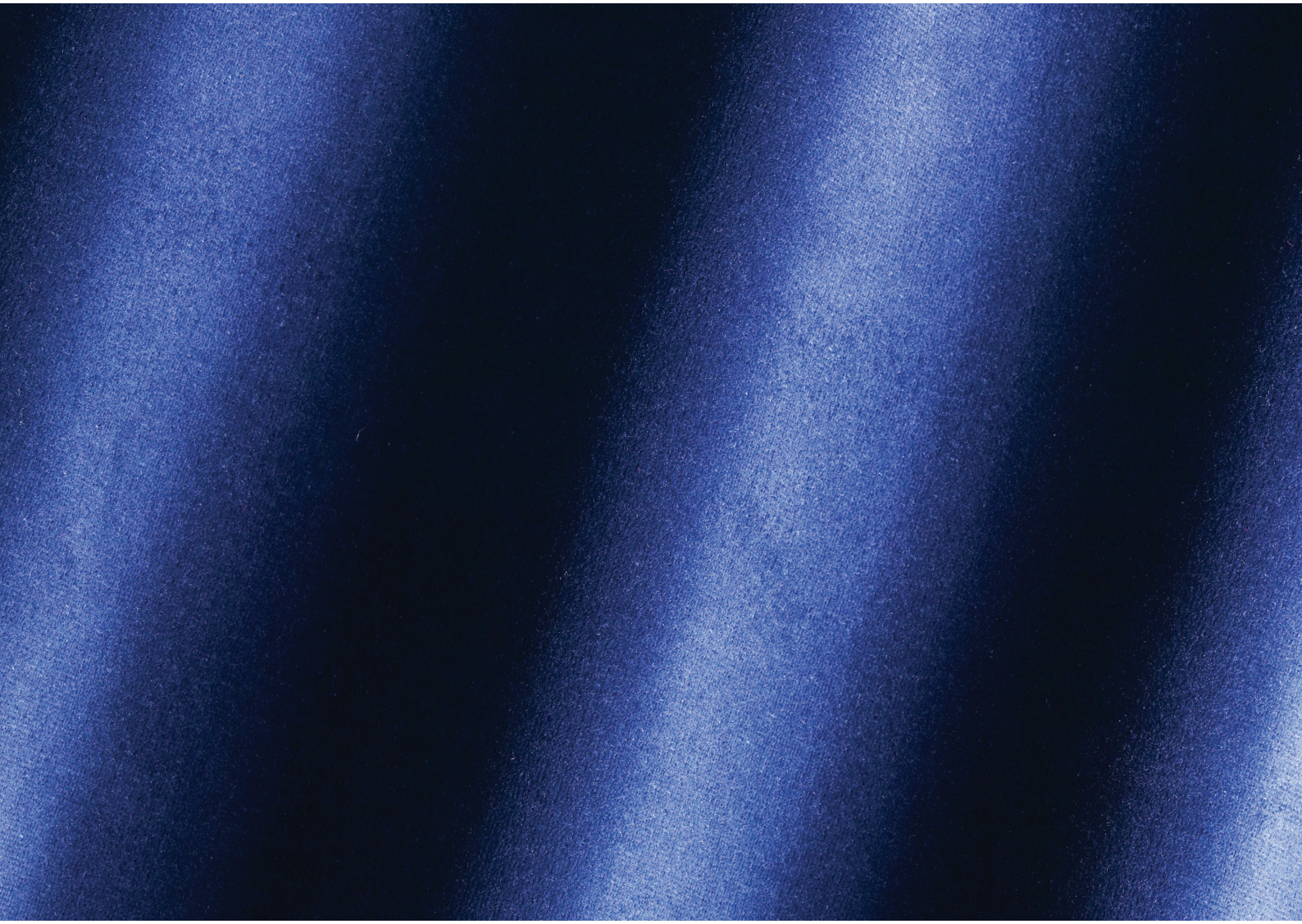
Duchess

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



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Contents

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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/m^2)

