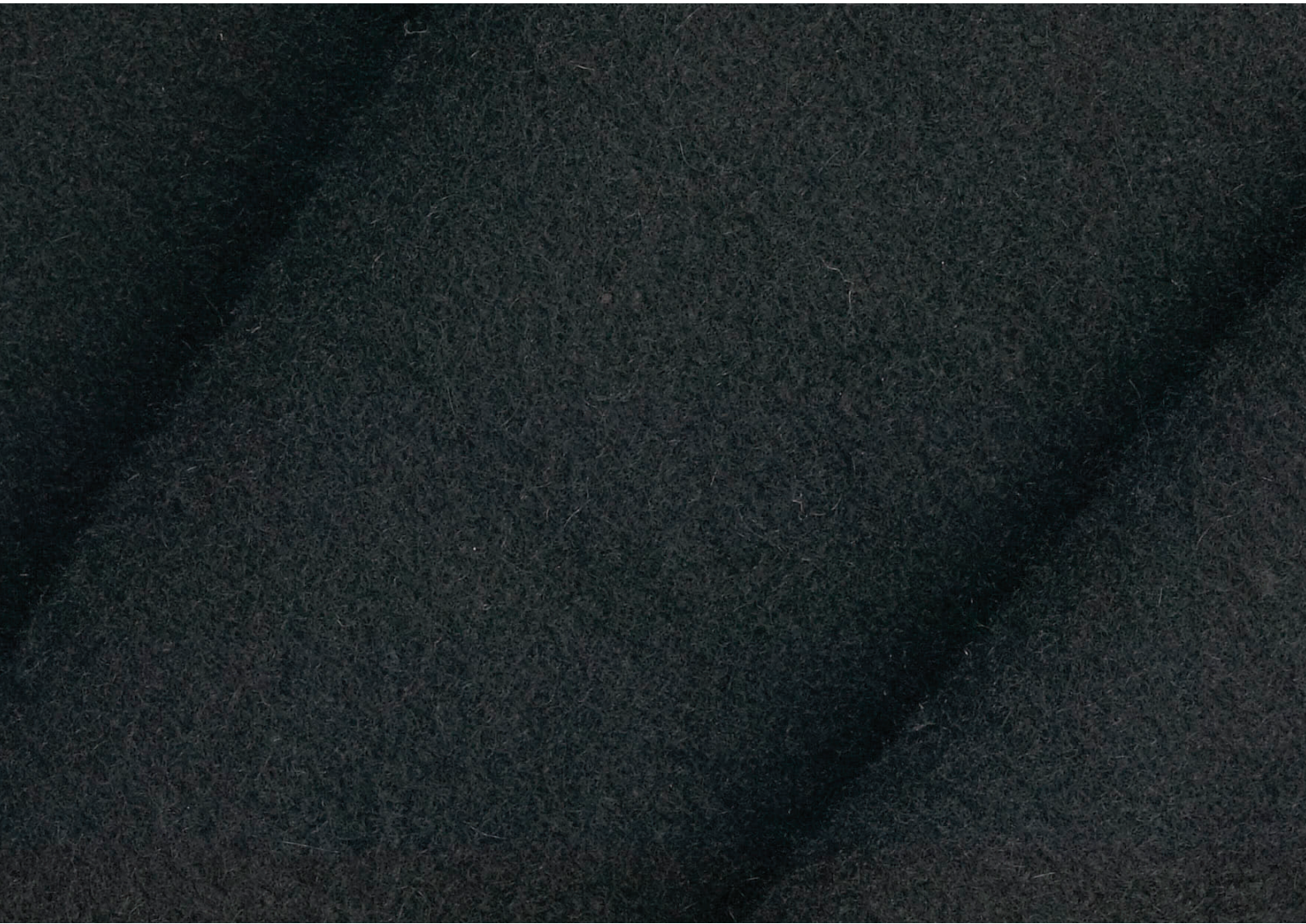


Wool Serge 650

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 650



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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.

