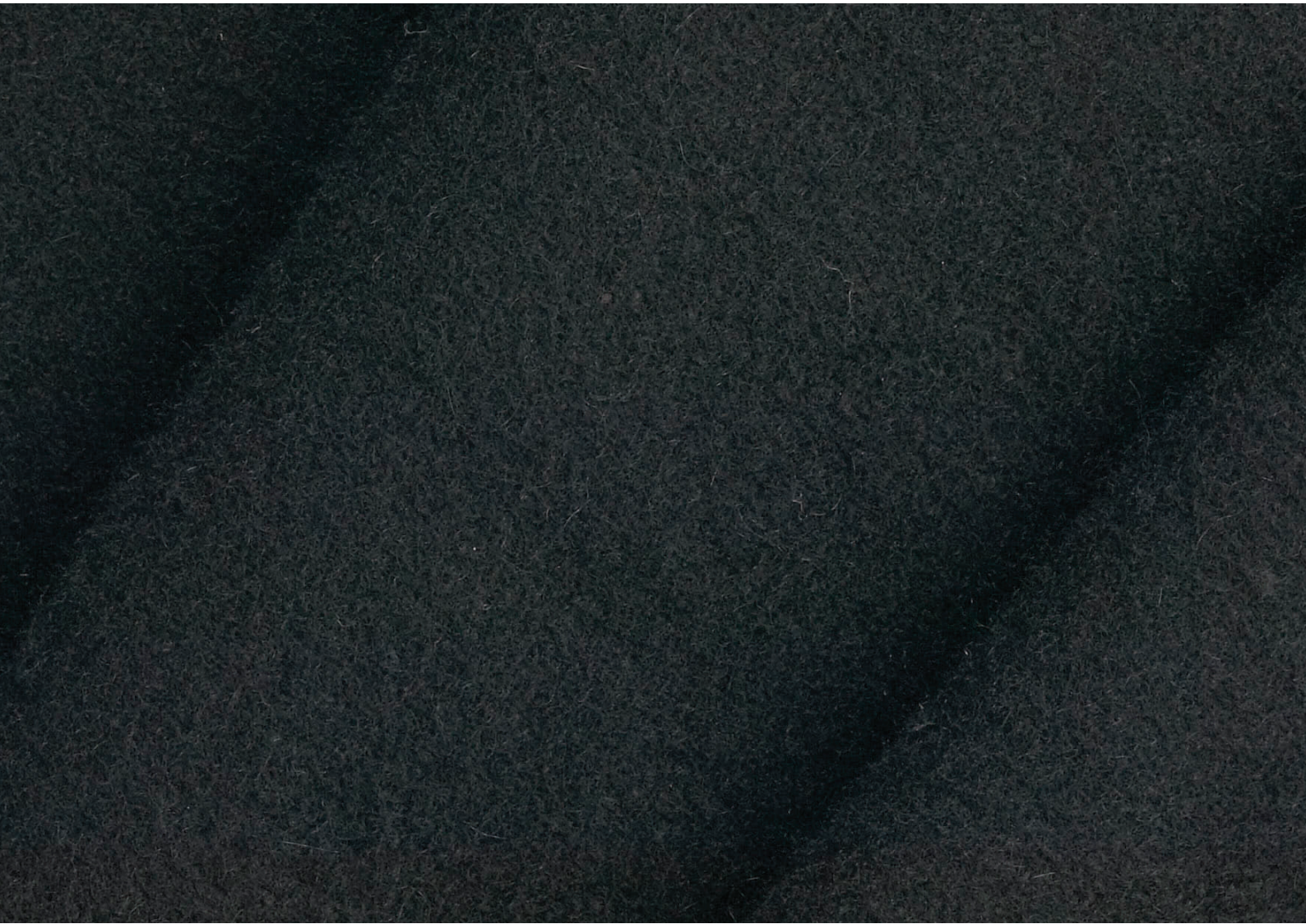


Wool Serge 800

Perfect For: Masking • Decorative/Scenic • Film & TV • Stage • Acoustics



J&C Joel 

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Contents

Composition & Care

150 cm 3

Fire Certificate

BS5867 Part 2 Type B 4

Acoustic Test Report

Flat 8

50% Fullness 10

100% Fullness 12

TECHNICAL



NDFR

Non Durably Flame Retardant

chemically treated with a water solution and if wetted in any way should be retreated



DFR

Durably Flame Retardant

chemically treated to withstand a number of cleanings



IFR

Inherently Flame Retardant

woven from fibres with a high flame retardancy



FR

Flame Retardant

chemically treated to an individual specification



NOT FR

Not Flame Retardant no flame retardant treatment



Confirmation that the fabric meets one or more flame retardant standards

BS5867 BS5867 Pt2 B is the British Standard for flame retardant fabrics used for curtains and drapes

BS5852 BS5852 Pt1 is the British Standard for flammability of upholstered composites for seating

BS4790 BS4790: 1987 Determination of the effects of a small source of ignition on textile floor coverings hot metal nut method (method 1, loose laid)

EN13773: 2003 Meets European fire safety standards for vertically hung fabrics. Burning behavior, ignitability testing of curtain fabric for use in the contract market.

