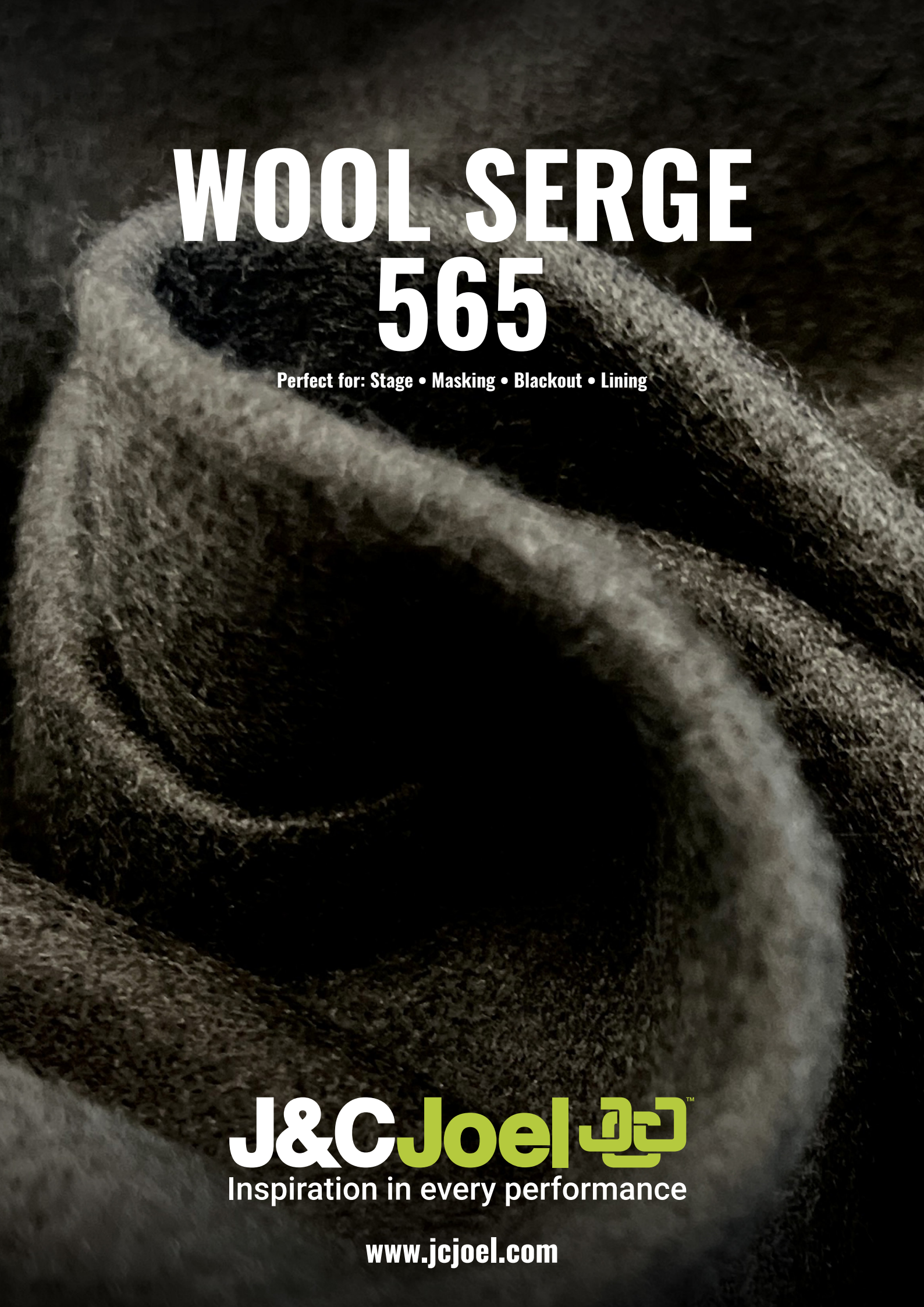
WOOL SERGE
565
Perfect for: Stage • Masking • Blackout • Lining
J&C Joel
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Contents

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Composition and Care
150 cm 3

Fire Certificates
BS5867 Part 2 Type B 4
IMO 8

Composition and Care
Flat 13
50% Fullness 15
100% Fullness 17

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

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Datasheet - Fabrics and Flooring