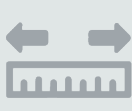
Fabric	Flame Retardancy	IFR
	Fire Certification	BS5867 Part 2 Type B
	Brand Name (and Manufacturer)	J&C Joel Ltd.
	Material (Blending Ratio)	95% Wool 5% Nylon & Other Fibres
	Construction of Fabric	Plain Weave • Yarn Count: Very Heavy • Ends/Picks: High Density
	Method of Dying	Fibre Dyed
Chemicals	Brand 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:
57m / 187ft



Width:
150cm / 59"



Weight:
650 g/m²



Fire Certification:
BS5867



Colours
Available



Fabric Thickness:
*2.00mm

*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 650
Type: BS5867 Part 2 Type B

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TEXTILE LABORATORY SERVICES LIMITED

P.O. Box 50, Wharfebank Business Centre, Ilkley Road, OTLEY, LS21 3JP, United Kingdom

Tel: +44 (0)1943 850967 Fax: +44 (0)1943 850965 Email: info@tls-ltd.demon.co.uk

Regd. Office: 3 Victoria Road, Guiseley, England - No.1966147



TEST CERTIFICATE

No. 26030/25

Testing to BS 5867 : Part 2 : 2008 : Type B Curtains, Drapes and Blinds

Client **J. & C. Joel Limited**
Corporation Mill
Corporation Street
Sowerby Bridge
HALIFAX
HX6 2QQ.

Fabric Reference **Heavy Wool Serge DFR, stated to be wool**
Descriptions are information
supplied by the client

Dimensions (approx) **104cm by 100cm**

Sample received **6/4/2010**

1. TESTING AS RECEIVED

Test results relate only to the sample tested. Three specimens, as received, from both length and width were tested in accordance with BS EN ISO 15025:2002 Procedure A (surface ignition) using 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

The test results may not apply to situations where there is a restricted air supply or prolonged exposure to large sources of intense heat as in a conflagration. The second specimen in each direction was tested in the inverse direction to the other two specimens. Testing was carried out on the face side of the fabric. The following results were noted.

Specimen	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' condition: **Pass**

PRE-TREATMENT

If the fabric is a PASS in the 'as received' condition then the fabric undergoes a water soak as per BS EN 1021 Annex D or BS 5651

Fire Test Certificate – Specimen

Fabric: Wool Serge 650
Type: BS5867 Part 2 Type B

J&C Joel 
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Regd. Office: 3 Victoria Road, Guiseley, England - No.1966147



2. TESTING AFTER PRE-TREATMENT

Test results relate only to the sample tested. Three specimens, after pre-treatment, from both length and width were tested in accordance with BS EN ISO 15025:2002 Procedure A (surface ignition) using 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

Specimen	7	8	9	10	11	12
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 after pre-treatment: **Pass**

CONCLUSION

The fabric meets the Type B performance requirements of BS 5867 : Part 2 : 2008

The 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 used in this test and the requirements of Clause 4 of BS 5867 : Part 2 : 2008. If the fabric is unsuitable for cleansing, this shall be stated.

J.M. Brown 
C Chem MRSC C Text FTI
Managing Director & Authorised Signatory

Checked by 

Acoustic Test Report - Absorption

Absorption Class: C

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 650

Fullness: Flat

Cavity from Wall: 100mm

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Data Sheet 9

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:** 67 %RH **Pressure:** 996 mbar

Sample Description: Wool Serge 650 - Single Layer - Flat (Approx. Weight 650g/m²) - 100mm cavity from wall

Mounting Method: G - 100

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 10

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
50*	4.50	4.83	-0.08	
63*	5.34	5.00	0.07	n/a
80*	7.80	7.20	0.06	
100	7.45	6.78	0.07	
125	7.52	6.51	0.11	0.10
160	6.43	5.60	0.12	
200	7.00	5.47	0.21	
250	6.85	4.80	0.33	0.30
315	6.50	4.40	0.39	
400	6.17	3.64	0.60	
500	5.51	3.16	0.72	0.70
630	4.84	2.80	0.81	
800	5.03	2.74	0.89	
1000	5.39	2.83	0.90	0.90
1250	5.59	2.88	0.90	
1600	5.17	3.05	0.72	
2000	4.85	2.91	0.73	0.75
2500	4.42	2.69	0.78	
3150	3.75	2.38	0.82	
4000	3.16	2.15	0.80	0.80
5000	2.58	1.84	0.84	
6300*	1.92	1.48	0.84	
8000*	1.54	1.24	0.86	n/a
10000*	1.12	0.96	0.83	

α_w 0.60(MH)