TL 1080-0002/8 German Military Specification for horizontally tested materials

EN14041 Details the requirement for CE Marking of textiles, laminate and resilient floor coverings

BS7905-1:2001 Lifting equipment for performance, broadcast and similar applications.

ATTRIBUTES



Approx roll length of material in linear metres (m) & feet (ft)



Approx width of material in centimetres (cm) & inches (")



Approx weight in grams per metre squared (g/m²)



Approx thickness in (mm)

M1, M2, M4 Conforms to French Fire Regulations

B1, B2 Conforms to German Fire Regulations DIN 4102

IMO Conforms to International Maritime Organisation regulations

Classe Uno Meets Italian Fire Regulations

BS EN13501-1 Fire Classification of construction, products and building elements. Classification using test data from reaction to fire tests

CFC EN ISO 9239-1 Reaction to fire test. Horizontal surface spread of flame on floor covering system. Determination of the burning behaviour using a retardant heat source

NFPA 701 NFPA 701: (USA) Standard Methods of Fire Tests for Flame Propagation of Textiles and Films

EN9239-1 Reaction to fire tests – horizontal surface spread of flame on floor covering systems

DIN EN1021 Meets European fire safety standards for exposure to different ignition sources, namely a lit cigarette and butane flame. Assessment of the ignitability of upholstered furniture

Datasheet - Fabrics & Flooring

Wool Serge 800



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To ensure you get the best from the product supplied to you, we advise you follow the care instructions within this datasheet.

Fabric	Flame Retardancy	IFR
	Fire Certification	BS5867 Part 2 Type B
	Brand Name (and Manufacturer)	J&C Joel Ltd.
	Material (Blending Ratio)	95% Wool 5% Nylon & Other Fibres
	Construction of Fabric	Plain Weave • Yarn Count: Very Heavy • Ends/Picks: Medium Density
	Method of Dying	Fibre Dyed
Chemicals	Brand Name of Flame Retardant Chemicals	N/A
	Chemical name of Flame Retardant Chemicals	N/A
	Process of Flame Retardant Chemicals	N/A
Care	Information	Inherently Flame Retardant to BS5867 Part 2 Type B. This means that the man-made fibres are flame retardant for life and if wet, would not need to be re-flameproofed. Therefore, the cloth will withstand wet cleaning but we would advise and suggest professional dry cleaning only, using the correct chemical process. Notwithstanding the aforementioned, it would be our advice to only dry clean this material periodically. We would suggest that the curtain be soft-brushed on a regular basis and periodically cleaned using a vacuum and drapery attachment. This fabric is not pre-shrunk.
	Laundering Treatment	 Dry Clean Only  Do Not Wash  Do Not Bleach  Do Not Iron  Do Not Tumble Dry
	Other Finishes	Pressed, Blown Finish
Notes		 Recycled Wool Materials



Fire Rating:
IFR



Approx Roll Length:
38m / 125ft



Width:
150cm / 59"



Weight:
800 g/m²



Fire Certification:
BS5867



Colours
Available



Fabric Thickness:
*2.10mm

*FABRIC THICKNESS Measured in-house with digital callipers, not under laboratory conditions.

For further information please contact our sales team sales@jcjoel.com

UK Europe Middle East Vietnam Macau Hong Kong

Fire Test Certificate – Specimen

Fabric: Wool Serge 800
Type: BS5867 Part 2 Type B

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Leeds, LS16 6QL, UK.
Telephone: +44 (0)113 259 1999
Email: info@bttg.co.uk
Website: www.bttg.co.uk

Date: 15 August 2017

Our Ref: 53651-40
Your Ref: -

Page: 1 of 4

Client: J. & C. Joel Limited
Corporation Mill
Corporation Street
Sowerby Bridge
Halifax
HX6 2QQ