Wool Serge 565

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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, IMO
	Brand Name (and Manufacturer)	J&C Joel Ltd.
	Material (Blending Ratio)	95% Recycled Wool 5% Nylon & Other Fibres
	Construction of Fabric	Plain Weave, Yarn Count: Very Heavy, Ends/Picks: Medium Density
Chemicals	**Surface Treatments**	Fibre Dyed
	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 and IMO. 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	
Other Finishes		Pressed, Blown Finish
Notes		Recycled Wool Materials



Fire Rating:
IFR



Approx Roll Length:
57m / 187ft



Width:
150cm / 59”



Weight:
565 g/m^2



Fire Certification:
BS5867 Part 2
Type B, IMO



Colour Available
1

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Fire Test Certificate - Specimen

Fabric: Wool Serge 565
Type: BS5867 Part 2 Type B

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Telephone: +44 (0) 113 259 1999
Email: onestopshop@bttg.co.uk
Website: www.bttg.co.uk

Date: 27 June 2022

Our Ref: 23/59842A/06/22
Your Ref: ---

Client: J&C Joel Ltd

Corporation Mill
Corporation Street
Sowerby Bridge
Halifax
HX6 2QQ

SPECIMEN

Job Title: Fire Test on One Fabric Sample

Clients Order Ref: 67711

Date of Receipt: 16 June 2022

Date Test Started: 24 June 2022

Description of Sample: One sample of fabric, which was referenced by the client as;

WS090 Premier Wool Serge

Work Requested: We were asked to make the following fire test:

BS 5867:Part 2:Type B:2008 (2015)

* subcontracted test, UKAS accredited
** subcontracted test, EN ISO/IEC 17025 accredited
*** not UKAS accredited

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Note: This report relates only to the items tested.

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Fire Test Certificate - Specimen

Fabric: Wool Serge 565
Type: BS5867 Part 2 Type B

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Website: www.bttg.co.uk

Date: 27 June 2022

Our Ref: 23/59842A/06/22
Your Ref: ---

Client: J&C Joel Ltd

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

Conditioning

The test specimens were conditioned for at least 24 hours in the standard atmosphere of 65 ± 5 % relative humidity and 20 ± 2 °C.

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 55% relative humidity.

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:Type B:2008 (2015).

Pre-treatment

If the fabric is a pass in the `as received` condition then the fabric is subjected a water soak and drying procedure as specified in BS EN 1021-1 & 2:Annex D:2006.

Testing after pre-treatment

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

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Fire Test Certificate - Specimen

Fabric: Wool Serge 565
Type: BS5867 Part 2 Type B

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Date: 27 June 2022

Our Ref: 23/59842A/06/22
Your Ref: ---

Client: J&C Joel Ltd

Results - Testing as Received:

	Length			Width		
Specimen No.	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
Afterflame (s)	0	0	0	10	0	1
Afterglow (s)	0	0	0	0	0	0

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

SPECIMEN

Results - Testing after pre-treatment:

	Length			Width		
Specimen No.	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
Afterflame (s)	0	0	0	0	0	0
Afterglow (s)	0	0	0	0	0	0

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 565
Type: BS5867 Part 2 Type B

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Date: 27 June 2022

Our Ref: 23/59842A/06/22
Your Ref: ---

Client: **J&C Joel Ltd**

Comment

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

Where required to make a judgement to any pass/fail criteria an estimation of uncertainty of measurement has been taken into account. Under our Policy we have used a non-binary decision rule.

See our decision rules Policy (http://www.bttg.co.uk/decision-rules-policy) for further information.

SPECIMEN

Uncertainty Budget

Measurements are not taken and pass/fail is related to flame extremities and flaming debris, as such any risk of false acceptance/false rejection is inherent with this standard and would be outside of 95% probability in any case. As such UoM is Zero providing all input parameters are correct.

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.

Reported by:..... B Bland, Technical Customer Service Officer

Countersigned by:..... P Doherty, Manager

Enquiries concerning this report should be addressed to Customer Services.

