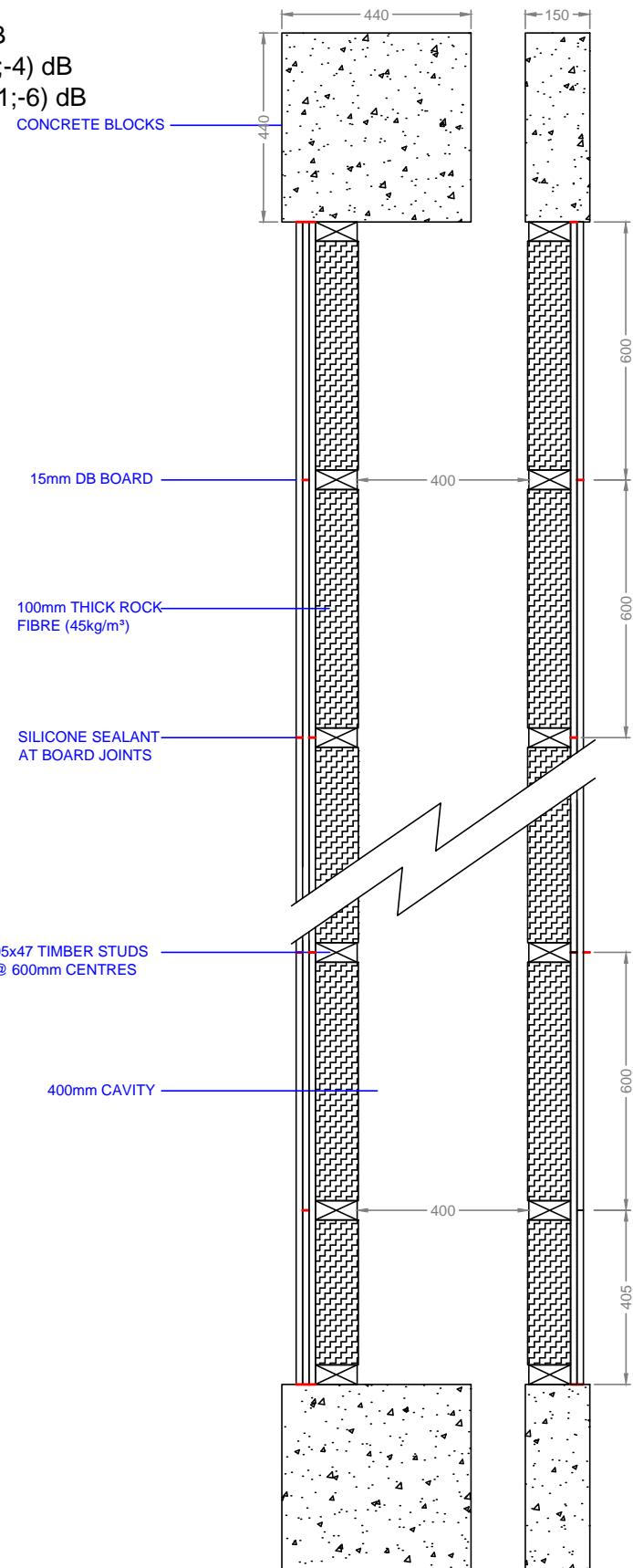
Appendix 5 Figure 2 Supporting Construction Detail

P003

Dnew - 61 (-1;-6) dB

Rw (1.9m²) - 53 (-1;-4) dB

Rw (14.2m²) - 62 (-1;-6) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn
21/08/17