Job Title: Surface Ignition Of Curtains & Drapes

Client's Order No: -

Date of Receipt: 16 June 2017

Date of Test Start: 29 June 2017

Description of Sample(s): One sample identified as follows was received for testing:
Kilo Wool Serge, stated to be IFR

Work Requested: We were asked to make the following test:
BS 5867: Part 2: 2008 (2015): Type B Curtains, Drapes and Blinds



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Fire Test Certificate – Specimen

Fabric: Wool Serge 800
Type: BS5867 Part 2 Type B

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J. & C. Joel Limited

Sample was identified as follows:

Kilo Wool Serge, stated to be IFR

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Date: 15 August 2017

Our Ref: 53651-40
Your Ref: -

Page: 2 of 4

BS 5867: Part 2: 2008 (2015): Type B Curtains, Drapes and Blinds
Testing as received.

Three specimens from both length and width were tested in accordance with BS EN ISO 15025: Procedure A (surface ignition): 2002. The sample was tested at 20 °C and 60 % relative humidity (R.H.).

Each specimen was subjected to an applied flame using propane and a 15 second flame application time. The results obtained (shown in the table below) were assessed according to the requirements of BS 5867: Part 2: 2008 (2015).

Pre-treatment

If the fabric is a pass in the 'as received' condition then the fabric is subjected a water soak procedure as specified in BS EN 1021: Annex D: 2006.

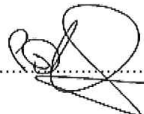
Testing after pre-treatment

Three specimens, after pre-treatment, from both length and width were tested following the procedure described above.

Test results relate only to the sample tested.

The results for all tests are given in the table(s) on the following page(s).

Reported by: 
J Coleman
Fire Technician

Countersigned By: 
P Doherty
Operational Head

Enquiries concerning this report should be addressed to Customer Services.



1066

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Fire Test Certificate – Specimen

Fabric: Wool Serge 800
Type: BS5867 Part 2 Type B

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Date: 15 August 2017

Our Ref: 53651-40
Your Ref: -

Page: 3 of 4

J. & C. Joel Limited

RESULTS

Sample Ref: Kilo Wool Serge, stated to be IFR

BS 5867: Part 2: 2008 (2015): Type B Curtains, Drapes and Blinds

Testing as Received

Specimen No.	Length			Width		
	1	2	3	4	5	6
Flame reached an edge	No	No	No	No	No	No
Hole reached an edge	No	No	No	No	No	No
Flaming debris separated	No	No	No	No	No	No

Requirements

Any "Yes" means fail except if only one specimen fails a further 6 specimens are tested, if the second 6 specimens all pass the result is a pass.

Result in 'as received': Pass

Testing after pre-treatment

Specimen No.	Length			Width		
	1	2	3	4	5	6
Flame reached an edge	No	No	No	No	No	No
Hole reached an edge	No	No	No	No	No	No
Flaming debris separated	No	No	No	No	No	No

Requirements

Any "Yes" means fail except if only one specimen fails a further 6 specimens are tested, if the second 6 specimens all pass the result is a pass.

Result in 'after pre-treatment': Pass



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Fire Test Certificate – Specimen

Fabric: Wool Serge 800
Type: BS5867 Part 2 Type B

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J. & C. Joel Limited

Conclusion

The fabric meets the Type B performance requirements of BS 5867: Part 2: 2008 (2015).

This material should be identified with the manufacturers name, trademark or other identifying mark, the statement 'Flammability complies with the requirements of BS 5867: Part 2: Type B and instructions of any special precautions to be taken concerning care (including cleansing) of the curtain, drape or window blind to be manufactured from the fabric, preferably using an appropriate care labelling symbol in accordance with BS EN 23758 and taking account of the pre-treatment using in this test and the requirements of Clause 4 of BS 5867: Part 2: 2008 (2015). If the fabric is unsuitable for cleansing, this shall be stated.

Uncertainty Budget

There is no uncertainty budget associated with BS 5867: Part 2: Type B as no measurements are determined, the pass/fail criteria is assessed visually.