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Fire Test Certificate - Specimen

Fabric: Wool Serge 565
Type: IMO

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Date:	24 July 2019
Our Ref:	56634-1
Your Ref:	-
Page:	1 of 5

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

Job Title: Fire Test on One Sample of Fabric

Client's Order No: 57441

Date of Receipt: 17 July 2019

Description of Sample(s): One sample of fabric, referenced;
Premier Wool Serge

Work Requested: We were asked to make the following test(s):

IMO FTP Code 2010 Part 7

SPECIMEN

* subcontracted test, UKAS accredited
** subcontracted test, EN ISO/IEC 17025 accredited
*** not UKAS accredited

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Fire Test Certificate - Specimen

Fabric: Wool Serge 565
Type: IMO

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Date: 24 July 2019

Our Ref: 56634-1
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Client: J. & C. Joel Limited

Product Description

Company Name	J & C Joel Ltd
Type of Material, i.e. Curtain, Drape, etc.	Curtain/Drapery Fabric
Name and/or Identification of the Product Tested	Premier Wool Serge
Mass per Unit Area (g/m^2)	565gsm
Thickness (mm)	2mm
Colour and Tone (i)	Black
Quantity and Number of Any Coating	None
Method and Quantity of Fire Retardant Treatment	Inherently Flame-retardant
Materials of the Product and its Composite Ratio (ii)	90% Wool - 10% OF
Composition of Weave (iii)	Twill
Density (Number/Inch) the Number of Threads per Inch in both warp and weft; and	---
Yarn Number Count	---

SPECIMEN

(i) If the product has a pattern, the representative colour shall be described.
(ii) Such as wool, nylon, polyester, etc.
(iii) Such as plain, weave, twilled;

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Fire Test Certificate - Specimen

Fabric: Wool Serge 565
Type: IMO

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Date: 24 July 2019

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Client: J. & C. Joel Limited

FIRE TESTS ACCORDING to IMO FTP Code 2010:Part 7
Test for Vertically Supported Textiles and Films

Cleaning Procedure
The sample received no pre-treatment as the fabric is stated to be inherently flame retardant.

Conditioning
The sample was conditioned for 72 hours in the standard atmosphere for conditioning textiles of 20± 5°C and 65 ± 5% R.H.

Procedure

The sample was tested in accordance with IMO FTP Code 2010:Part 7. The sponsor sampled the material and the specimens were cut from the sample received to the dimensions set out in the standard.

A 40mm high propane gas flame was applied to the edge of 5 warp and 5 weft specimens for 5 seconds.

The after-flame time, length of char, existence of surface flashing and ignition of cotton waste from drops were recorded.

SPECIMEN

Requirements

The Performance Criteria for Curtains and Drapes states that: Products which show any of the following characteristics obtained by the fire test in appendix 1, shall be considered unsuitable for use as curtains, drapes or free-hanging fabric product for use in rooms containing furniture and furnishings of restricted fire risk as defined in the relevant regulations of chapter II-2 of the Convention:-.

1. An after-flame time greater than 5 sec for any of the 10 or more specimens tested with surface application of the pilot flame.
2. Burn through to any edge of any of the 10 or more specimens tested with surface application of the pilot flame.
3. Ignition of cotton wool below specimen in any of the 10 or more specimens tested.
4. An average char length in excess of 150mm observed in any of the 10 or more specimens tested by either surface or edge ignition; and
5. The occurrence of a surface flash propagating more than 100mm from the point of ignition with or without charring of the base fabric.

If it is found that either or both of the batches of five specimens cut in both warp and weft directions fail to meet one or more of the criteria specified in subparagraphs .1 to .3 and .5 above because of poor performance of only one of the five specimens tested, one complete retest of a similar batch is permitted. Failure of the second batch to meet any of the criteria shall provide the basis for rejection of the fabric for use.

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Fire Test Certificate - Specimen

Fabric: Wool Serge 565
Type: IMO

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Date: 24 July 2019

Our Ref: 56634-1
Your Ref: -

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Client: J. & C. Joel Limited

As Received

	After flame time (s)		Char length (mm)		Flaming to edge (yes or No)		Ignition of Cotton Wool from Flaming Drops (Yes or No)		Surface Flashing (Yes or No), if yes, Propagation Length (mm)	
	Warp	Weft	Warp	Warp	Weft	Weft	Warp	Weft	Warp	Weft
	0	0	34	40	No	No	No	No	No	No
	0	0	39	39	No	No	No	No	No	No
	0	1	40	36	No	No	No	No	No	No
	3	0	37	35	No	No	No	No	No	No
	0	0	34	37	No	No	No	No	No	No
Mean	1	0	37	37						

SPECIMEN

Comment

The results indicate the sample meets the requirements according to IMO 2010 FTP Code, Part 7.