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

Duchess

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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**	NDFR
	Fire Certification	BS5867 Part 2 Type B
	Brand Name (and Manufacturer)	J&C Joel Ltd.
	Material (Blending Ratio)	100% Cotton
	Construction of Fabric	V Weave
Chemicals	**Surface Treatments**	Piece Dyed, Chemically Treated
	Brand Name of Flame Retardant Chemicals	Thor
	Chemical name of Flame Retardant Chemicals	Flammentin MSG
	Process of Flame Retardant Chemicals	Immerson
Care	**Information**	Non-Durably Flame Retardant. This means that the fabric is chemically treated and if wet (in any way) should be retreated to meet the flammability requirements of BS5867 Part 2 Type B. Therefore, the cloth will not withstand wet cleaning and should be re-flame proofed whenever wet. The cloth can be professionally dry cleaned 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. Commercial flame retardants may alter the aesthetics, appearance, colour or performance of the textile material. This fabric is not pre-shrunk.
	Laundering Treatment	
Notes		Approx Pile Height: 2.5mm

Fire Rating:	Approx Roll Length:	Width:	Weight:	Fire Certification:	Colours Available	Fabric Thickness:
NDFR	40m / 131ft	140cm / 55”	520 g/m^2	BS5867		1.95 mm

Determination of fabric thickness BS EN ISO 5084: 1997. Test report available upon request.

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

BTTG
TESTING • CERTIFICATION • AUDITING

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Leeds, LS16 6QL, UK.
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Email: info@bttg.co.uk
Website: www.bttg.co.uk

Date: 01 August 2017

Our Ref: **53519-43**
Your Ref: -

Page: 1 of 3

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

Job Title: Surface Ignition Of Curtains & Drapes (Type B)

Client's Order No: -

Date of Receipt: 19 May 2017
Date of Test Start: 09 June 2017

Description of Sample(s): One sample identified as follows was received for testing:

Heavy Velvet Velour, stated to be NDFR

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

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

ilac-MRA UKAS TESTING 1066

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Email: info@bttg.co.uk
Website: www.bttg.co.uk

Date: 01 August 2017

Our Ref: **53519-43**
Your Ref: -

J. & C. Joel Limited

Sample was identified as follows:

Heavy Velvet Velour, stated to be NDFR

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

Pre-Treatment
No water treatment required as the sample was stated to be non durable flame retardant.

Conditioning
The test specimens were conditioned for at least 24 hours in the standard atmosphere of 60 ± 5 % relative humidity (R.H.) and 20 ± 2 °C.

Testing
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).

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.

ilac-MRA UKAS TESTING 1066

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Website: www.bttg.co.uk

Date: 01 August 2017

Our Ref: **53519-43**
Your Ref: -

J. & C. Joel Limited

RESULTS

Sample Ref: Heavy Velvet Velour, stated to be NDFR

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

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

Result: Pass

Conclusion
The fabric meets the Type B performance requirements of BS 5867: Part 2: 2008 – the fabric must be clearly labelled `If wetted in any way it is essential to re-treat the fabric to meet flammability requirements`.

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 (2011). 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.

ilac-MRA UKAS TESTING 1086

Acoustic Test Report - Absorption

Absorption Class: C
Calculated to EN ISO 11654:1997
Fabric: Duchess
Fullness: 50%
Cavity from Wall: 100mm

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Data Sheet 17

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

Client: J&C Joel Ltd
Test Date: 20/05/2014

Empty Room:	**Temperature:**	19.0	°C	**Humidity:**	62	%RH	**Pressure:**	999 mbar
Room with Sample:	**Temperature:**	18.9	°C	**Humidity:**	62	%RH	**Pressure:**	999 mbar

Sample Description: Duchess – Single Layer – 50% fullness (Approx. weight 520g/m²) – 100mm cavity from wall

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

	Test 19			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.33*	*5.00*	*0.07*	
*63**	*5.40*	*5.23*	*0.03*	*n/a*
*80**	*6.56*	*6.03*	*0.07*	
100	7.57	6.94	0.06	
125	7.11	6.37	0.09	0.10
160	6.42	5.53	0.14	
200	7.12	5.42	0.24	
250	7.07	4.89	0.34	0.35
315	6.84	4.06	0.54	
400	6.46	3.53	0.69	
500	5.45	2.97	0.83	0.80
630	4.96	2.72	0.89	
800	5.47	2.79	0.95	
1000	5.91	2.85	0.98	0.95
1250	5.59	2.90	0.89	
1600	5.06	2.77	0.88	
2000	4.75	2.65	0.90	0.90
2500	4.34	2.54	0.88	
3150	3.64	2.26	0.90	
4000	3.09	2.04	0.89	0.90
5000	2.44	1.72	0.92	
*6300**	*1.79*	*1.35*	*0.97*	
*8000**	*1.51*	*1.17*	*1.03*	*n/a*
*10000**	*1.06*	*0.86*	*1.17*	