Class C

Calculated to EN ISO 11654:1997

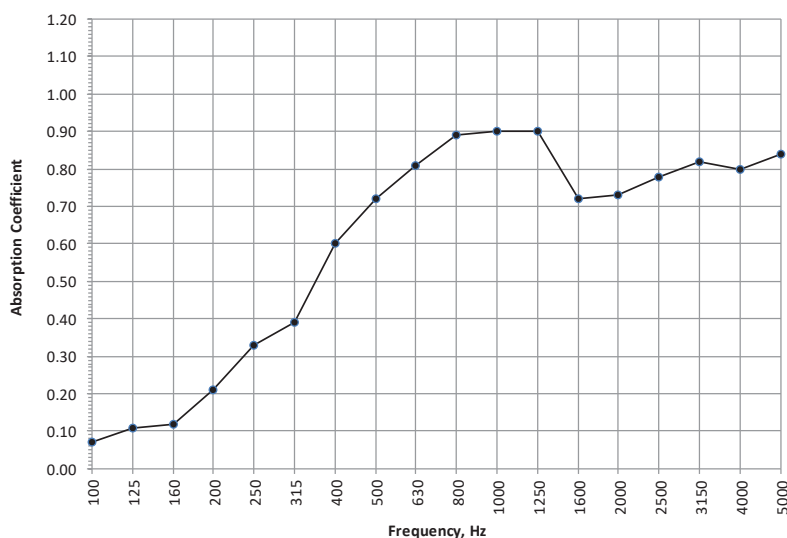
NRC 0.65

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: C

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 650

Fullness: Flat

Cavity from Wall: 350mm

J&C Joel 

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Data Sheet 14

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

Client: J & C Joel Ltd

Test Date: 19/01/2019

Empty Room: **Temperature:** 17.0 °C **Humidity:** 46 %RH **Pressure:** 1002 mbar

Room with Sample: **Temperature:** 15.7 °C **Humidity:** 43 %RH **Pressure:** 1001 mbar

Sample Description: Wool Serge 650 - Single Layer - flat (Approx. weight 650g/m2) - 350mm cavity from wall

Mounting Method: G - 350

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 15

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
50*	4.96	4.72	0.06	
63*	5.39	4.75	0.14	n/a
80*	7.08	5.95	0.15	
100	9.00	7.07	0.16	
125	7.30	5.69	0.21	0.20
160	6.60	4.88	0.29	
200	6.86	4.62	0.38	
250	7.22	3.96	0.62	0.55
315	6.99	3.69	0.70	
400	6.36	3.53	0.69	
500	5.64	3.21	0.73	0.70
630	5.09	3.13	0.67	
800	5.10	2.96	0.77	
1000	5.74	3.07	0.82	0.80
1250	5.63	3.07	0.80	
1600	5.18	2.84	0.85	
2000	4.76	2.60	0.91	0.90
2500	4.22	2.37	0.95	
3150	3.35	2.01	0.99	
4000	2.59	1.63	1.08	1.00
5000	2.04	1.28	1.35	
6300*	1.39	0.96	1.41	
8000*	1.14	0.81	1.47	n/a
10000*	0.80	0.59	1.83	

α_w 0.75(H)

Class C

Calculated to EN ISO 11654:1997

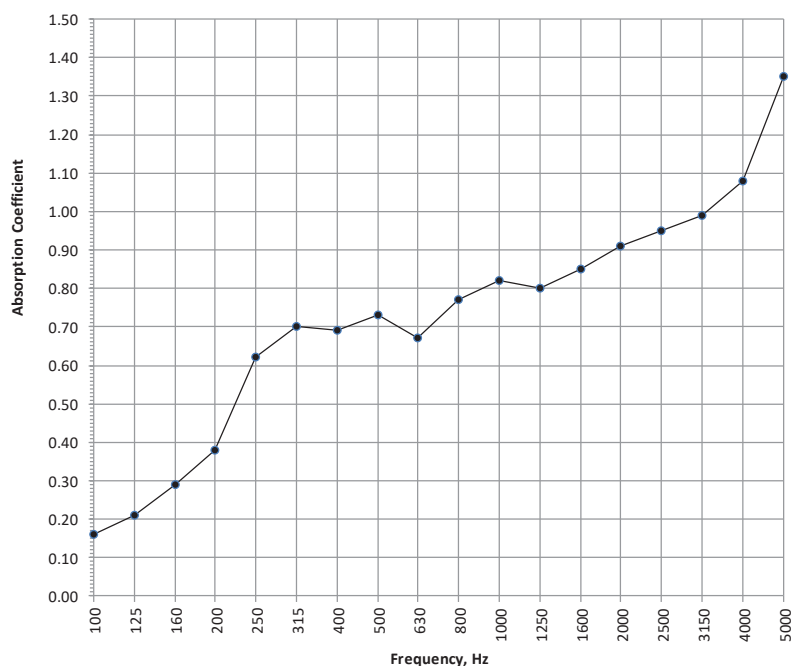
NRC 0.75

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: B

Calculated to EN ISO 11654:1997

Fabric: Wool Serge 650

Fullness: 50%

Cavity from Wall: 100mm



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Data Sheet 8

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:** 67 %RH **Pressure:** 996 mbar