This report relates only to the samples submitted and as described in the report.

Uncertainty of measurement has not been taken into account when presenting the test result. The relevant uncertainty value is included as an annex which forms an integral part of the report.

Reported by:.....
B Bland
Laboratory Technician

Countersigned By:.....
P Doherty
Manager

ilac-MRA UKAS TESTING 1066

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Client: J. & C. Joel Limited

Date:	24 July 2019
Our Ref:	56634-1
Your Ref:	-
Page:	5 of 5

Uncertainty Budget - Annex

The overall uncertainty budget IMO FTP Code 2010:Part 7 is as follows:-

Measurements:	±1mm
Duration of Flaming:	±0.5 seconds

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Acoustic Test Report - Absorption

Absorption Class: D
Calculated to EN ISO 11654:1997

Fabric: Wool Serge 565

Fullness: Flat

Cavity from Wall: 100mm

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Data Sheet 9

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 565 - Single Layer – Flat (Approx. weight 565g/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	Practical Absorp Coeff #
*50**	*5.07*	*5.34*	*-0.05*	
*63**	*4.60*	*4.75*	*-0.04*	*n/a*
*80**	*5.86*	*5.27*	*0.10*	
100	6.96	6.70	0.03	
125	7.22	6.73	0.05	0.05
160	6.82	5.92	0.12	
200	6.37	5.61	0.11	
250	7.19	5.28	0.27	0.25
315	7.06	4.95	0.33	
400	6.40	4.16	0.46	
500	5.35	3.50	0.54	0.55
630	5.03	3.02	0.72	
800	5.43	3.01	0.80	
1000	5.96	3.06	0.86	0.80
1250	5.70	3.09	0.80	
1600	5.08	2.96	0.74	
2000	4.62	2.96	0.63	0.70
2500	4.17	2.61	0.73	
3150	3.50	2.26	0.77	
4000	2.85	1.90	0.82	0.85
5000	2.25	1.51	0.97	
*6300**	*1.66*	*1.16*	*1.09*	
*8000**	*1.38*	*0.98*	*1.13*	*n/a*
*10000**	*0.93*	*0.69*	*1.36*	

α_w 0.55(MH)

Class D

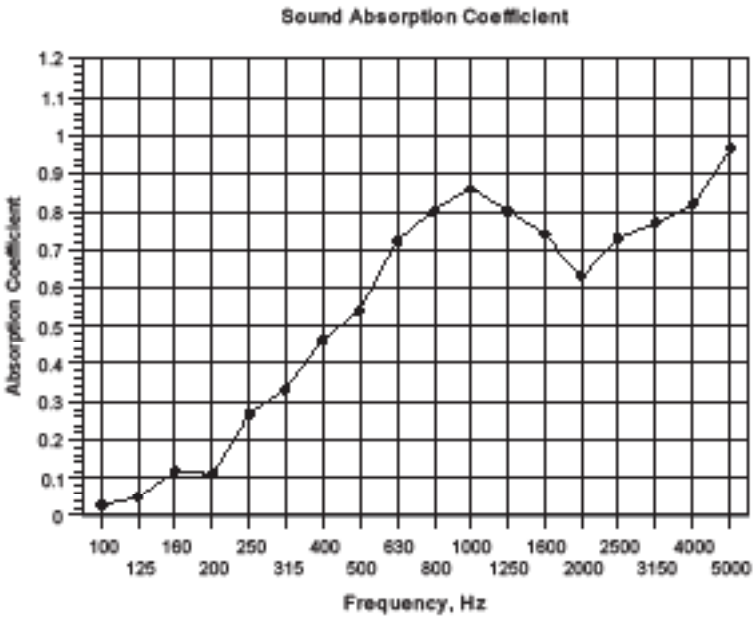
Calculated to EN ISO 11654:1997

NRC 0.60

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

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Acoustic Test Report - Absorption

Absorption Class: C
Calculated to EN ISO 11654:1997
Fabric: Wool Serge 565
Fullness: Flat
Cavity from Wall: 350mm