α_w 0.65(MH)

Class C

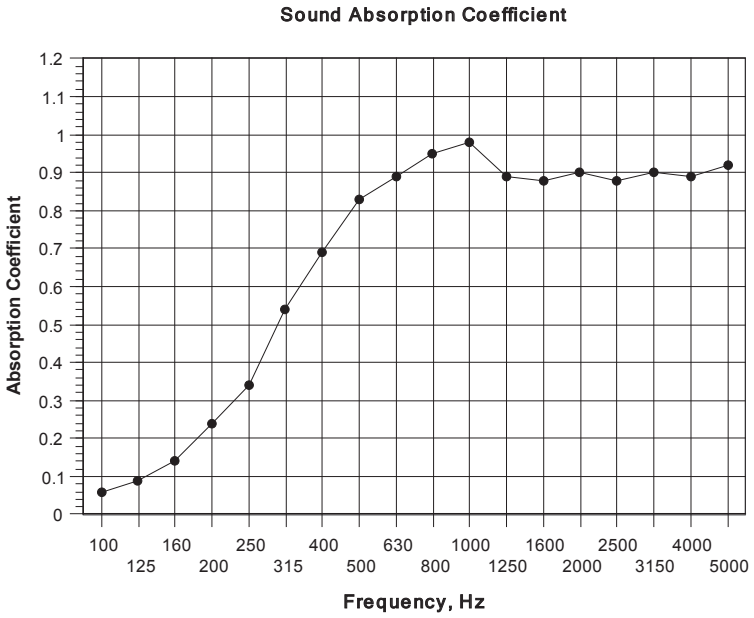
Calculated to EN ISO 11654:1997

NRC 0.75

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: Duchess
Fullness: 50%
Cavity from Wall: 350mm

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Data Sheet 18

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

Client: J&C Joel Ltd
Test Date: 20/05/2014

Empty Room:	**Temperature:**	19.0	°C	**Humidity:**	62	%RH	**Pressure:**	999 mbar
Room with Sample:	**Temperature:**	18.9	°C	**Humidity:**	62	%RH	**Pressure:**	999 mbar

Sample Description: Duchess – Single Layer – 50% fullness (Approx. weight 520g/m²) – 350mm cavity from wall

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

	Test 20			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.33*	*4.90*	*0.09*	
*63**	*5.40*	*5.10*	*0.06*	*n/a*
*80**	*6.56*	*5.51*	*0.16*	
100	7.57	5.96	0.19	
125	7.11	5.40	0.24	0.25
160	6.42	4.49	0.36	
200	7.12	4.30	0.50	
250	7.07	4.00	0.58	0.60
315	6.84	3.58	0.72	
400	6.46	3.39	0.76	
500	5.45	2.96	0.83	0.85
630	4.96	2.68	0.92	
800	5.47	2.74	0.98	
1000	5.91	2.85	0.98	0.95
1250	5.59	2.81	0.95	
1600	5.06	2.72	0.92	
2000	4.75	2.58	0.95	0.95
2500	4.34	2.45	0.96	
3150	3.64	2.19	0.98	
4000	3.09	1.94	1.03	1.00
5000	2.44	1.66	1.03	
*6300**	*1.79*	*1.31*	*1.10*	
*8000**	*1.51*	*1.15*	*1.11*	*n/a*
*10000**	*1.06*	*0.85*	*1.24*	

α_w 0.85(H)