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Acoustic Test Report - Absorption

Absorption Class: C

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 800

Fullness: Flat

Cavity from Wall: 100mm



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Data Sheet 11

The Laboratory Measurement of Random Incidence Sound Absorption generally to BS EN ISO 354:2003

Client: J&C Joel Ltd

Test Date: 12/04/2014

Empty Room: **Temperature:** 17.0 °C **Humidity:** 57 %RH **Pressure:** 1010 mbar

Room with Sample: **Temperature:** 16.7 °C **Humidity:** 50 %RH **Pressure:** 1009 mbar

Sample Description: Wool Serge 800 - Single Layer - Flat (Approx. weight 800g/m²) - 100mm cavity from wall

Mounting Method: G-100

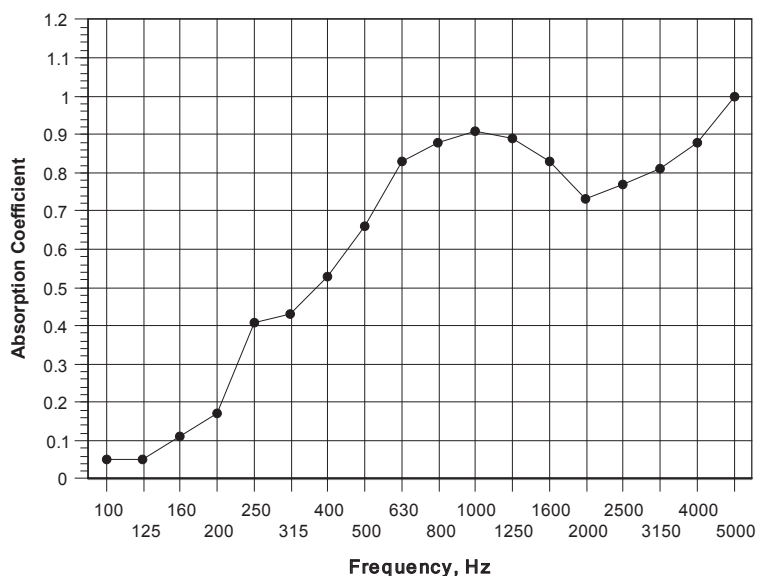
Sample Area: 9 m²

Chamber Volume: 300 m³

Test 12

Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
50*	5.07	5.33	-0.05	
63*	4.60	4.05	0.16	n/a
80*	5.86	5.72	0.02	
100	6.96	6.53	0.05	0.05
125	7.22	6.80	0.05	
160	6.82	5.98	0.11	
200	6.37	5.29	0.17	
250	7.19	4.67	0.41	0.35
315	7.06	4.53	0.43	
400	6.40	3.93	0.53	
500	5.35	3.24	0.66	0.65
630	5.03	2.85	0.83	
800	5.43	2.88	0.88	
1000	5.96	2.98	0.91	0.90
1250	5.70	2.93	0.89	
1600	5.08	2.84	0.83	
2000	4.62	2.81	0.73	0.80
2500	4.17	2.56	0.77	
3150	3.50	2.22	0.81	
4000	2.85	1.86	0.88	0.90
5000	2.25	1.50	1.00	
6300*	1.66	1.12	1.26	
8000*	1.38	0.97	1.19	n/a
10000*	0.93	0.70	1.25	

Sound Absorption Coefficient



α_w 0.65(MH)

Class C

Calculated to EN ISO 11654:1997

NRC 0.70

Calculated to ASTM C 423-01

* Denotes frequencies outside the range covered
by BS EN ISO 354:2003

T1, empty room reverberation time
T2, room reverberation time with sample

Practical absorption coefficient, BS EN ISO 11654:1997

v4.3

Acoustic Test Report - Absorption

Absorption Class: C

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 800

Fullness: Flat

Cavity from Wall: 350mm

J&C Joel 

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Data Sheet 12

The Laboratory Measurement of Random Incidence Sound Absorption generally to BS EN ISO 354:2003

Client: J&C Joel Ltd

Test Date: 12/04/2014

Empty Room: **Temperature:** 17.0 °C **Humidity:** 57 %RH **Pressure:** 1010 mbar

Room with Sample: **Temperature:** 16.7 °C **Humidity:** 50 %RH **Pressure:** 1009 mbar

Sample Description: Wool Serge 800 - Single Layer - Flat (Approx. weight 800g/m²) - 350mm cavity from wall