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Data Sheet 10

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 565 - Single Layer – Flat (Approx. weight 565g/m²) – 350mm cavity from wall

Mounting Method: G-350
Sample Area: 9 m2
Chamber Volume: 300 m3

	Test 11			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.07*	*4.92*	*0.03*	
*63**	*4.60*	*3.97*	*0.19*	*n/a*
*80**	*5.86*	*5.00*	*0.16*	
100	6.96	5.59	0.19	
125	7.22	5.50	0.23	0.25
160	6.82	4.58	0.39	
200	6.37	4.11	0.47	
250	7.19	4.08	0.57	0.55
315	7.06	3.86	0.64	
400	6.40	3.60	0.66	
500	5.35	3.31	0.63	0.60
630	5.03	3.30	0.57	
800	5.43	3.21	0.69	
1000	5.96	3.37	0.70	0.70
1250	5.70	3.31	0.68	
1600	5.08	3.02	0.71	
2000	4.62	2.83	0.72	0.75
2500	4.17	2.57	0.76	
3150	3.50	2.23	0.80	
4000	2.85	1.85	0.90	0.90
5000	2.25	1.49	1.02	
*6300**	*1.66*	*1.16*	*1.09*	
*8000**	*1.38*	*0.98*	*1.13*	*n/a*
*10000**	*0.93*	*0.69*	*1.36*	

α_w 0.70(H)

Class C

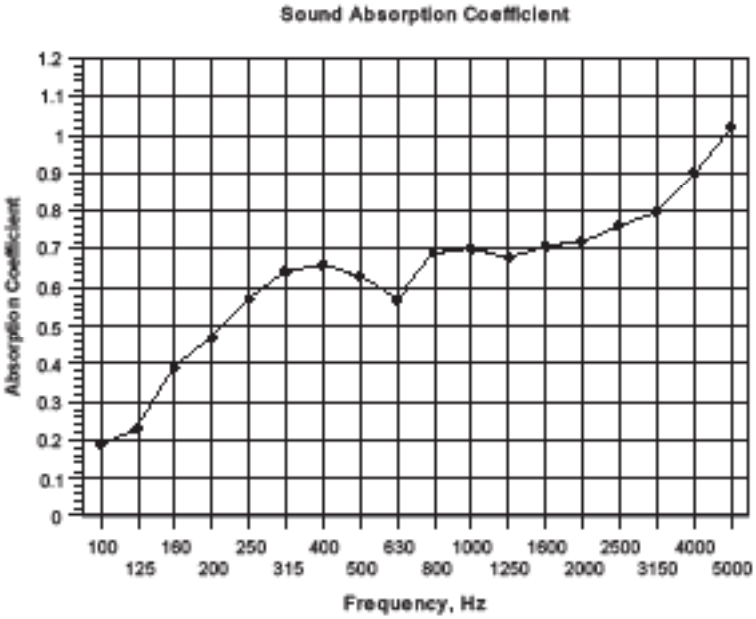
Calculated to EN ISO 11654:1997

NRC 0.65

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

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Acoustic Test Report - Absorption

Absorption Class: B
Calculated to EN ISO 11654:1997
Fabric: Wool Serge 565
Fullness: 50%
Cavity from Wall: 100mm

J&C Joel
Inspiration in every performance

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: 12/04/2014

Empty Room:	**Temperature:**	17.0	°C	**Humidity:**	57	%RH	**Pressure:**	1010 mbar
Room with Sample:	**Temperature:**	16.7	°C	**Humidity:**	49	%RH	**Pressure:**	1009 mbar

Sample Description: Wool Serge 565 – Single Layer – 50% fullness (Approx. weight 565g/m²) – 100mm cavity from wall