Drawn By
LGR

Scale Not to Scale
All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

Appendix 5 Figure 3

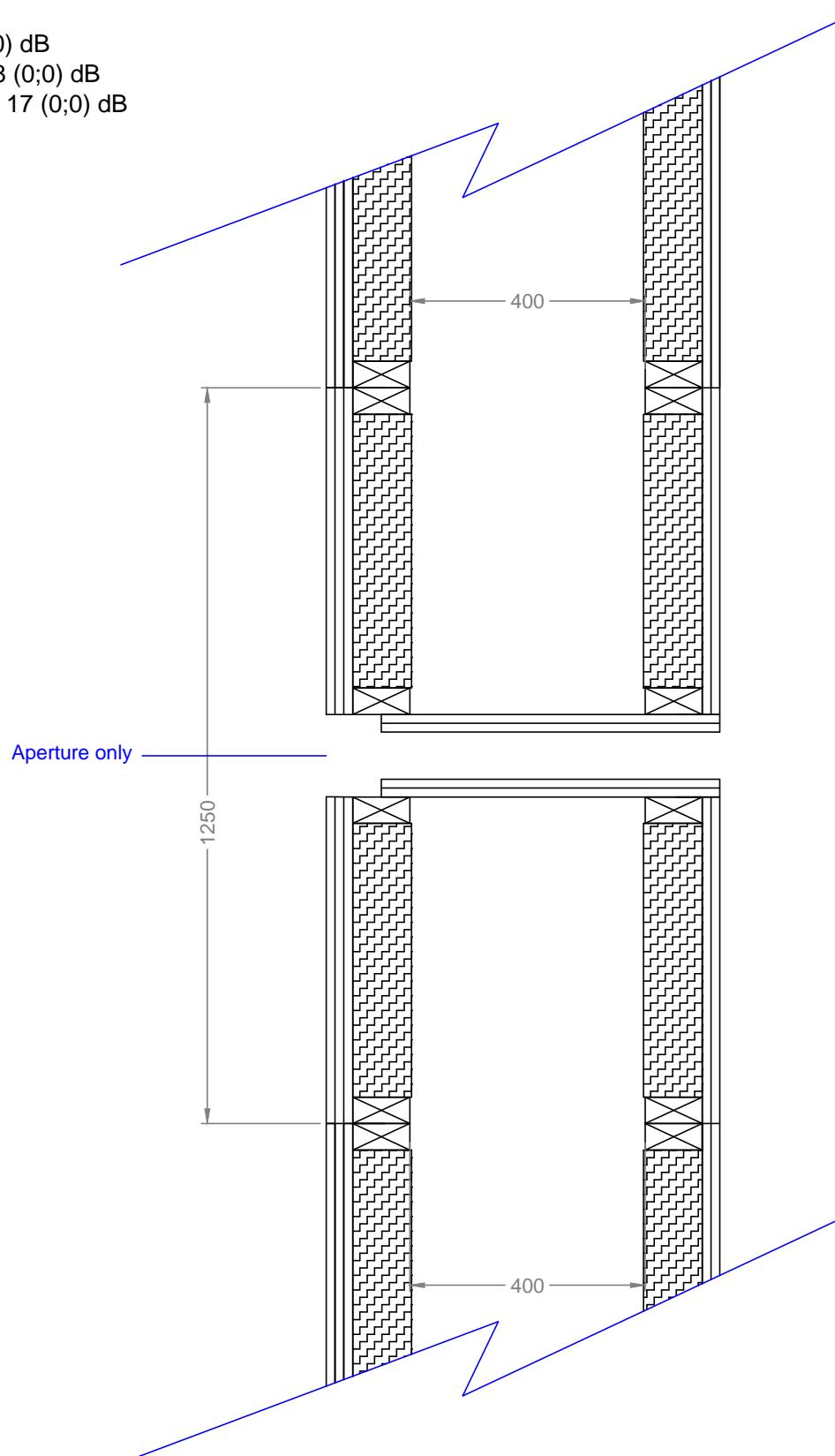
Supporting Construction Detail

P004

Dnew - 15 (1;0) dB

Rw (1.9m²) - 8 (0;0) dB

Rw (14.2m²) - 17 (0;0) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

Appendix 5 Figure 4

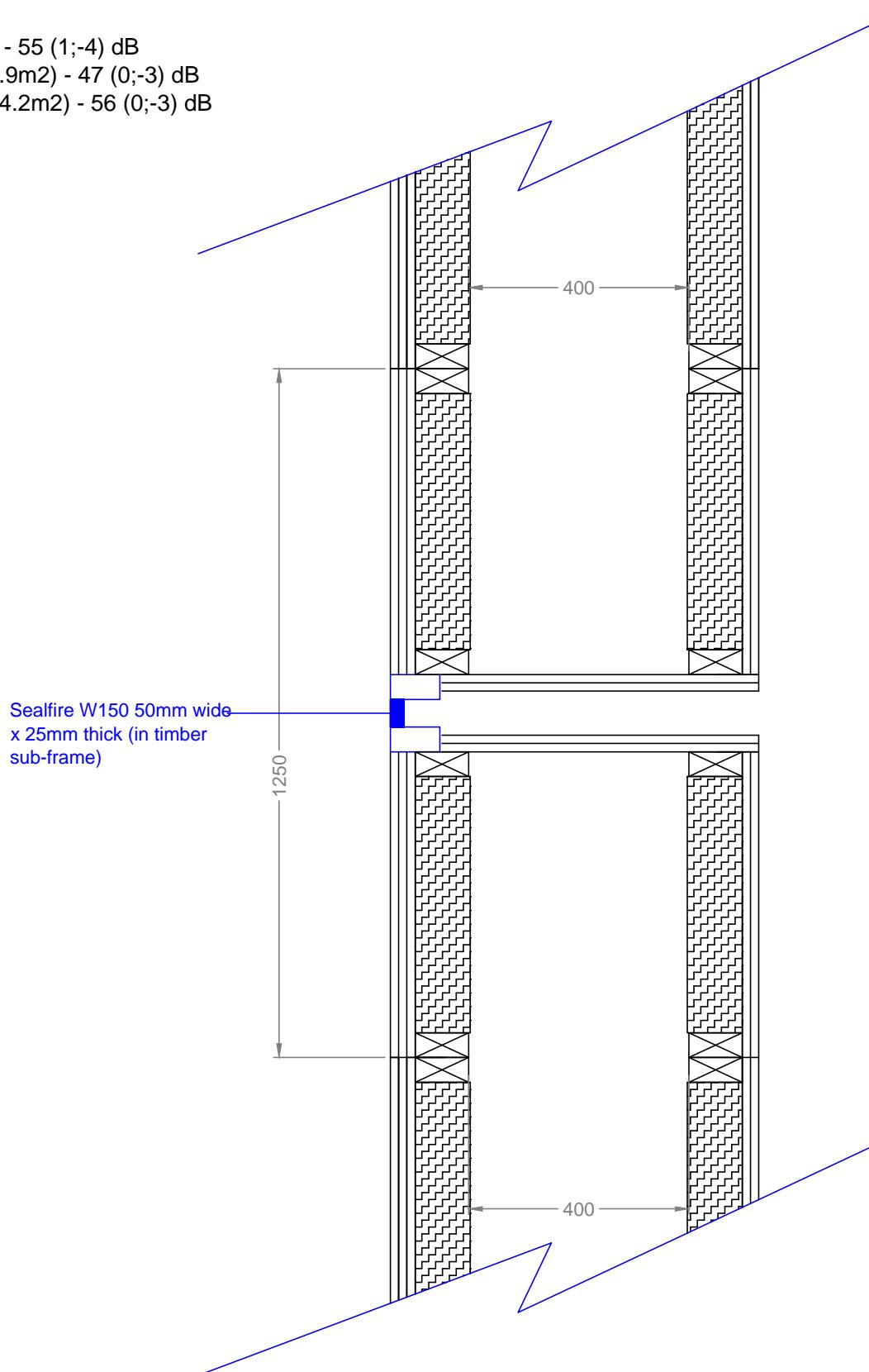
Supporting Construction Detail

P005

Dnew - 55 (1;-4) dB

Rw (1.9m²) - 47 (0;-3) dB

Rw (14.2m²) - 56 (0;-3) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

Appendix 5 Figure 5

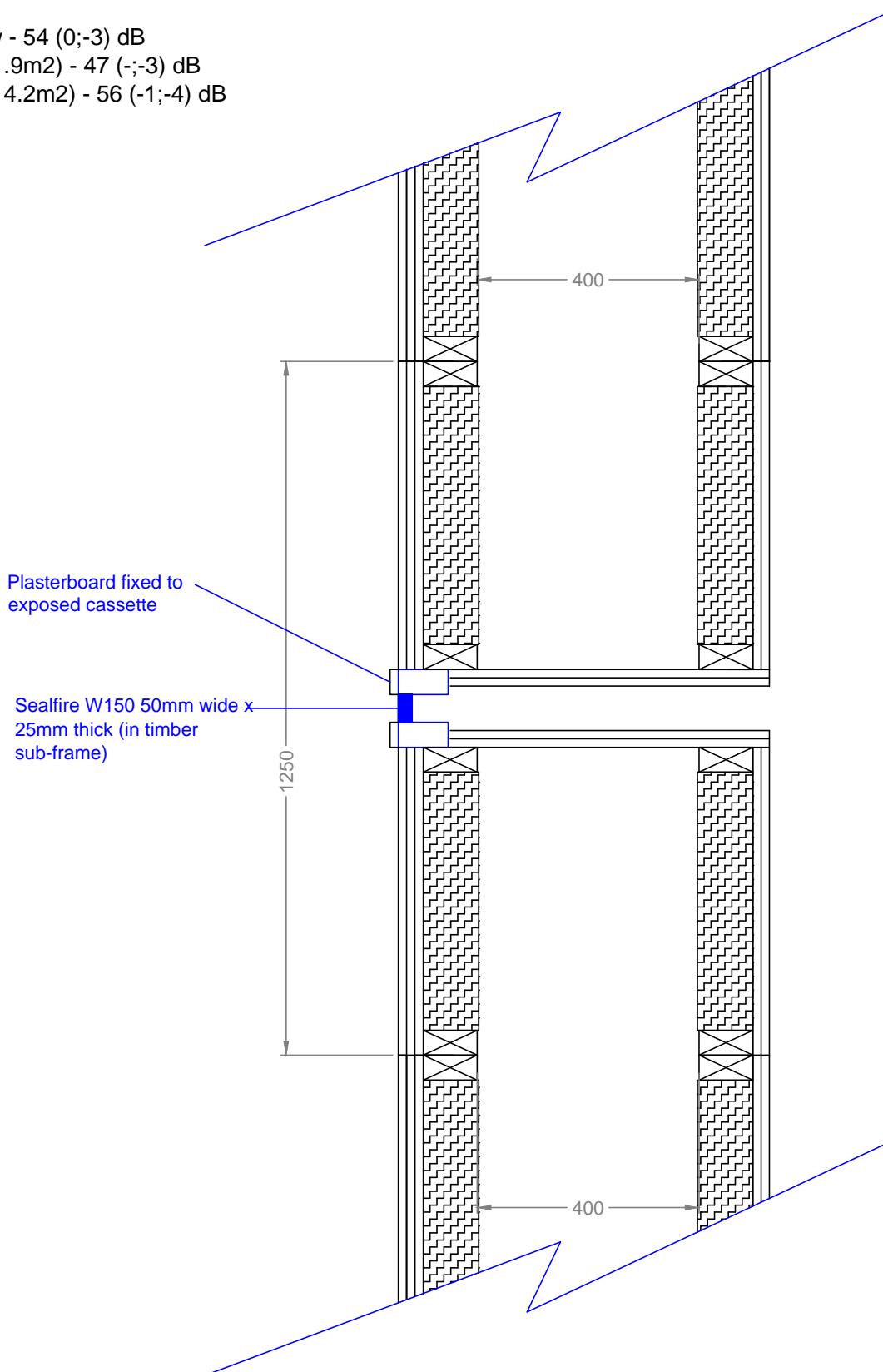
Supporting Construction Detail

P006

Dnew - 54 (0;-3) dB

Rw (1.9m²) - 47 (-;-3) dB

Rw (14.2m²) - 56 (-1;-4) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

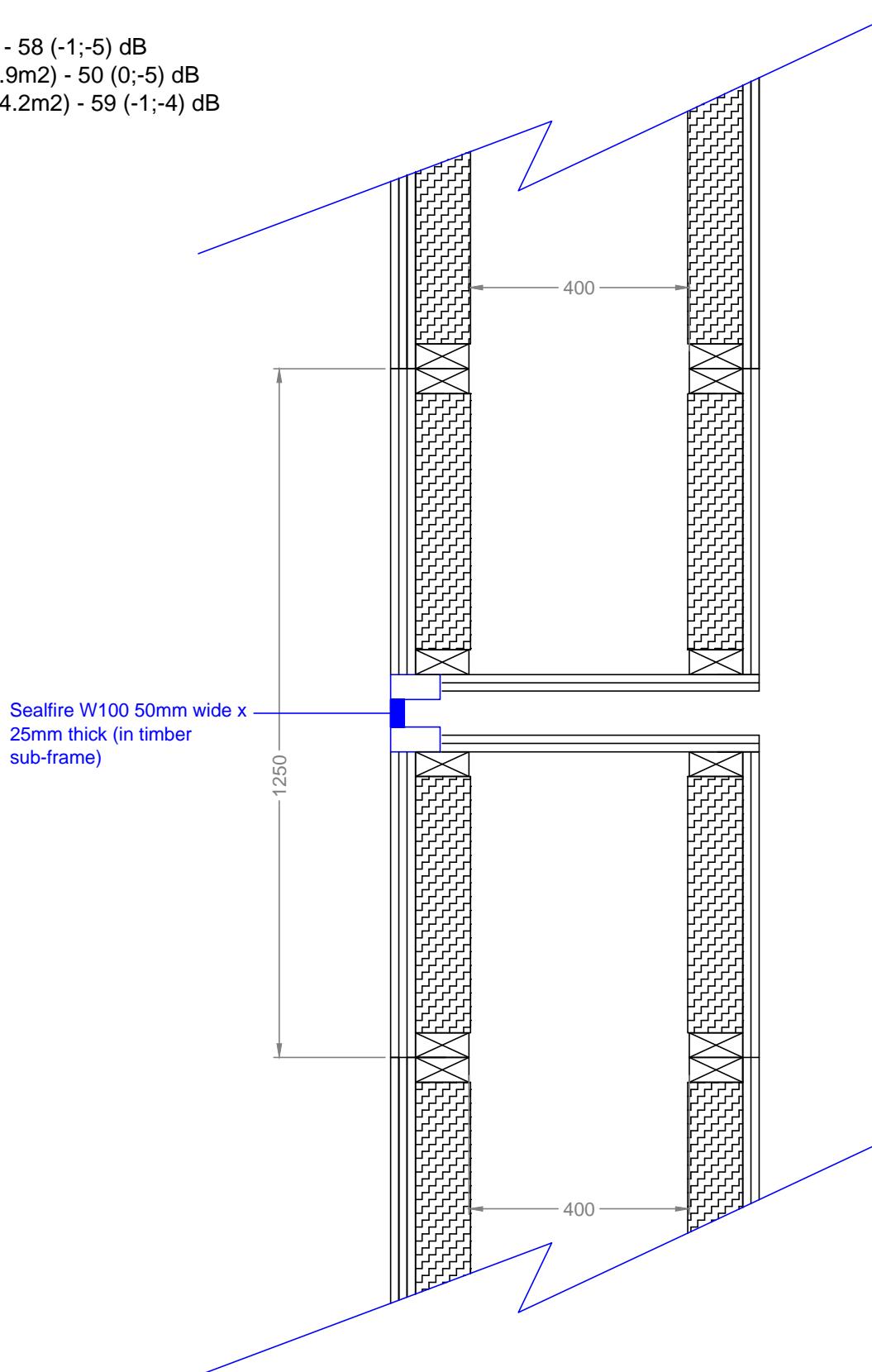
Appendix 5 Figure 6 | Supporting Construction Detail