Class B

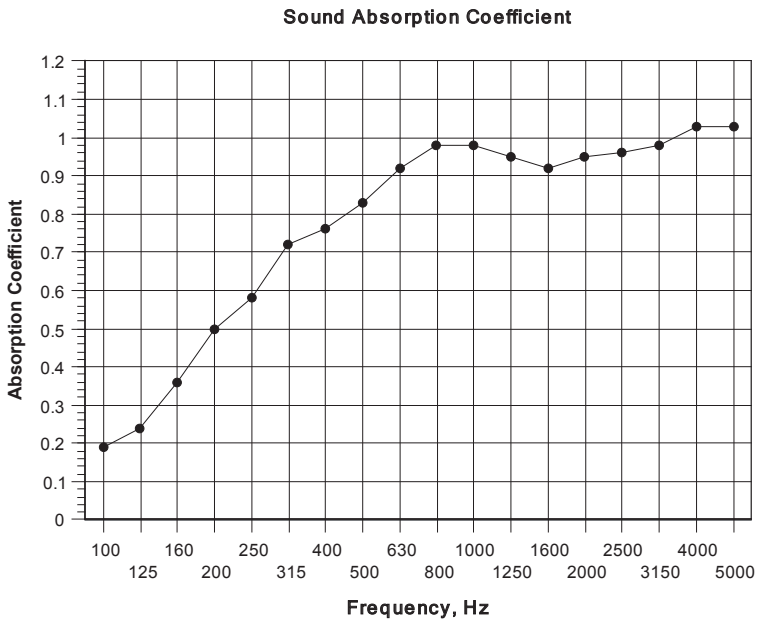
Calculated to EN ISO 11654:1997

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



Practical absorption coefficient, BS EN ISO 11654:1997

v4.3

Acoustic Test Report - Absorption

Absorption Class: B
Calculated to EN ISO 11654:1997
Fabric: Duchess
Fullness: 100%
Cavity from Wall: 100mm

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Data Sheet 20

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

Client: J&C Joel Ltd
Test Date: 20/05/2014

Empty Room:	**Temperature:**	19.0	°C	**Humidity:**	62	%RH	**Pressure:**	999 mbar
Room with Sample:	**Temperature:**	18.9	°C	**Humidity:**	62	%RH	**Pressure:**	999 mbar

Sample Description: Duchess – Single Layer – 100% fullness (Approx. weight 520g/m²) – 100mm cavity from wall

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

	Test 22			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.33*	*5.41*	*-0.01*	
*63**	*5.40*	*5.04*	*0.07*	*n/a*
*80**	*6.56*	*6.00*	*0.08*	
100	7.57	6.79	0.08	
125	7.11	5.94	0.15	0.15
160	6.42	5.20	0.20	
200	7.12	4.85	0.35	
250	7.07	4.50	0.44	0.50
315	6.84	3.78	0.64	
400	6.46	3.36	0.77	
500	5.45	2.89	0.88	0.90
630	4.96	2.60	0.99	
800	5.47	2.72	1.00	
1000	5.91	2.91	0.94	1.00
1250	5.59	2.74	1.00	
1600	5.06	2.70	0.93	
2000	4.75	2.62	0.92	0.90
2500	4.34	2.50	0.91	
3150	3.64	2.22	0.95	
4000	3.09	1.99	0.96	0.95
5000	2.44	1.67	1.01	
*6300**	*1.79*	*1.35*	*0.97*	
*8000**	*1.51*	*1.14*	*1.15*	*n/a*
*10000**	*1.06*	*0.82*	*1.47*	

α_w 0.80(H)