Mounting Method: G-350

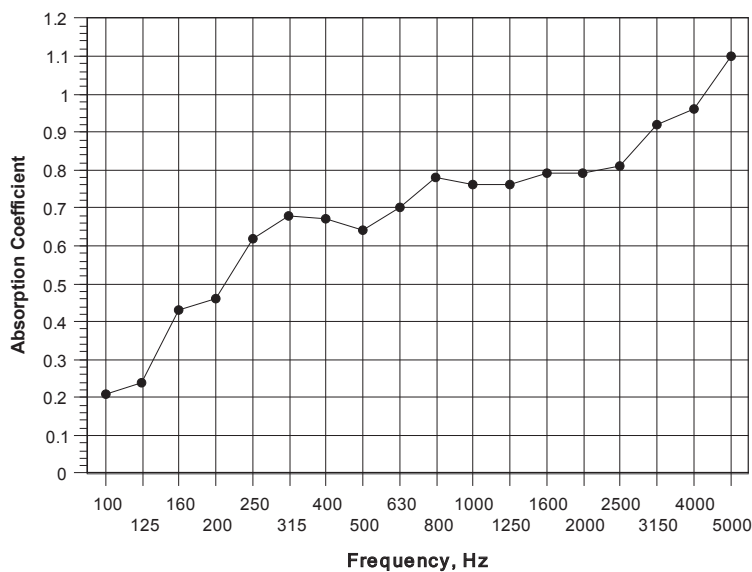
Sample Area: 9 m²

Chamber Volume: 300 m³

Test 13

Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
50*	5.07	5.01	0.01	
63*	4.60	4.10	0.14	n/a
80*	5.86	5.52	0.06	
100	6.96	5.50	0.21	
125	7.22	5.44	0.24	0.30
160	6.82	4.41	0.43	
200	6.37	4.12	0.46	
250	7.19	3.94	0.62	0.60
315	7.06	3.73	0.68	
400	6.40	3.57	0.67	
500	5.35	3.29	0.64	0.65
630	5.03	3.06	0.70	
800	5.43	3.05	0.78	
1000	5.96	3.24	0.76	0.75
1250	5.70	3.16	0.76	
1600	5.08	2.89	0.79	
2000	4.62	2.73	0.79	0.80
2500	4.17	2.51	0.81	
3150	3.50	2.13	0.92	
4000	2.85	1.81	0.96	1.00
5000	2.25	1.46	1.10	
6300*	1.66	1.14	1.17	
8000*	1.38	0.96	1.25	n/a
10000*	0.93	0.68	1.48	

Sound Absorption Coefficient



α_w 0.75(H)

Class C

Calculated to EN ISO 11654:1997

NRC 0.70

Calculated to ASTM C 423-01

* Denotes frequencies outside the range covered by BS EN ISO 354:2003

T1, empty room reverberation time
T2, room reverberation time with sample

Practical absorption coefficient, BS EN ISO 11654:1997

v4.3

Acoustic Test Report - Absorption

Absorption Class: B

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 800

Fullness: 50%

Cavity from Wall: 100mm

J&C Joel 

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Data Sheet 6

See SRL report 24694-SRL-RP-XT-001-P1 for full details

The Laboratory Measurement of Random Incidence Sound Absorption generally to BS EN ISO 354:2003

Client: J & C Joel

Test Date: 21/08/2020

Empty Room: **Temperature:** 21.2 °C **Humidity:** 67 %RH **Pressure:** 994 mbar

Room with Sample: **Temperature:** 21.5 °C **Humidity:** 68 %RH **Pressure:** 995 mbar

Sample Description: Wool Serge 800 - Single Layer - 50% Fullness (Approx. Weight 800g/m²) - 100mm cavity from wall

Mounting Method: G - 100

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 7

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
50*	4.50	4.61	-0.03	
63*	5.34	4.67	0.14	n/a
80*	7.80	6.69	0.11	
100	7.45	6.45	0.11	
125	7.52	5.68	0.23	0.25
160	6.43	4.56	0.34	
200	7.00	4.64	0.39	
250	6.85	3.80	0.63	0.55
315	6.50	3.73	0.61	
400	6.17	3.28	0.76	
500	5.51	2.81	0.93	0.90
630	4.84	2.59	0.96	
800	5.03	2.50	1.08	
1000	5.39	2.63	1.04	1.00
1250	5.59	2.67	1.05	
1600	5.17	2.70	0.95	
2000	4.85	2.69	0.89	0.90
2500	4.42	2.56	0.88	
3150	3.75	2.26	0.95	
4000	3.16	2.02	0.97	0.95
5000	2.58	1.76	0.98	
6300*	1.92	1.45	0.94	
8000*	1.54	1.20	1.04	n/a
10000*	1.12	0.93	1.06	

