

Acoustic Felt

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



J&C Joel 

the inspiration behind the performance

Contents

Composition & Care

137 cm 3

Fire Certificate

BS5867 Part 2 Type B 4

Acoustic Test Report

Flat 7

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

Acoustic Felt

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
	Brand Name (and Manufacturer)	J&C Joel Ltd.
	Material (Blending Ratio)	70% Jute 30% Wool
	Construction of Fabric	Felted Non Woven
Chemicals	Surface Treatments	Flameproofed
	Brand Name of Flame Retardant Chemicals	Solvay
	Chemical name of Flame Retardant Chemicals	Proban
	Process of Flame Retardant Chemicals	Immersion
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	     Dry Clean Only Do Not Wash Do Not Bleach Do Not Iron Do Not Tumble Dry
Notes		



Fire Rating:
NDFR



Approx Roll Length:
25m / 82ft



Width:
137cm / 54"



Weight:
880 g/m²



Fire Certification:
BS5867



Colour
Available

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

Fire Test Certificate – Specimen

Fabric: Acoustic Felt
Type: BS5867 Part 2 Type B

J&C Joel 
the inspiration behind the performance



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

Date: 01 August 2017

Our Ref: 53519-44
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:
Acoustic Felt, 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



Shirley® Technologies Limited. Registered Office: Wira House, West Park Ring Road, Leeds, LS16 6QL.
A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.
The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.
Our laboratories are accredited to EN ISO/IEC 17025.

Copyright © 2017 Shirley Technologies Limited. All rights reserved.

Fire Test Certificate – Specimen

Fabric: Acoustic Felt
Type: BS5867 Part 2 Type B

J&C Joel 
the inspiration behind the performance



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

Date: 01 August 2017

Our Ref: 53519-44
Your Ref: -

Page: 2 of 3

J. & C. Joel Limited

Sample was identified as follows:

Acoustic Felt, 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 $60 \pm 5\%$ relative humidity (R.H.) and $20 \pm 2^\circ\text{C}$.

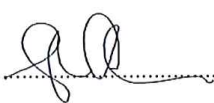
Testing

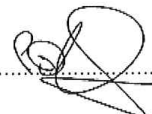
Three specimens from both length and width were tested in accordance with BS EN ISO 15025: Procedure A (surface ignition):2002. The sample was tested at 20°C and 60% relative humidity (R.H.).

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.



Shirley® Technologies Limited. Registered Office: Wira House, West Park Ring Road, Leeds, LS16 6QL.
A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.
The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.
Our laboratories are accredited to EN ISO/IEC 17025.

Copyright © 2017 Shirley Technologies Limited. All rights reserved.

Fire Test Certificate – Specimen

Fabric: Acoustic Felt
Type: BS5867 Part 2 Type B

J&C Joel 
the inspiration behind the performance



J. & C. Joel Limited

RESULTS

Sample Ref: Acoustic Felt, stated to be NDFR

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

Date: 01 August 2017

Our Ref: 53519-44
Your Ref: -

Page: 3 of 3

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: 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.



1066

Shirley® Technologies Limited. Registered Office: Wira House, West Park Ring Road, Leeds, LS16 6QL.
A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.
The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.
Our laboratories are accredited to EN ISO/IEC 17025.

Copyright © 2017 Shirley Technologies Limited. All rights reserved.

Acoustic Test Report - Absorption

Absorption Class: E

(Calculated in accordance with EN ISO 11654:1997)

Fabric: Acoustic Felt - Fawn

Fullness: Flat

Cavity from Wall: Flat to the Floor

J&C Joel 

the inspiration behind the performance

S R L

Confidential

Data Sheet 34

The Laboratory Measurement of Random Incidence Sound Absorption 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: 19.3 °C Humidity: 60 %RH Pressure: 1001 mbar

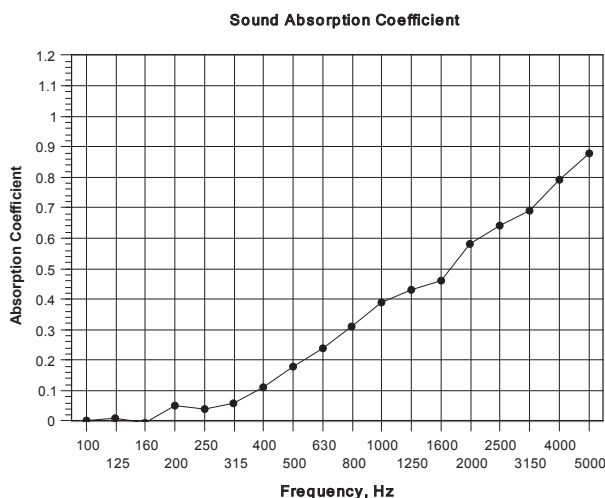
Sample Description: Acoustic Felt Fawn – Single Layer – Flat (Approx. weight 880g/m²) – Flat to floor