Sample Description: Wool Serge 650 - Single Layer - 50% Fullness (Approx. Weight 650g/m²) - 100mm cavity from wall

Mounting Method: G - 100

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 9

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
50*	4.50	4.76	-0.07	
63*	5.34	4.96	0.08	n/a
80*	7.80	6.83	0.10	
100	7.45	6.58	0.09	
125	7.52	5.94	0.19	0.20
160	6.43	4.70	0.31	
200	7.00	4.62	0.39	
250	6.85	4.09	0.53	0.50
315	6.50	3.99	0.52	
400	6.17	3.31	0.75	
500	5.51	2.85	0.91	0.85
630	4.84	2.60	0.95	
800	5.03	2.59	1.00	
1000	5.39	2.68	1.00	1.00
1250	5.59	2.71	1.02	
1600	5.17	2.78	0.89	
2000	4.85	2.66	0.91	0.90
2500	4.42	2.53	0.90	
3150	3.75	2.29	0.91	
4000	3.16	2.04	0.93	0.95
5000	2.58	1.78	0.94	
6300*	1.92	1.42	1.00	
8000*	1.54	1.24	0.86	n/a
10000*	1.12	0.95	0.89	

α_w 0.80(H)

Class B

Calculated to EN ISO 11654:1997

NRC 0.85

Calculated to ASTM C 423-01

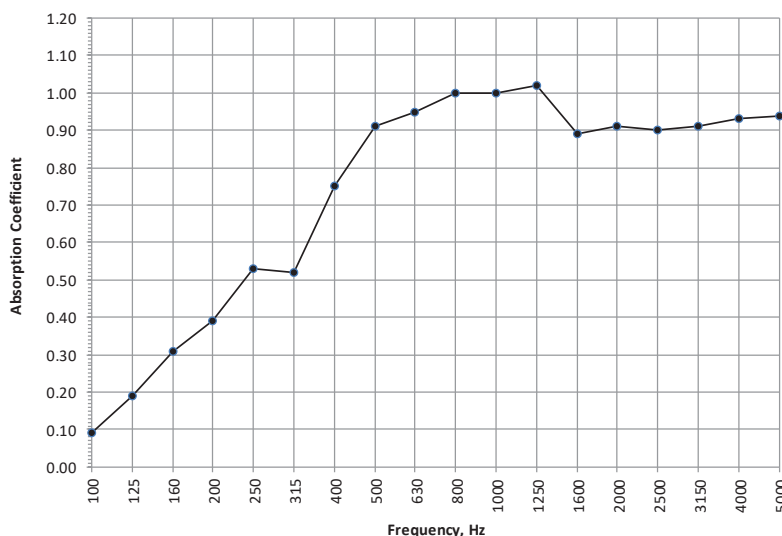
* Denotes frequencies outside the range covered

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 650

Fullness: 50%

Cavity from Wall: 350mm

J&C Joel 

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Data Sheet 13

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

Client: J & C Joel Ltd

Test Date: 19/01/2019

Empty Room: **Temperature:** 17.0 °C **Humidity:** 46 %RH **Pressure:** 1002 mbar

Room with Sample: **Temperature:** 15.6 °C **Humidity:** 43 %RH **Pressure:** 1001 mbar

Sample Description: Wool Serge 650 - Single Layer - 50% fullness (Approx. weight 650g/m2) - 350mm cavity from wall

Mounting Method: G - 350

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 14

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
50*	4.96	4.41	0.14	
63*	5.39	4.47	0.21	n/a
80*	7.08	5.55	0.21	
100	9.00	7.05	0.17	
125	7.30	5.58	0.23	0.25
160	6.60	4.52	0.38	
200	6.86	4.22	0.50	
250	7.22	3.69	0.72	0.70
315	6.99	3.39	0.83	
400	6.36	3.17	0.86	
500	5.64	3.01	0.85	0.90
630	5.09	2.62	1.01	
800	5.10	2.67	0.97	
1000	5.74	2.85	0.96	1.00
1250	5.63	2.66	1.07	
1600	5.18	2.59	1.03	
2000	4.76	2.45	1.04	1.00
2500	4.22	2.25	1.07	
3150	3.35	1.86	1.20	
4000	2.59	1.58	1.18	1.00
5000	2.04	1.26	1.41	
6300*	1.39	0.92	1.64	
8000*	1.14	0.79	1.63	n/a
10000*	0.80	0.58	1.97	