P007

Dnew - 58 (-1;-5) dB

Rw (1.9m²) - 50 (0;-5) dB

Rw (14.2m²) - 59 (-1;-4) dB



EXOVA

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

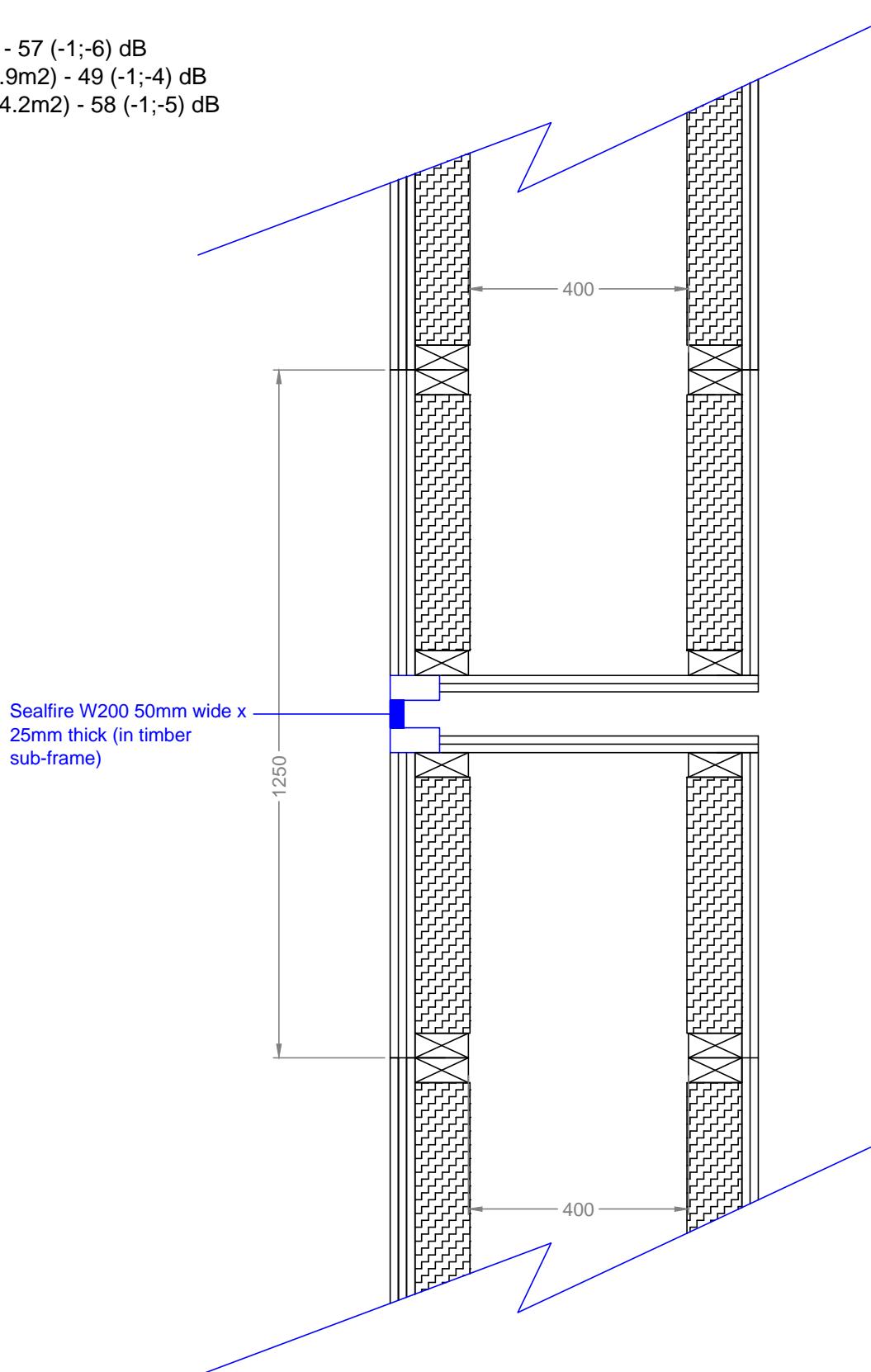
Appendix 5 Figure 7 | Supporting Construction Detail