Mounting Method: G-100
Sample Area: 9 m2
Chamber Volume: 300 m3

	Test 14			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.07*	*5.19*	*-0.02*	
*63**	*4.60*	*4.16*	*0.12*	*n/a*
*80**	*5.86*	*5.26*	*0.10*	
100	6.96	6.42	0.06	
125	7.22	5.91	0.16	0.15
160	6.82	5.07	0.27	
200	6.37	4.60	0.33	
250	7.19	4.18	0.54	0.50
315	7.06	3.96	0.60	
400	6.40	3.51	0.70	
500	5.35	2.96	0.82	0.80
630	5.03	2.67	0.95	
800	5.43	2.83	0.92	
1000	5.96	2.99	0.90	0.90
1250	5.70	2.99	0.85	
1600	5.08	2.80	0.85	
2000	4.62	2.65	0.84	0.85
2500	4.17	2.39	0.91	
3150	3.50	2.13	0.90	
4000	2.85	1.81	0.94	1.00
5000	2.25	1.45	1.09	
*6300**	*1.66*	*1.11*	*1.25*	
*8000**	*1.38*	*0.94*	*1.30*	*n/a*
*10000**	*0.93*	*0.66*	*1.62*	

α_w 0.80(H)

Class B

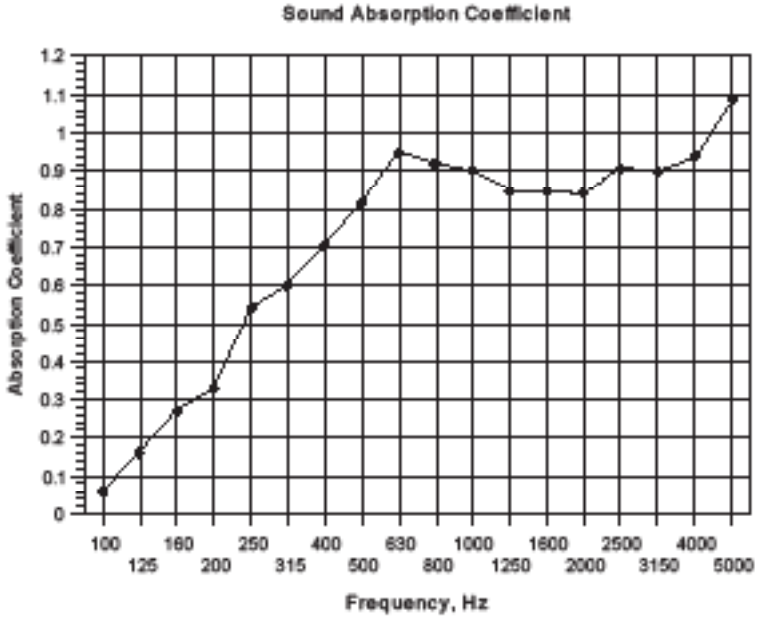
Calculated to EN ISO 11654:1997

NRC 0.80

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

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Acoustic Test Report - Absorption

Absorption Class: B
Calculated to EN ISO 11654:1997
Fabric: Wool Serge 565
Fullness: 50%
Cavity from Wall: 350mm

J&C Joel
Inspiration in every performance

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: 12/04/2014
Empty Room: **Temperature:** 17.0 °C **Humidity:** 57 %RH **Pressure:** 1010 mbar
Room with Sample: **Temperature:** 16.1 °C **Humidity:** 49 %RH **Pressure:** 1009 mbar
Sample Description: Wool Serge 565 – Single Layer – 50% fullness (Approx. weight 565g/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	Practical Absorp Coeff #
*50**	*5.07*	*4.88*	*0.04*	
*63**	*4.60*	*4.17*	*0.12*	*n/a*
*80**	*5.86*	*4.93*	*0.17*	
100	6.96	5.24	0.26	
125	7.22	5.11	0.31	0.35
160	6.82	4.16	0.51	
200	6.37	3.89	0.54	
250	7.19	3.64	0.73	0.70
315	7.06	3.40	0.83	
400	6.40	3.37	0.76	
500	5.35	3.15	0.71	0.75
630	5.03	2.84	0.84	
800	5.43	2.92	0.86	
1000	5.96	2.99	0.90	0.90
1250	5.70	2.93	0.89	
1600	5.08	2.76	0.88	
2000	4.62	2.61	0.87	0.90
2500	4.17	2.33	0.96	
3150	3.50	2.07	0.96	
4000	2.85	1.76	1.00	1.00
5000	2.25	1.40	1.18	
*6300**	*1.66*	*1.08*	*1.32*	
*8000**	*1.38*	*0.94*	*1.21*	*n/a*
*10000**	*0.93*	*0.66*	*1.50*	

α_w 0.85(H)