Mounting Method: E-0

Sample Area: 12.45 m²

Chamber Volume: 300 m³

Test 36				
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
50*	5.33	5.17	0.02	
63*	5.40	4.55	0.13	n/a
80*	6.56	6.67	-0.01	
100	7.57	7.60	-0.00	
125	7.11	6.94	0.01	0.00
160	6.42	6.49	-0.01	
200	7.12	6.57	0.05	
250	7.07	6.53	0.04	0.05
315	6.84	6.19	0.06	
400	6.46	5.44	0.11	
500	5.45	4.34	0.18	0.20
630	4.96	3.79	0.24	
800	5.47	3.82	0.31	
1000	5.91	3.70	0.39	0.40
1250	5.59	3.44	0.43	
1600	5.06	3.15	0.46	
2000	4.75	2.78	0.58	0.55
2500	4.34	2.53	0.64	
3150	3.64	2.21	0.69	
4000	3.09	1.89	0.79	0.80
5000	2.44	1.56	0.88	
6300*	1.79	1.24	0.94	
8000*	1.51	1.06	1.06	n/a
10000*	1.06	0.79	1.20	



α_w 0.25(H)

Class E

Calculated to EN ISO 11654:1997

NRC 0.30

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: D

(Calculated in accordance with EN ISO 11654:1997)

Fabric: Acoustic Felt - Multicoloured

Fullness: Flat

Cavity from Wall: Flat to the Floor

J&C Joel 

the inspiration behind the performance

S R L

Confidential

Data Sheet 33

The Laboratory Measurement of Random Incidence Sound Absorption 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: 19.3 °C Humidity: 60 %RH Pressure: 1001 mbar

Sample Description: Acoustic Felt Multicoloured – Single Layer – Flat (Approx. weight 1.42kg/m²) – Flat to floor

Mounting Method: E-0

Sample Area: 12.45 m²

Chamber Volume: 300 m³

Test 35

Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
50*	5.33	4.57	0.12	
63*	5.40	4.68	0.11	n/a
80*	6.56	6.41	0.01	
100	7.57	7.73	-0.01	
125	7.11	6.93	0.01	0.00
160	6.42	6.34	0.01	
200	7.12	6.27	0.07	
250	7.07	6.27	0.07	0.10
315	6.84	5.65	0.12	
400	6.46	4.99	0.18	
500	5.45	3.99	0.26	0.25
630	4.96	3.54	0.31	
800	5.47	3.45	0.42	
1000	5.91	3.35	0.50	0.50
1250	5.59	3.09	0.56	
1600	5.06	2.78	0.63	
2000	4.75	2.53	0.72	0.75
2500	4.34	2.25	0.83	
3150	3.64	2.01	0.86	
4000	3.09	1.79	0.90	0.90
5000	2.44	1.52	0.95	
6300*	1.79	1.23	0.97	
8000*	1.51	1.09	0.96	n/a
10000*	1.06	0.78	1.26	

α_w 0.30(H)

Class D

Calculated to EN ISO 11654:1997

NRC 0.40

Calculated to ASTM C 423-01

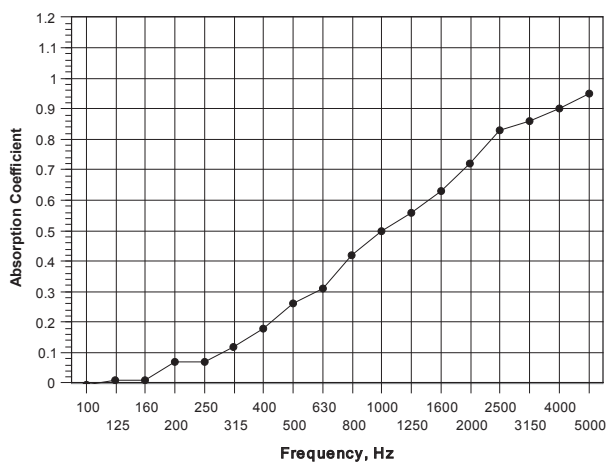
* Denotes frequencies outside the range covered
by BS EN ISO 354:2003

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

Practical absorption coefficient, BS EN ISO 11654:1997

v4.3

Sound Absorption Coefficient



J&C Joel

the inspiration behind the performance



J&C Joel United Kingdom - HQ
uksales@jcjoel.com



J&C Joel Europe
eusales@jcjoel.com



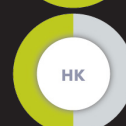
J&C Joel Middle East
uaesales@jcjoel.com



J&C Joel Vietnam
asiasales@jcjoel.com



J&C Joel Macau
asiasales@jcjoel.com



J&C Joel Hong Kong
asiasales@jcjoel.com

www.jcjoel.com