Class B

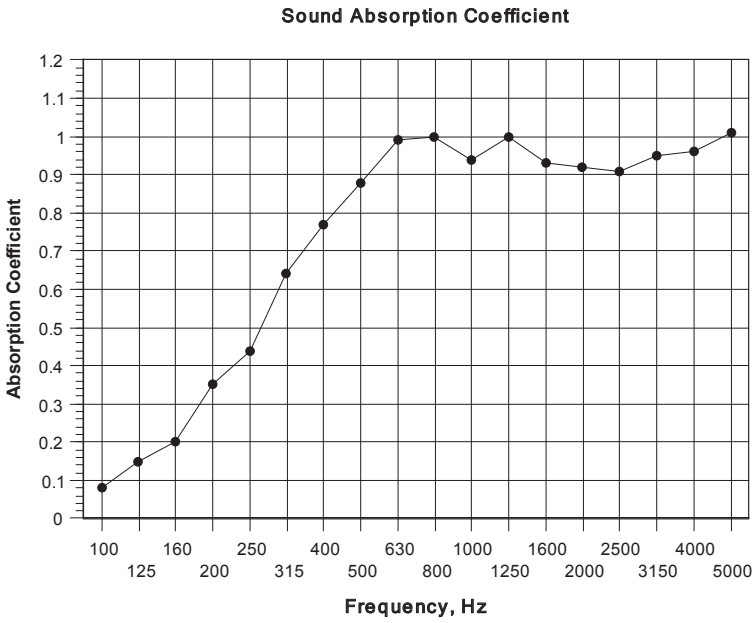
Calculated to EN ISO 11654:1997

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

v4.3

Acoustic Test Report - Absorption

Absorption Class: A
Calculated to EN ISO 11654:1997
Fabric: Duchess
Fullness: 100%
Cavity from Wall: 350mm

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Data Sheet 19

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

Client: J&C Joel Ltd
Test Date: 20/05/2014

Empty Room:	**Temperature:**	19.0	°C	**Humidity:**	62	%RH	**Pressure:**	999 mbar
Room with Sample:	**Temperature:**	18.9	°C	**Humidity:**	62	%RH	**Pressure:**	999 mbar

Sample Description: Duchess – Single Layer – 100% fullness (Approx. weight 520g/m²) – 350mm cavity from wall

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

	Test 21			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.33*	*4.87*	*0.10*	
*63**	*5.40*	*4.94*	*0.09*	*n/a*
*80**	*6.56*	*5.80*	*0.11*	
100	7.57	6.00	0.19	
125	7.11	5.31	0.26	0.30
160	6.42	4.42	0.38	
200	7.12	4.37	0.48	
250	7.07	3.98	0.59	0.60
315	6.84	3.59	0.71	
400	6.46	3.18	0.86	
500	5.45	2.90	0.87	0.90
630	4.96	2.66	0.94	
800	5.47	2.63	1.06	
1000	5.91	2.77	1.03	1.00
1250	5.59	2.64	1.08	
1600	5.06	2.55	1.05	
2000	4.75	2.47	1.05	1.00
2500	4.34	2.34	1.06	
3150	3.64	2.12	1.06	
4000	3.09	1.93	1.05	1.00
5000	2.44	1.61	1.13	
*6300**	*1.79*	*1.28*	*1.19*	
*8000**	*1.51*	*1.11*	*1.27*	*n/a*
*10000**	*1.06*	*0.80*	*1.64*	

α_w 0.90

Class A

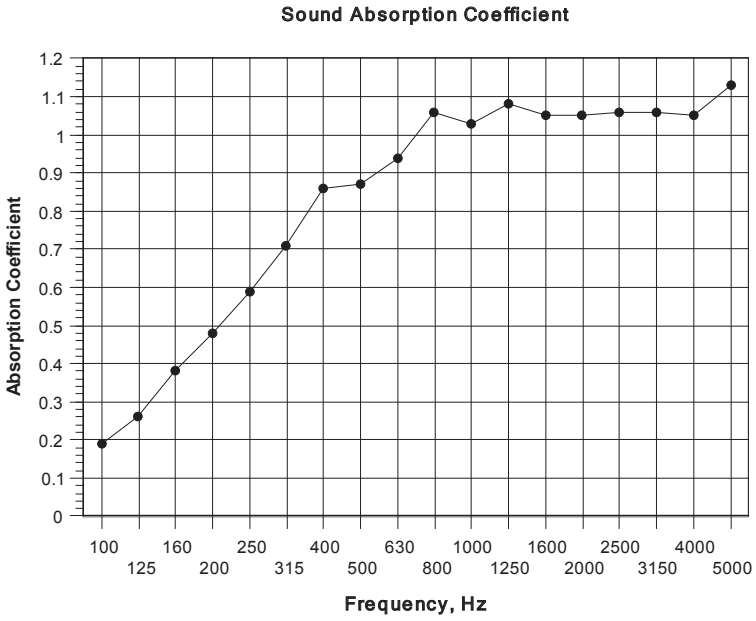
Calculated to EN ISO 11654:1997

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



Practical absorption coefficient, BS EN ISO 11654:1997

v4.3

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