Class B

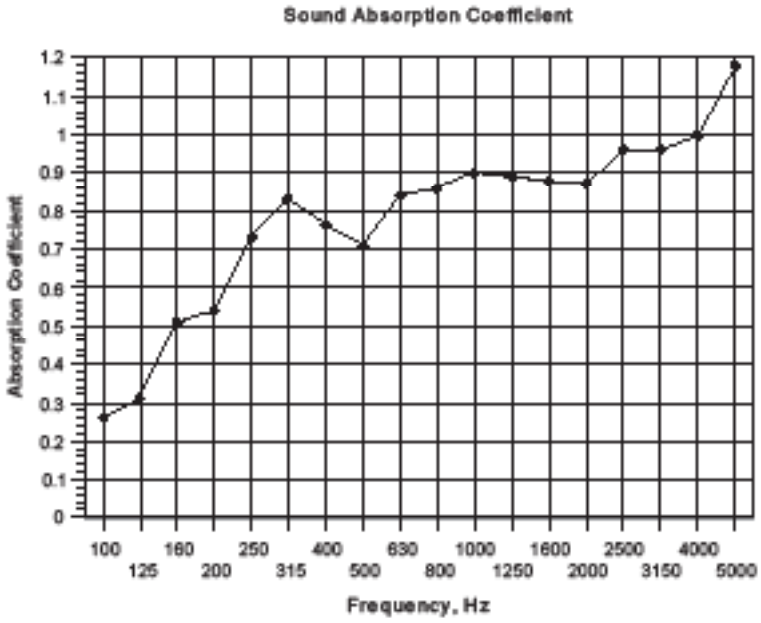
Calculated to EN ISO 11654:1997

NRC 0.80

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

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Acoustic Test Report - Absorption

Absorption Class: A
Calculated to EN ISO 11654:1997
Fabric: Wool Serge 565
Fullness: 100%
Cavity from Wall: 100mm

J&C Joel
Inspiration in every performance

Data Sheet 16

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:**	49	%RH	**Pressure:**	1009 mbar

Sample Description: Wool Serge 565 – Single Layer – 100% fullness (Approx. weight 565g/m²) – 100mm cavity from wall

Mounting Method: G-100
Sample Area: 9 m2
Chamber Volume: 300 m3

	Test 17			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.07*	*5.35*	*-0.06*	
*63**	*4.60*	*3.67*	*0.30*	*n/a*
*80**	*5.86*	*5.36*	*0.09*	
100	6.96	6.57	0.05	
125	7.22	5.26	0.28	0.20
160	6.82	4.85	0.32	
200	6.37	4.32	0.40	
250	7.19	3.85	0.65	0.60
315	7.06	3.71	0.69	
400	6.40	3.25	0.82	
500	5.35	2.91	0.85	0.90
630	5.03	2.61	1.00	
800	5.43	2.78	0.95	
1000	5.96	2.87	0.98	0.95
1250	5.70	2.82	0.96	
1600	5.06	2.72	0.91	
2000	4.62	2.58	0.90	0.90
2500	4.17	2.34	0.96	
3150	3.50	2.09	0.95	
4000	2.85	1.75	1.04	1.00
5000	2.25	1.43	1.14	
*6300**	*1.66*	*1.11*	*1.25*	
*8000**	*1.38*	*0.95*	*1.24*	*n/a*
*10000**	*0.93*	*0.67*	*1.50*	