P008

Dnew - 57 (-1;-6) dB

Rw (1.9m²) - 49 (-1;-4) dB

Rw (14.2m²) - 58 (-1;-5) dB



EXOVA

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

Appendix 5 Figure 8

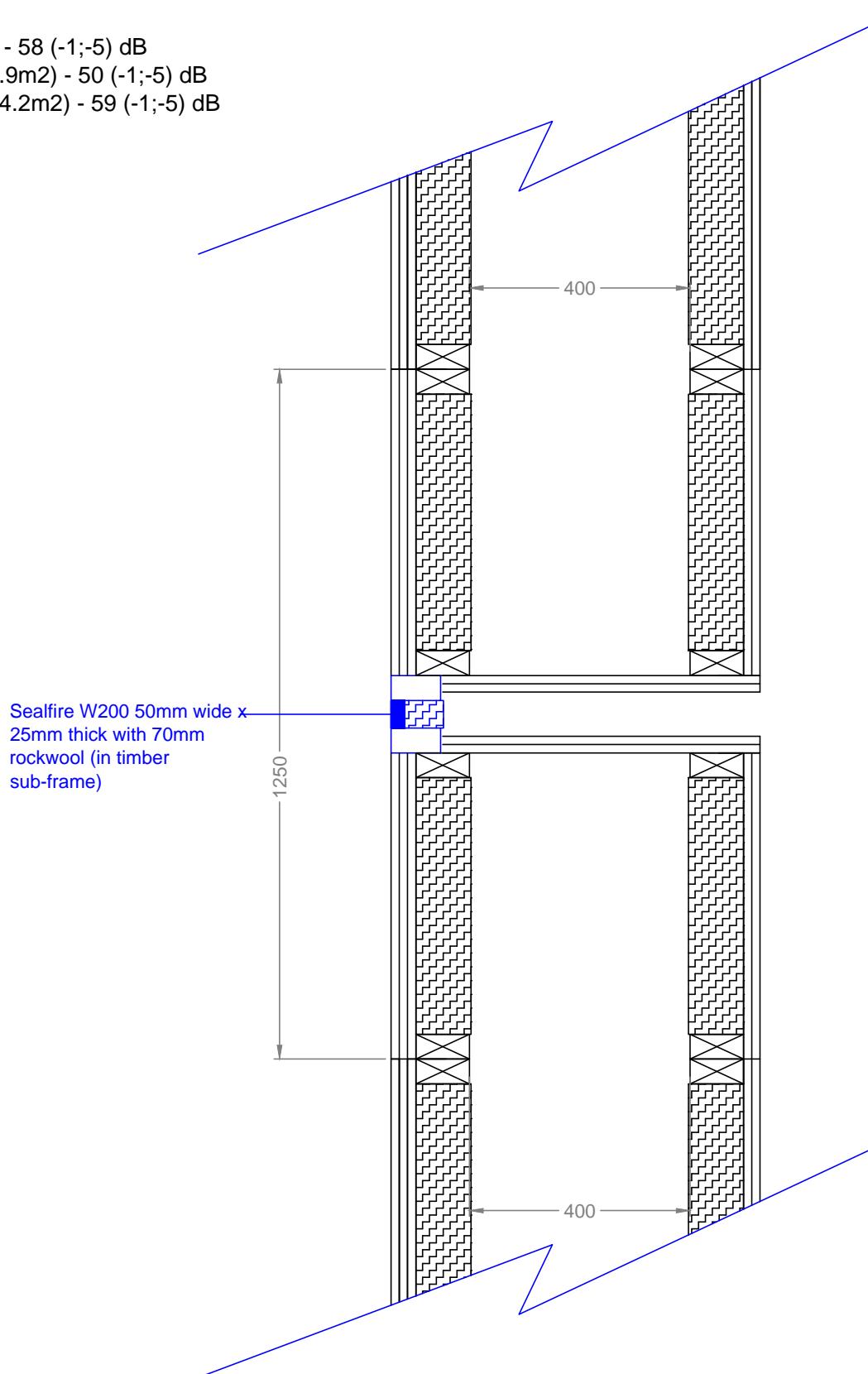
Supporting Construction Detail

P009

Dnew - 58 (-1;-5) dB

Rw (1.9m²) - 50 (-1;-5) dB

Rw (14.2m²) - 59 (-1;-5) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

Appendix 5 Figure 9

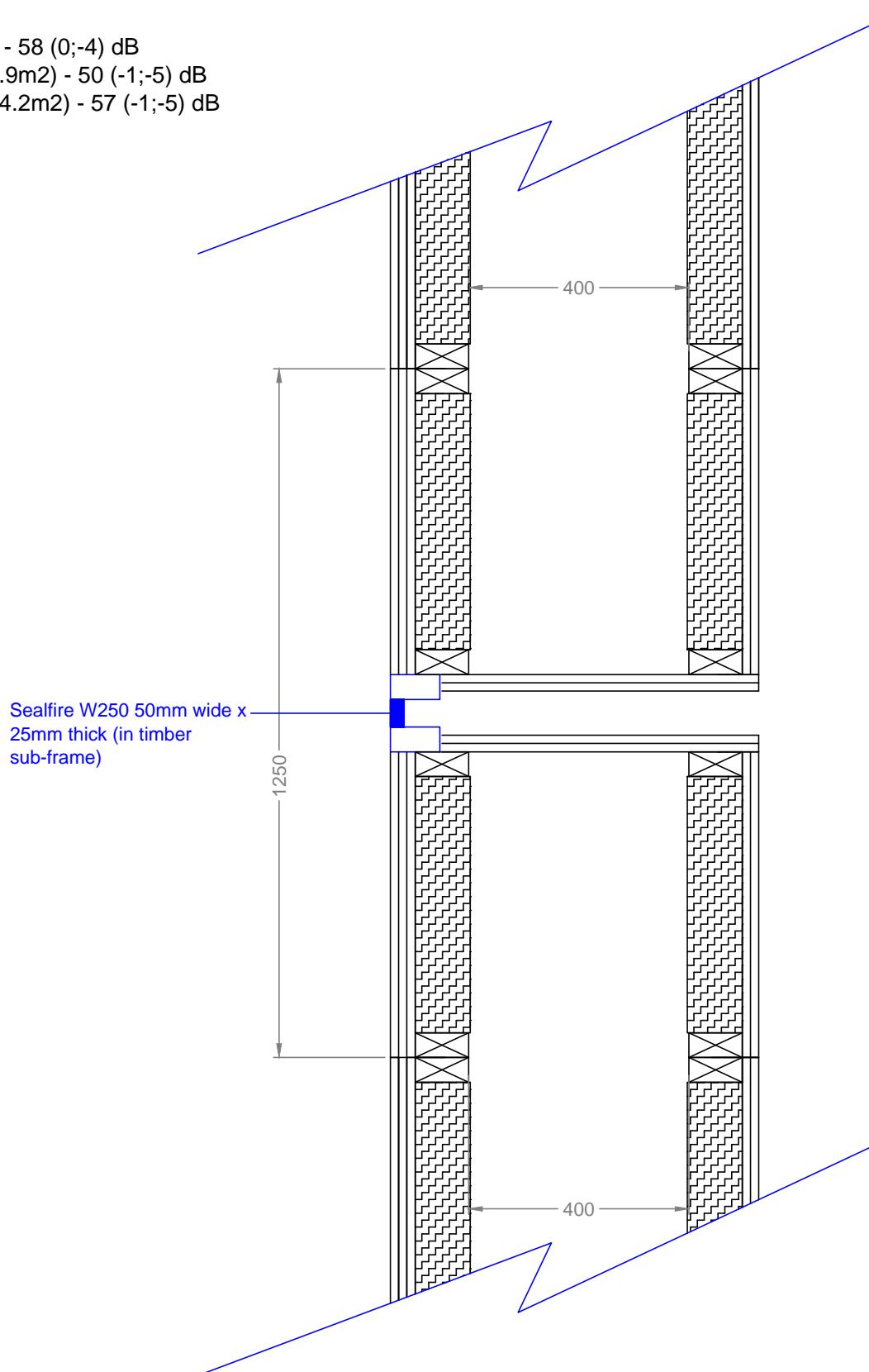
Supporting Construction Detail

P010

Dnew - 58 (0;-4) dB

Rw (1.9m²) - 50 (-1;-5) dB

Rw (14.2m²) - 57 (-1;-5) dB



EXOVA

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

Appendix 5 Figure 10 | Supporting Construction Detail

P012

Dnew - 57 (-1;-6) dB

Rw (1.9m²) - 50 (-1;-6) dB

Rw (14.2m²) - 59 (-2;-6) dB

Sealfire W100 30mm wide x 15mm thick (both sides with PE backing material (in timber sub-frame))

1250

70

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm unless otherwise stated

Project No.

WYC 385361/AR1

EXOVA

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

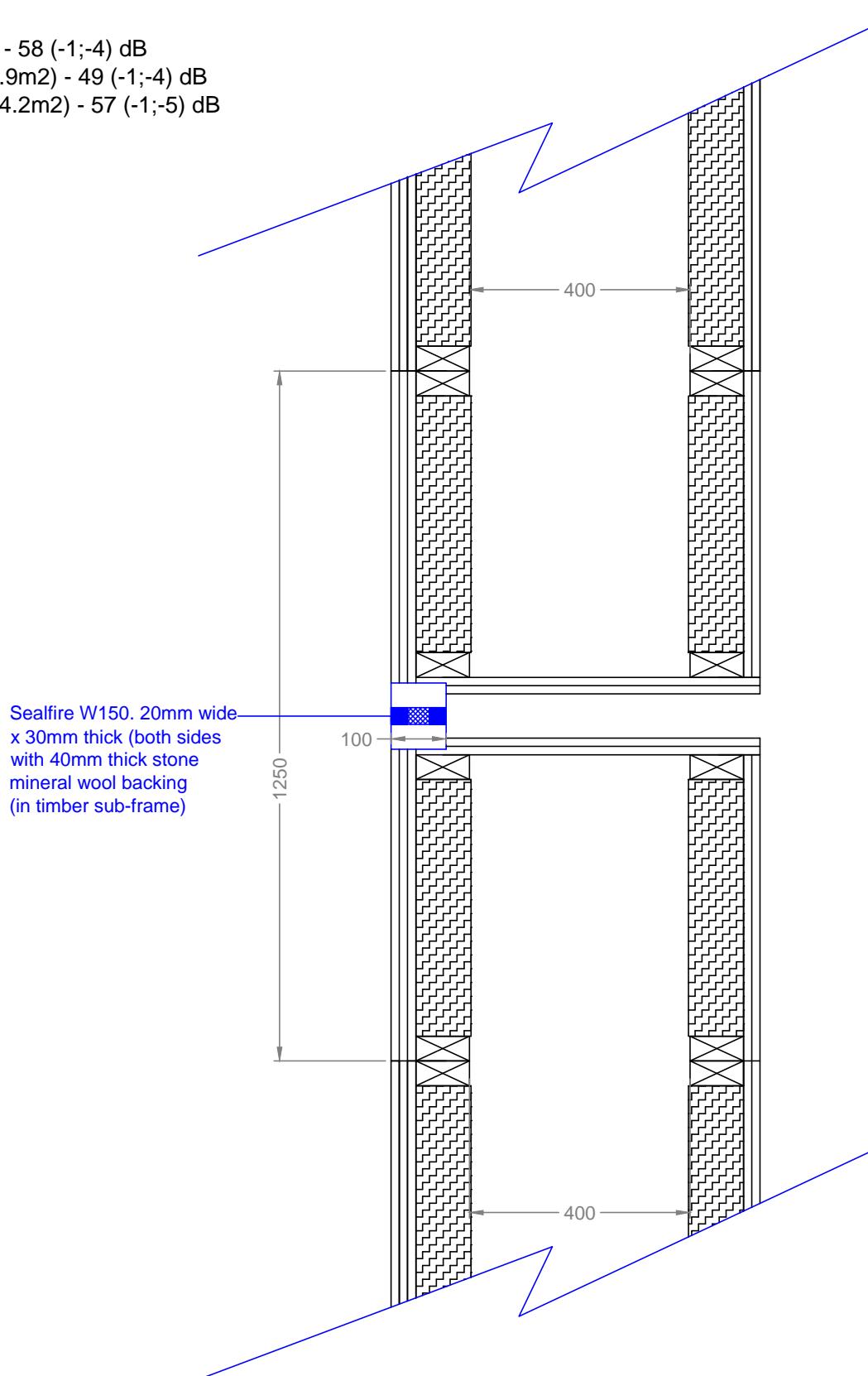
Appendix 5 Figure 11 | Supporting Construction Detail