α_w 0.85

Class B

Calculated to EN ISO 11654:1997

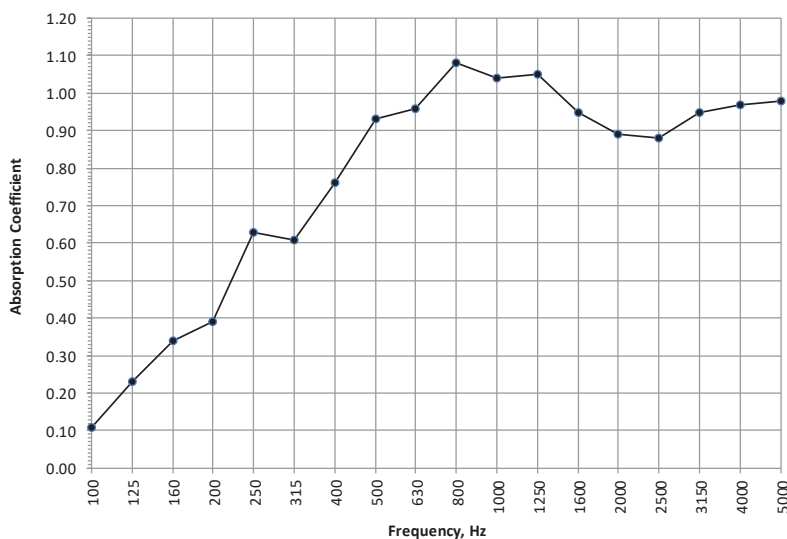
NRC 0.85

Calculated to ASTM C 423-01

* Denotes frequencies outside the range covered
by BS EN ISO 354:2003

T1, empty room reverberation time
T2, room reverberation time with sample

Sound Absorption Coefficient



Practical absorption coefficient, BS EN ISO 11654:1997

v5

Acoustic Test Report - Absorption

Absorption Class: A

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 800

Fullness: 50%

Cavity from Wall: 350mm

J&C Joel 

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Data Sheet 21

The Laboratory Measurement of Random Incidence Sound Absorption generally to BS EN ISO 354:2003

Client: J & C Joel Ltd

Test Date: 20/01/2019

Empty Room: **Temperature:** 15.7 °C **Humidity:** 45 %RH **Pressure:** 1007 mbar

Room with Sample: **Temperature:** 15.4 °C **Humidity:** 42 %RH **Pressure:** 1009 mbar

Sample Description: Wool Serge 800 - Single Layer - 50% fullness (Approx. weight 800g/m2) 350mm cavity from the wall

Mounting Method: G - 350

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 23

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
50*	4.89	4.50	0.10	
63*	5.29	4.91	0.08	n/a
80*	7.17	5.97	0.15	
100	8.74	6.82	0.17	
125	7.19	5.48	0.23	0.30
160	6.81	4.20	0.49	
200	6.80	3.98	0.56	
250	6.89	3.79	0.64	0.70
315	6.81	3.33	0.83	
400	6.46	3.09	0.92	
500	5.52	2.88	0.90	0.90
630	5.09	2.71	0.94	
800	5.13	2.60	1.03	
1000	5.66	2.76	1.00	1.00
1250	5.45	2.75	0.97	
1600	5.02	2.61	0.98	
2000	4.54	2.37	1.07	1.00
2500	4.01	2.17	1.10	
3150	3.16	1.84	1.16	
4000	2.47	1.49	1.34	1.00
5000	1.89	1.22	1.41	
6300*	1.26	0.90	1.49	
8000*	1.05	0.75	1.75	n/a
10000*	0.75	0.57	1.90	