α_w 0.95

Class A

Calculated to EN ISO 11654:1997

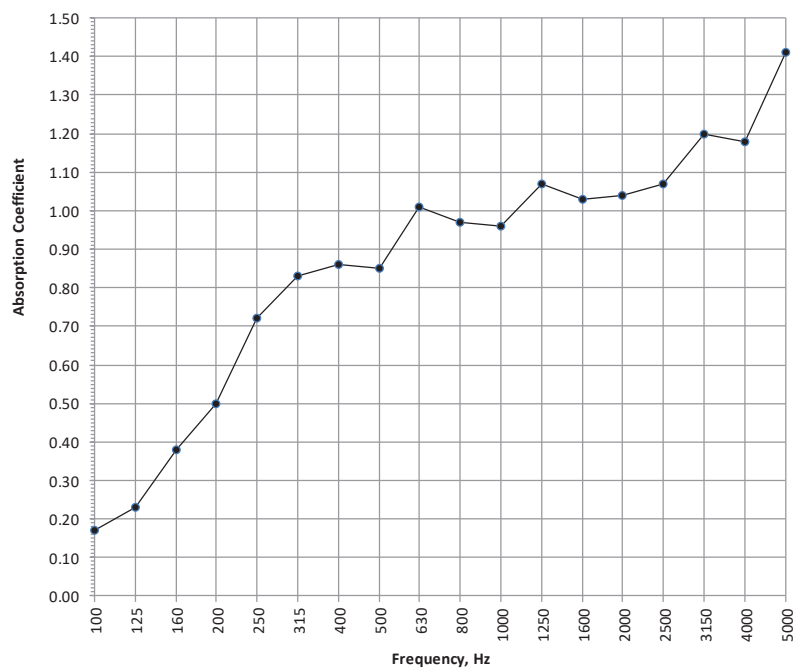
NRC 0.90

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 650

Fullness: 100%

Cavity from Wall: 100mm

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Data Sheet 7

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:** 67 %RH **Pressure:** 995 mbar

Sample Description: Wool Serge 650 - Single Layer - 100% Fullness (Approx. Weight 650g/m²) - 100mm cavity from wall

Mounting Method: G - 100

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 8

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
50*	4.50	4.59	-0.02	
63*	5.34	4.94	0.08	n/a
80*	7.80	6.97	0.08	
100	7.45	6.53	0.10	
125	7.52	5.61	0.24	0.20
160	6.43	4.71	0.30	
200	7.00	4.31	0.48	
250	6.85	3.85	0.61	0.60
315	6.50	3.60	0.66	
400	6.17	3.11	0.85	
500	5.51	2.78	0.95	0.95
630	4.84	2.57	0.98	
800	5.03	2.53	1.05	
1000	5.39	2.66	1.02	1.00
1250	5.59	2.71	1.02	
1600	5.17	2.71	0.94	
2000	4.85	2.60	0.95	0.95
2500	4.42	2.42	1.00	
3150	3.75	2.21	1.00	
4000	3.16	2.01	0.97	1.00
5000	2.58	1.76	0.97	
6300*	1.92	1.39	1.08	
8000*	1.54	1.20	1.01	n/a
10000*	1.12	0.91	1.14	