P013

Dnew - 58 (-1;-4) dB

Rw (1.9m²) - 49 (-1;-4) dB

Rw (14.2m²) - 57 (-1;-5) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn 17/08/17 Drawn By LGR Scale Not to Scale
All dimensions in mm unless otherwise stated

Project No. WYC 385361/AR1

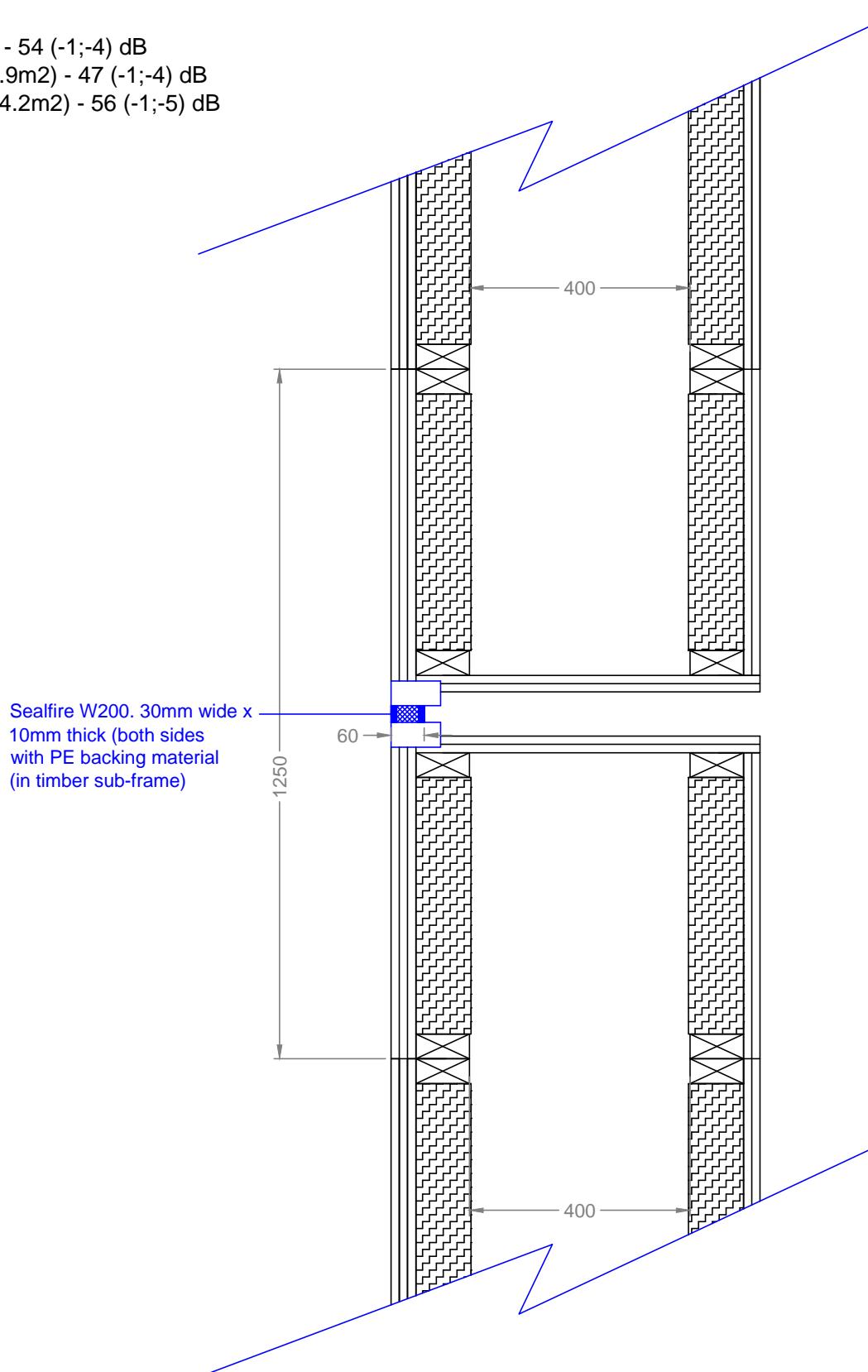
Appendix 5 Figure 12 | Supporting Construction Detail

P014

Dnew - 54 (-1;-4) dB

Rw (1.9m²) - 47 (-1;-4) dB

Rw (14.2m²) - 56 (-1;-5) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn 17/08/17 Drawn By LGR Scale Not to Scale
All dimensions in mm unless otherwise stated

Project No. WYC 385361/AR1

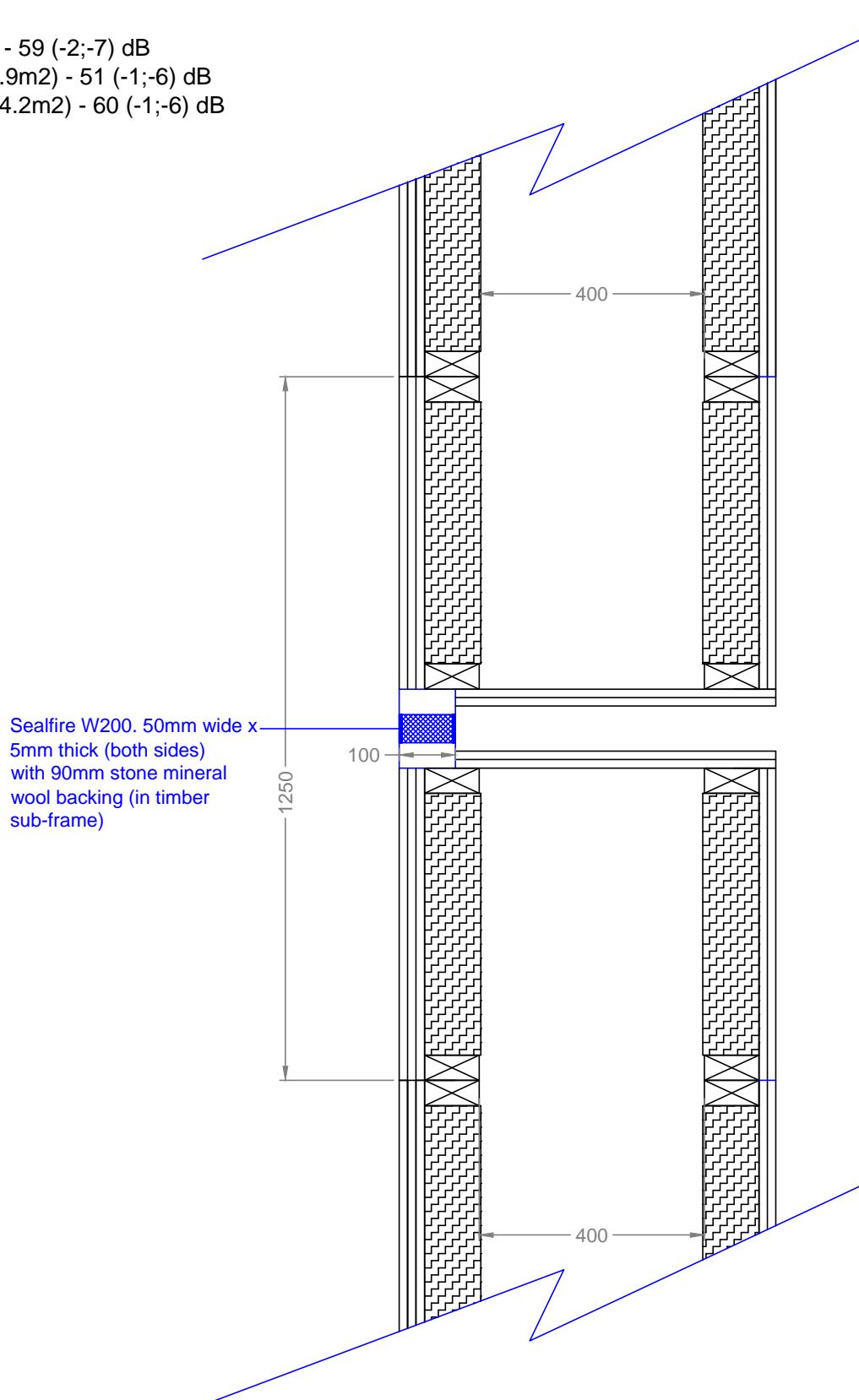
Appendix 5 Figure 13 | Supporting Construction Detail