α_w 0.95

Class A

Calculated to EN ISO 11654:1997

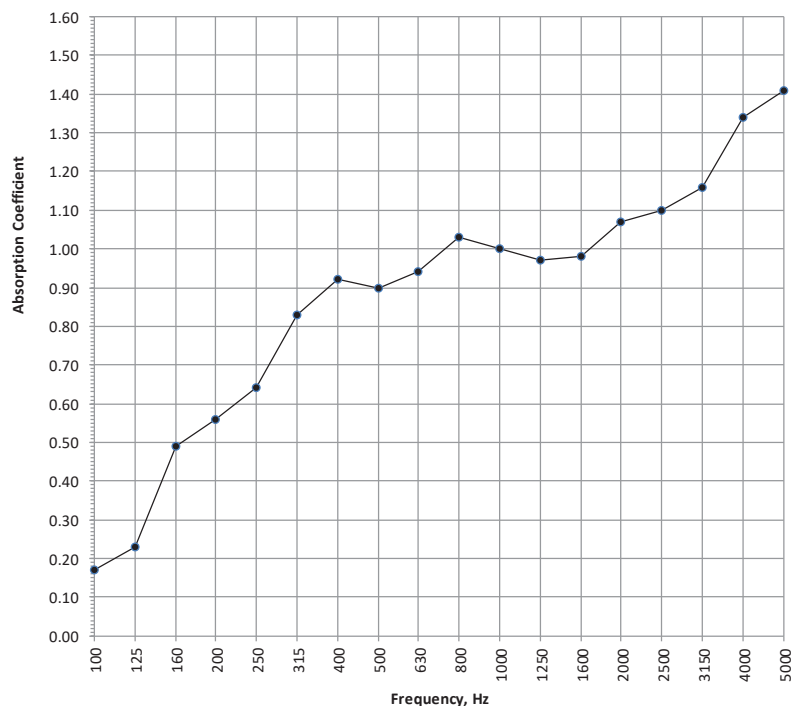
NRC 0.90

Calculated to ASTM C 423-01

* Denotes frequencies outside the range covered
by BS EN ISO 354:2003

T1, empty room reverberation time
T2, room reverberation time with sample

Sound Absorption Coefficient



Practical absorption coefficient, BS EN ISO 11654:1997

v5

Acoustic Test Report - Absorption

Absorption Class: A

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 800

Fullness: 100%

Cavity from Wall: 100mm



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Data Sheet 5

See SRL report 24694-SRL-RP-XT-001-P1 for full details

The Laboratory Measurement of Random Incidence Sound Absorption generally to BS EN ISO 354:2003

Client: J & C Joel

Test Date: 21/08/2020

Empty Room: **Temperature:** 21.2 °C **Humidity:** 67 %RH **Pressure:** 994 mbar

Room with Sample: **Temperature:** 21.5 °C **Humidity:** 68 %RH **Pressure:** 995 mbar

Sample Description: Wool Serge 800 - Single Layer - 100% Fullness (Approx. Weight 800g/m²) - 100mm cavity from wall

Mounting Method: G - 100

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 6

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
50*	4.50	4.55	-0.01	
63*	5.34	4.74	0.13	n/a
80*	7.80	6.43	0.15	
100	7.45	6.11	0.16	
125	7.52	5.66	0.23	0.25
160	6.43	4.45	0.37	
200	7.00	4.12	0.54	
250	6.85	3.59	0.71	0.70
315	6.50	3.35	0.78	
400	6.17	3.13	0.84	
500	5.51	2.72	1.00	0.95
630	4.84	2.56	0.98	
800	5.03	2.51	1.07	
1000	5.39	2.67	1.01	1.00
1250	5.59	2.68	1.04	
1600	5.17	2.68	0.96	
2000	4.85	2.58	0.97	0.95
2500	4.42	2.45	0.97	
3150	3.75	2.18	1.03	
4000	3.16	1.95	1.06	1.00
5000	2.58	1.72	1.06	
6300*	1.92	1.39	1.09	
8000*	1.54	1.20	1.04	n/a
10000*	1.12	0.92	1.12	

α_w 0.95

Class A

Calculated to EN ISO 11654:1997

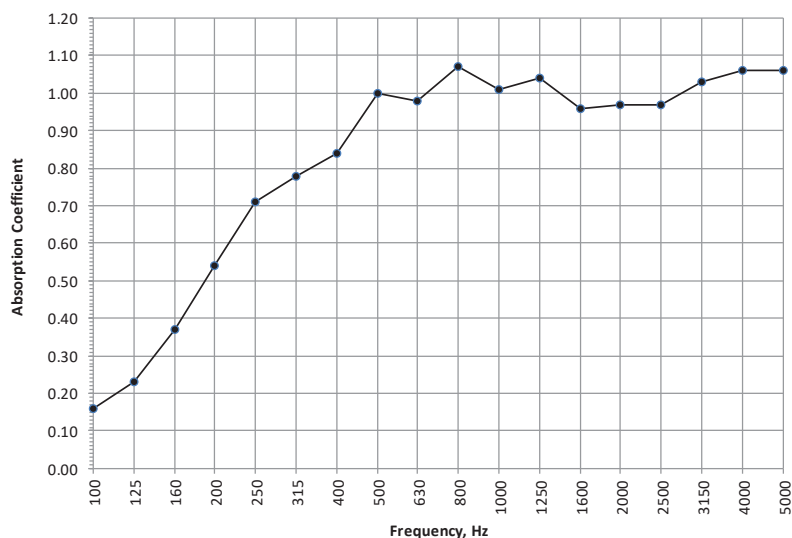
NRC 0.90

Calculated to ASTM C423-01

* Denotes frequencies outside the range covered
by BS EN ISO 354:2003

T1, empty room reverberation time
T2, room reverberation time with sample

Sound Absorption Coefficient



Practical absorption coefficient, BS EN ISO 11654:1997

v5

Acoustic Test Report - Absorption

Absorption Class: A

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 800

Fullness: 100%

Cavity from Wall: 350mm

J&C Joel 

the inspiration behind the performance

Data Sheet 22

The Laboratory Measurement of Random Incidence Sound Absorption generally to BS EN ISO 354:2003