α_w 0.90

Class A

Calculated to EN ISO 11654:1997

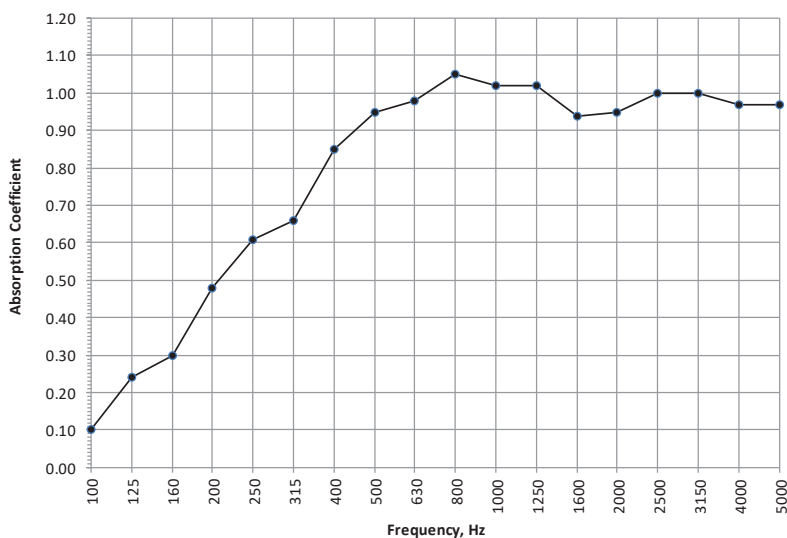
NRC 0.90

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 650

Fullness: 100%

Cavity from Wall: 350mm

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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: 19/01/2019

Empty Room: **Temperature:** 17.0 °C **Humidity:** 46 %RH **Pressure:** 1002 mbar

Room with Sample: **Temperature:** 15.5 °C **Humidity:** 43 %RH **Pressure:** 1001 mbar

Sample Description: Wool Serge 650 - Single Layer - 100% fullness (Approx. weight 650g/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 α_s	Practical Absorp Coeff #
50*	4.96	4.41	0.14	
63*	5.39	4.48	0.21	n/a
80*	7.08	5.69	0.19	
100	9.00	6.72	0.21	
125	7.30	5.28	0.29	0.30
160	6.60	4.29	0.44	
200	6.86	3.88	0.61	
250	7.22	3.48	0.81	0.80
315	6.99	3.16	0.94	
400	6.36	3.15	0.87	
500	5.64	2.87	0.93	0.95
630	5.09	2.60	1.03	
800	5.10	2.58	1.04	
1000	5.74	2.77	1.01	1.00
1250	5.63	2.66	1.07	
1600	5.18	2.54	1.07	
2000	4.76	2.38	1.11	1.00
2500	4.22	2.17	1.15	
3150	3.35	1.82	1.26	
4000	2.59	1.54	1.27	1.00
5000	2.04	1.25	1.43	
6300*	1.39	0.92	1.63	
8000*	1.14	0.79	1.61	n/a
10000*	0.80	0.58	1.95	

α_w 1.00

Class A

Calculated to EN ISO 11654:1997

NRC 0.95

Calculated to ASTM C 423-01

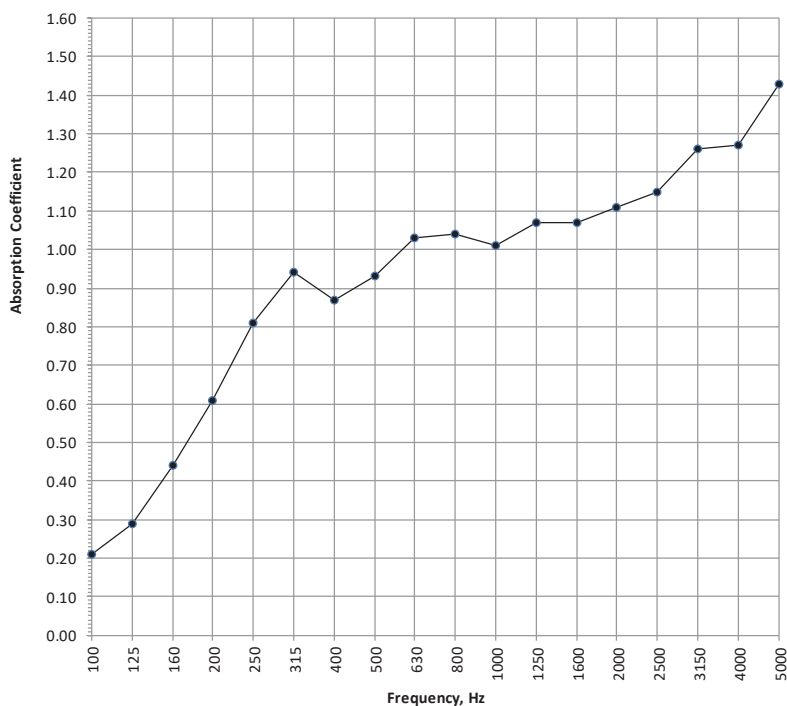
* Denotes frequencies outside the range covered

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

J&C Joel

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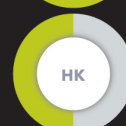
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