P015

Dnew - 59 (-2;-7) dB

Rw (1.9m²) - 51 (-1;-6) dB

Rw (14.2m²) - 60 (-1;-6) dB



EXOVA

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn 17/08/17 Drawn By LGR Scale Not to Scale
All dimensions in mm unless otherwise stated

Project No. WYC 385361/AR1

Appendix 5 Figure 14

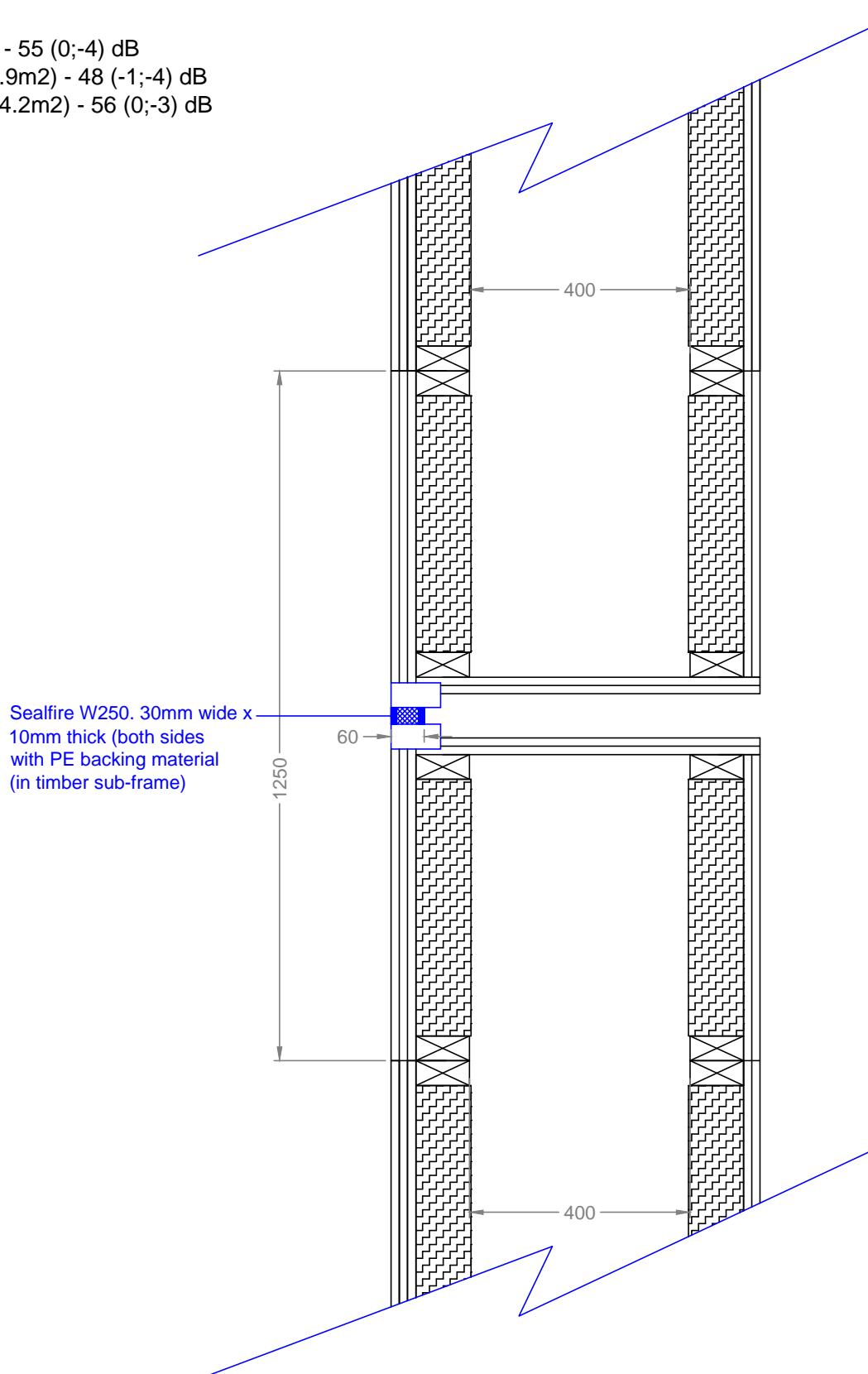
Supporting Construction Detail

P016

Dnew - 55 (0;-4) dB

Rw (1.9m²) - 48 (-1;-4) dB

Rw (14.2m²) - 56 (0;-3) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm unless otherwise stated

Project No.

WYC 385361/AR1

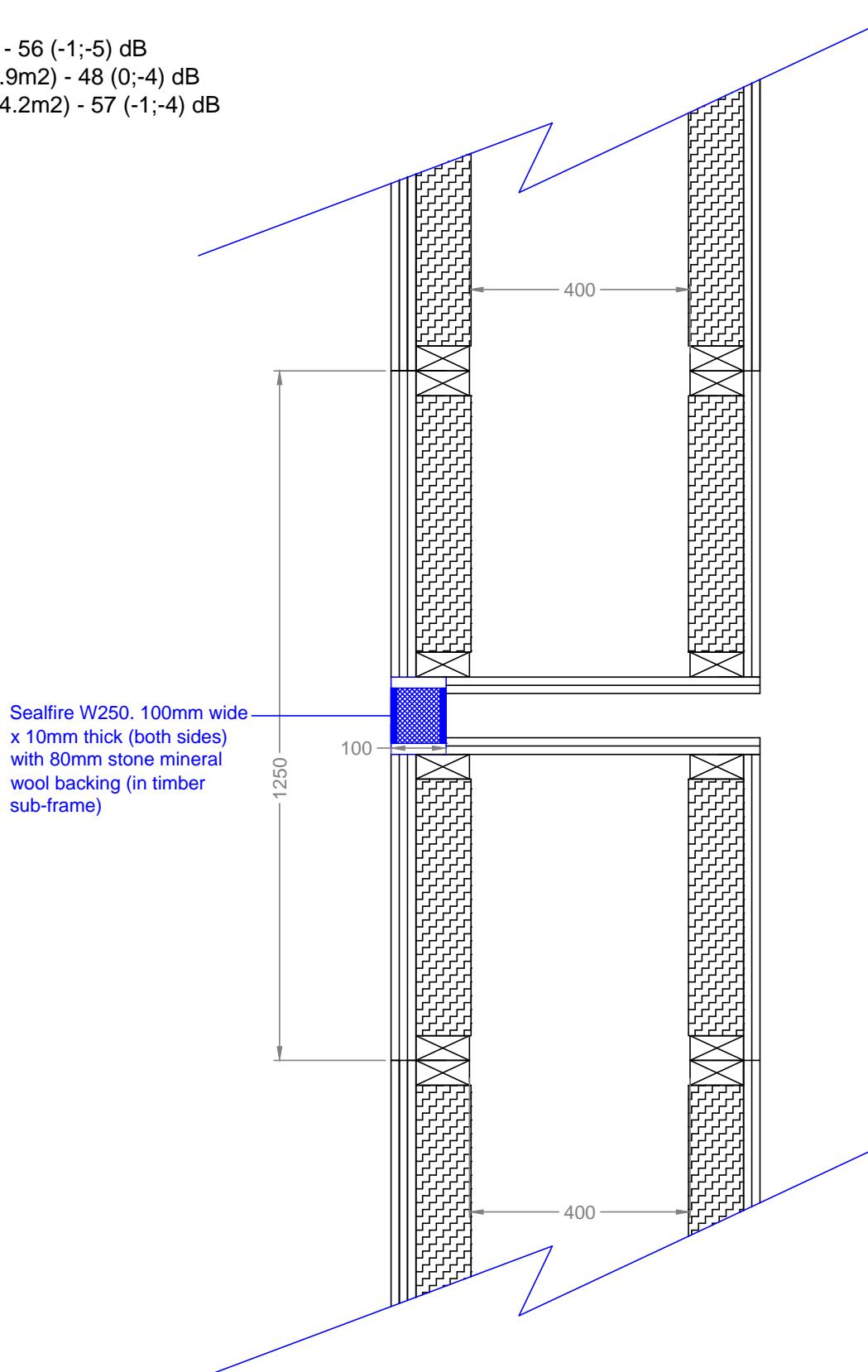
Appendix 5 Figure 15 | Supporting Construction Detail