α_w 0.90

Class A

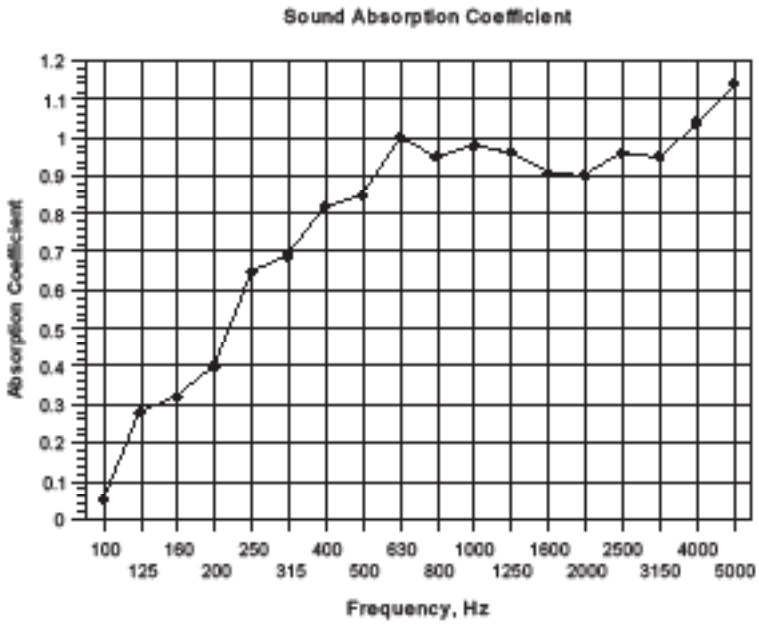
Calculated to EN ISO 11654:1997

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



Practical absorption coefficient, BS EN ISO 11654:1997

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Acoustic Test Report - Absorption

Absorption Class: A
Calculated to EN ISO 11654:1997

Fabric: Wool Serge 565

Fullness: 100%

Cavity from Wall: 350mm

J&C Joel
Inspiration in every performance

Data Sheet 15

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:**	49	%RH	**Pressure:**	1009 mbar

Sample Description: Wool Serge 565 – Single Layer – 100% fullness (Approx. weight 565g/m²) – 350mm cavity from wall

Mounting Method: G-350
Sample Area: 9 m2
Chamber Volume: 300 m3

	Test 16			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.07*	*4.93*	*0.03*	
*63**	*4.60*	*3.72*	*0.28*	*n/a*
*80**	*5.86*	*5.22*	*0.11*	
100	6.96	5.48	0.21	
125	7.22	5.02	0.33	0.35
160	6.62	4.33	0.45	
200	6.37	3.89	0.54	
250	7.19	3.60	0.75	0.70
315	7.06	3.43	0.81	
400	6.40	3.34	0.78	
500	5.35	3.09	0.74	0.80
630	5.03	2.76	0.89	
800	5.43	2.71	1.00	
1000	5.96	2.86	0.96	1.00
1250	5.70	2.78	0.99	
1600	5.08	2.59	1.01	
2000	4.62	2.49	0.97	1.00
2500	4.17	2.28	1.02	
3150	3.50	2.00	1.07	
4000	2.85	1.68	1.17	1.00
5000	2.25	1.38	1.26	
*6300**	*1.66*	*1.06*	*1.39*	
*8000**	*1.38*	*0.93*	*1.36*	*n/a*
*10000**	*0.93*	*0.67*	*1.50*	

α_w 0.90

Class A

Calculated to EN ISO 11654:1997

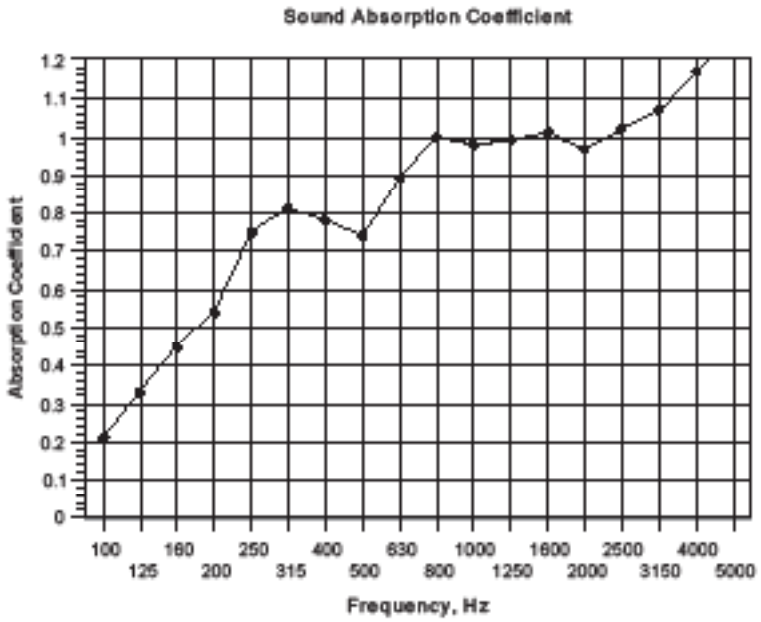
NRC 0.85

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

Practical absorption coefficient, BS EN ISO 11654:1997



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