Client: J & C Joel Ltd

Test Date: 20/01/2019

Empty Room: **Temperature:** 15.7 °C **Humidity:** 45 %RH **Pressure:** 1007 mbar

Room with Sample: **Temperature:** 15.3 °C **Humidity:** 42 %RH **Pressure:** 1009 mbar

Sample Description: Wool Serge 800 - Single Layer - 100% fullness (Approx. weight 800g/m²) 350mm cavity from the wall

Mounting Method: G - 350

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 24

Freq Hz	T1 sec	T2 sec	Absorp Coeff a _s	Practical Absorp Coeff #
50*	4.89	4.55	0.08	
63*	5.29	4.55	0.17	n/a
80*	7.17	6.16	0.12	
100	8.74	6.75	0.18	
125	7.19	5.08	0.31	0.35
160	6.81	4.08	0.53	
200	6.80	3.77	0.64	
250	6.89	3.51	0.76	0.75
315	6.81	3.18	0.91	
400	6.46	3.01	0.96	
500	5.52	2.77	0.98	1.00
630	5.09	2.56	1.05	
800	5.13	2.56	1.06	
1000	5.66	2.69	1.05	1.00
1250	5.45	2.58	1.10	
1600	5.02	2.49	1.08	
2000	4.54	2.30	1.14	1.00
2500	4.01	2.11	1.17	
3150	3.16	1.77	1.27	
4000	2.47	1.46	1.40	1.00
5000	1.89	1.15	1.67	
6300*	1.26	0.86	1.75	
8000*	1.05	0.73	1.93	n/a
10000*	0.75	0.54	2.41	

α_w 1.00

Class A

Calculated to EN ISO 11654:1997

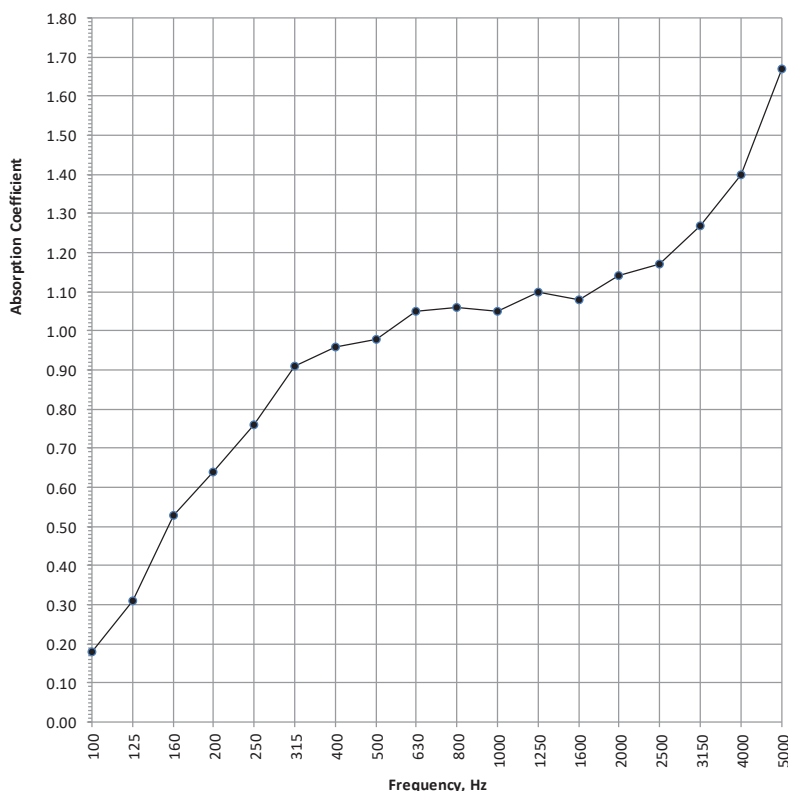
NRC 1.00

Calculated to ASTM C423-01

* Denotes frequencies outside the range covered
by BS EN ISO 354:2003

T1, empty room reverberation time
T2, room reverberation time with sample

Sound Absorption Coefficient



Practical absorption coefficient, BS EN ISO 11654:1997

v5

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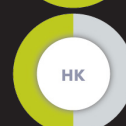
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