P017

Dnew - 56 (-1;-5) dB

Rw (1.9m²) - 48 (0;-4) dB

Rw (14.2m²) - 57 (-1;-4) dB



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

Appendix 5 Figure 16 | Supporting Construction Detail

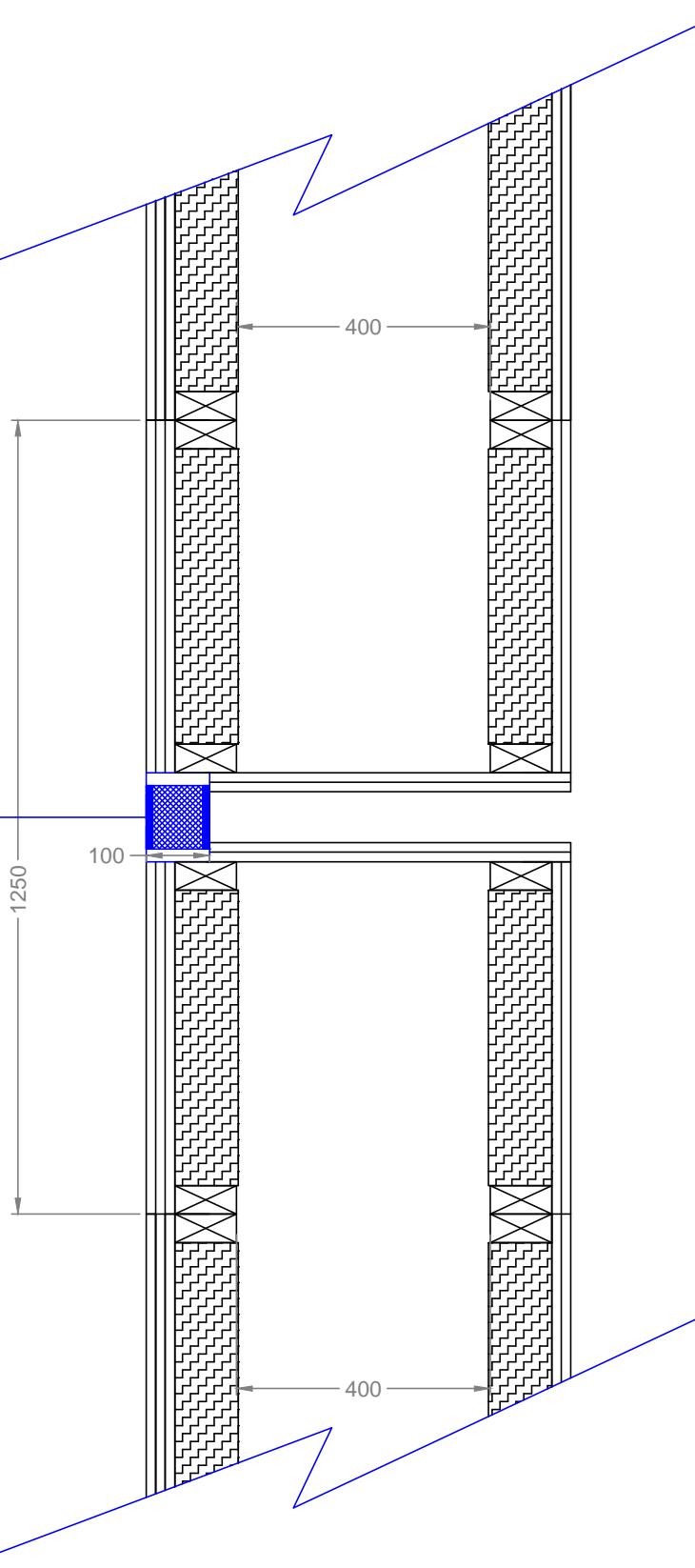
P018

Dnew - 56 (0;-4) dB

Rw (1.9m²) - 49 (-1;-5) dB

Rw (14.2m²) - 57 (0;-4) dB

Sealfire W100. 100mm wide
x 10mm thick (both sides)
with 80mm stone mineral
wool backing (in timber
sub-frame)



EXOVA

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross
section of test wall

Date Drawn
17/08/17

Drawn By
LGR

Scale Not to Scale
All dimensions in mm
unless otherwise stated

Project No.

WYC 385361/AR1

Appendix 5 Figure 17

Supporting Construction Detail

P019

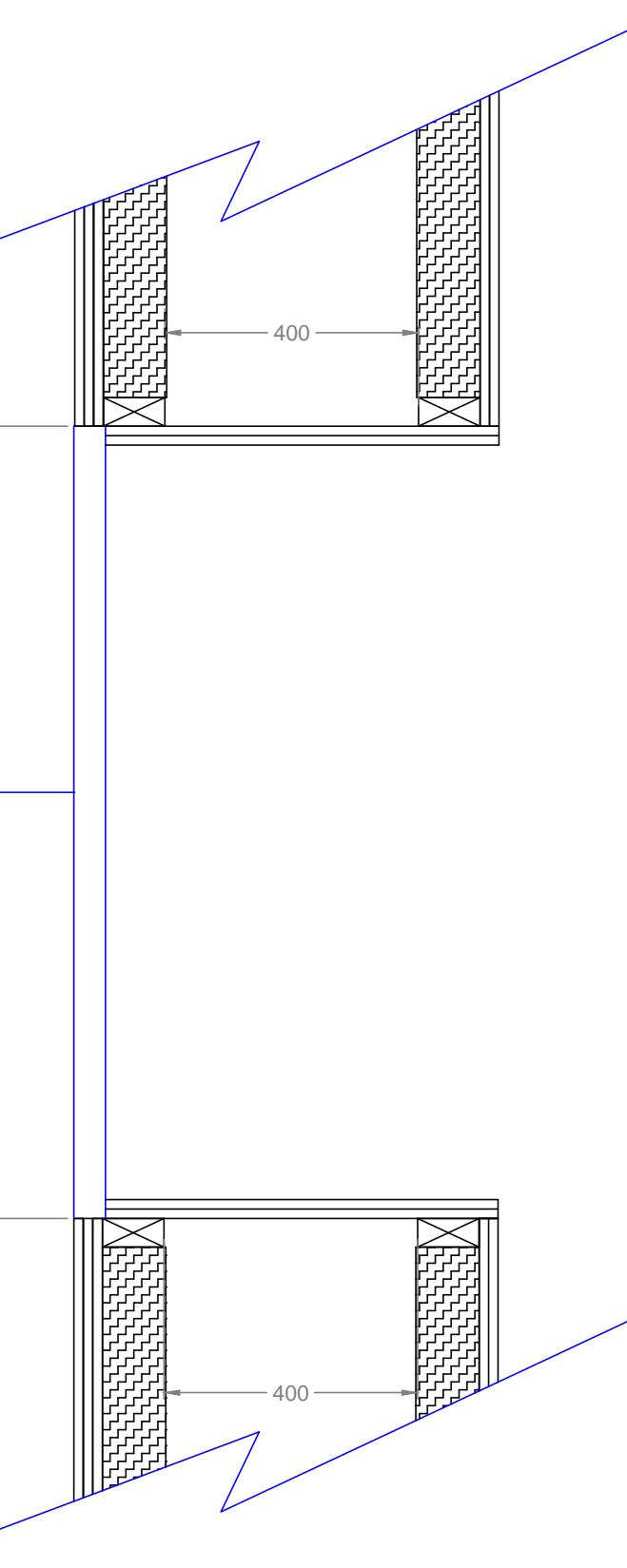
Dnew - 45 (0;-2) dB

Rw (1.9m²) - 38 (0;-2) dB

Rw (14.2m²) - 47 (-1;-3) dB

50mm thick Sealfire
W1000 compound

1250



Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn
17/08/17

Drawn By
LGR

Scale Not to Scale
All dimensions in mm
unless otherwise stated

Project No.

WYC 386075/AR1

Appendix 5 Figure 18

Supporting Construction Detail

P020

Dnew - 55 (0;-4) dB

Rw (1.9m²) - 48 (-1;-4) dB

Rw (14.2m²) - 57 (-1;-5) dB

50mm thick Sealfire
W1000 compound with
50mm stone mineral
wool (on receive room side)

1250

400

400

Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross
section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 386075/AR1

P022

Dnew - 52 (-1;-4) dB

Rw (1.9m²) - 44 (0;-3) dBRw (14.2m²) - 53 (0;-4) dB

50mm thick Sealfire
W1000 compound
with 50mm stone
mineral wool (on
source room side)

1250

400

400

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross
section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 386075/AR1

Appendix 5 Figure 20

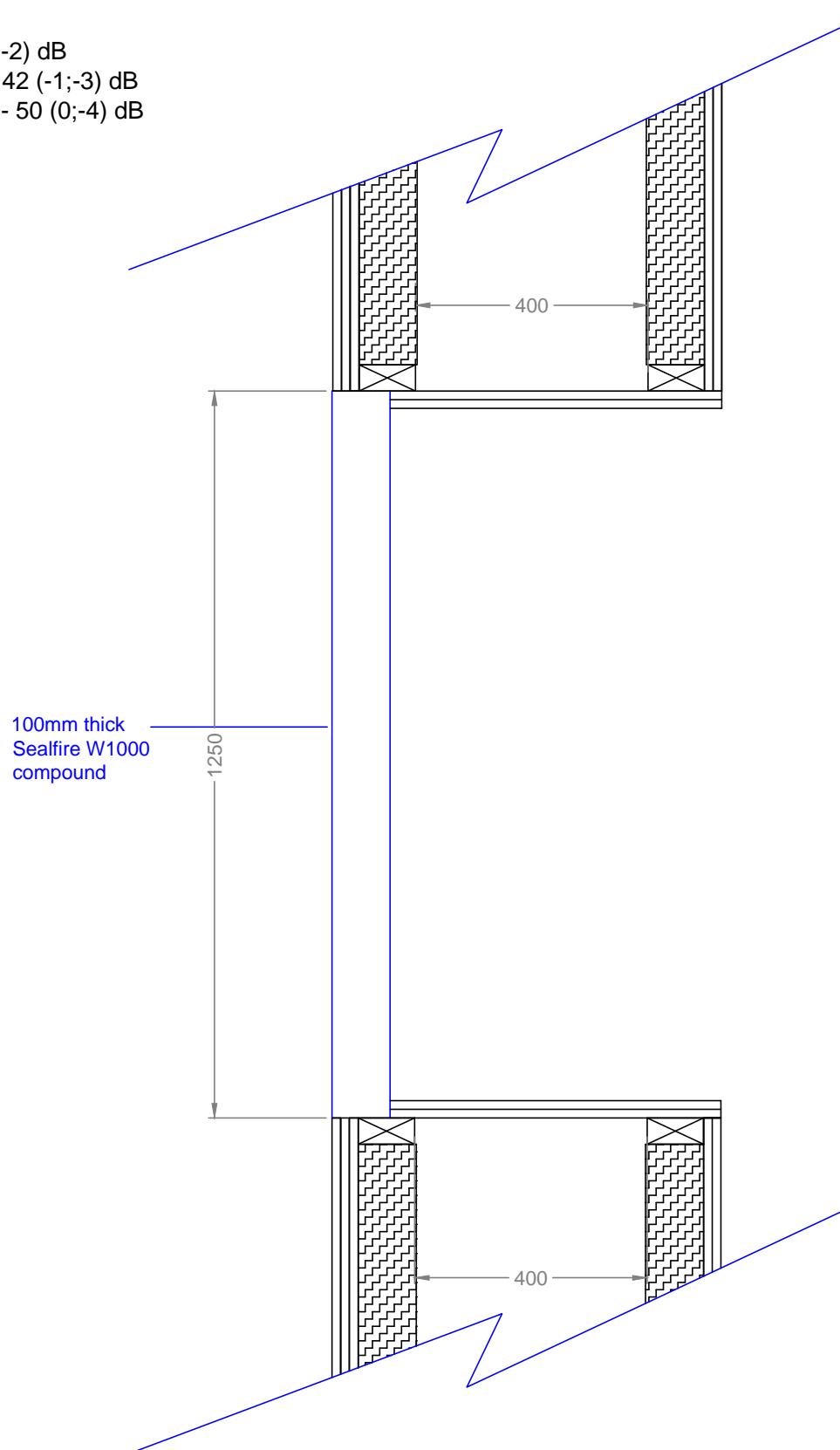
Supporting Construction Detail

P023

Dnew - 49 (0;-2) dB

Rw (1.9m²) - 42 (-1;-3) dB

Rw (14.2m²) - 50 (0;-4) dB



EXOVA

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm unless otherwise stated

Project No.

WYC 386075/AR1

Appendix 5 Figure 21

Supporting Construction Detail

P024

Dnew - 56 (-1;-4) dB

Rw (1.9m²) - 48 (0;-3) dB

Rw (14.2m²) - 57 (0;-3) dB

90mm thick Sealfire
W1000 compound
with 50mm Stone
mineral wool (on
source room side)

1250

400

400

Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross
section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 386075/AR1

Appendix 5 Figure 22

Supporting Construction Detail

P025

Dnew - 54 (0;-3) dB

Rw (1.9m²) - 47 (0;-3) dB

Rw (14.2m²) - 56 (0;-3) dB

90mm thick Sealfire
W1000 compound
with 50mm Stone
mineral wool (on
source room side)

1250

Schematic drawing showing horizontal cross
section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 386075/AR1

Exova

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Appendix 5 Figure 23

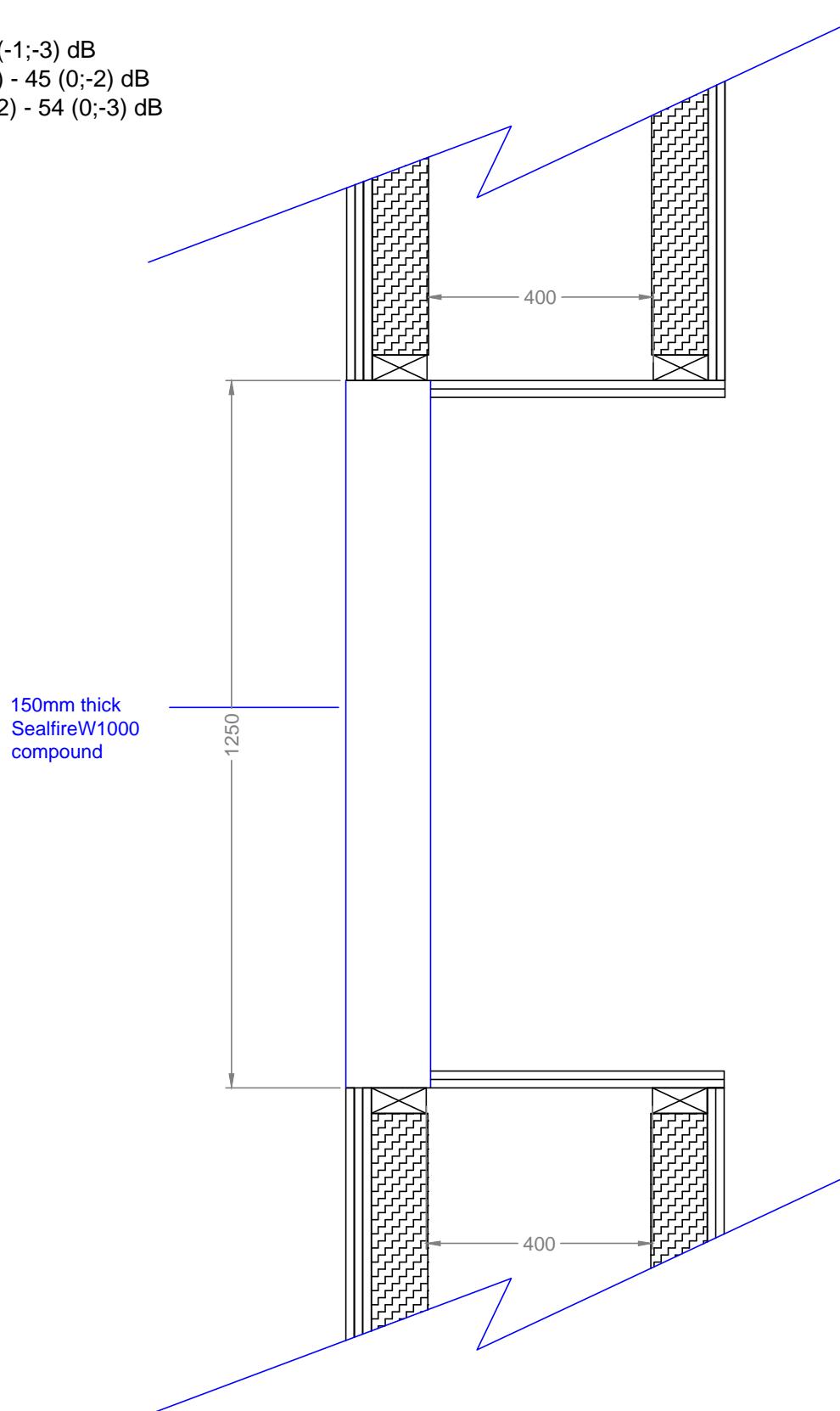
Supporting Construction Detail

P026

Dnew - 53 (-1;-3) dB

Rw (1.9m²) - 45 (0;-2) dB

Rw (14.2m²) - 54 (0;-3) dB



EXOVA

Chiltern House, Stocking Lane, Hughenden Valley
High Wycombe, Buckinghamshire, HP14 4ND, UK.
Tel: +44 (0)1494 569800 Fax: +44 (0)1494 564895

Schematic drawing showing horizontal cross section of test wall

Date Drawn

17/08/17

Drawn By

LGR

Scale Not to Scale

All dimensions in mm
unless otherwise stated

Project No.

WYC 386075/AR1