ACOUSTIC MOLTON

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

J&C Joel™

Inspiration in every performance

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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

United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

www.jcjoel.com

Datasheet - Fabrics and Flooring

Acoustic Molton

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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, M1, B1, EN13501-1
	Brand Name (and Manufacturer)	J&C Joel Ltd.
	Material (Blending Ratio)	100% Cotton
	Construction of Fabric	Plain Weave
Chemicals	**Surface Treatments**	Dyed & Flameproofed
	Brand Name of Flame Retardant Chemicals	KAPP-Chemie GMBH & Co.K.G
	Chemical name of Flame Retardant Chemicals	Kappaflam CFP
	Process of Flame Retardant Chemicals	Immersion
Care	**Information**	Non-Durably Flame Retardent. This means the fabric is chemically treated if wet (in any way) should be treated to meet the flammability requirements of BS5867 Part 2 Type B, M1, B1 and EN13501-1. 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. Commerical flame retardents 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 Bale Length:
30m / 98ft

Width:
300cm / 118”

Weight:
500 g/m^2

Fire Certification:
BS5867, B1, EN13501-1, M1

Colour Available
2

United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

www.jcjoel.com

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: BS5867 Part 2 Type B

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BTTG
TESTING • CERTIFICATION • AUDITING

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: **53519-31**
Your Ref: -

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:	08 June 2017
Description of Sample(s):	One sample identified as follows was received for testing: Acoustic Molton, 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

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: BS5867 Part 2 Type B

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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: **53519-31**
Your Ref: -

J. & C. Joel Limited

Sample was identified as follows:

Acoustic Molton, 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.

1066

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: BS5867 Part 2 Type B

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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: **53519-31**
Your Ref: -

Page: 3 of 3

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J. & C. Joel Limited

RESULTS

Sample Ref: Acoustic Molton, 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

CSTB le futur en construction
Direction Sécurité, Structures et Feu
Division Etudes et Essais Feu

PROCES-VERBAL DE CLASSEMENT DE REACTION AU FEU D'UN MATERIAU

Selon l'arrêté du 21 novembre 2002 modifié relatif à la réaction au feu des produits de construction et d'aménagement
Laboratoire pilote agréé du Ministère de l'Intérieur (arrêté du 05/02/59 modifié)

N° RA22-0033

Valable 5 ans à compter du 08 octobre 2021

Matériau présenté par :

Marques commerciales :	CALMUC KALMUCK
Description sommaire :	Tissu 100 % coton ignifugé par foulardage, gratté sur les 2 faces. Masse surfacique nominale : 500 à 550 g/m^2. Epaisseur mesurée : 2,2 mm. Coloris : noir ou écru.
Nature de l'essai :	Essai au brûleur électrique Vieillissement en chambre climatique
Classement :	**M1**

Durabilité du classement (Annexe 2 – Paragraphe 5) : Non limitée (article non lavable, non nettoyable à sec et pour usage intérieur uniquement).

Compte tenu des critères résultant des essais décrits dans le rapport d'essais N° DSSF-21-05760 annexé.

Ce procès-verbal atteste uniquement des caractéristiques de l'échantillon soumis aux essais et ne préjuge pas des caractéristiques de produits similaires. Il ne constitue donc pas une certification de produits au sens du code de la consommation. Seul le rapport électronique signé avec un certificat numérique valide fait foi en cas de litige. Ce rapport électronique est conservé au CSTB pendant une durée minimale de 10 ans. La reproduction de ce rapport électronique n'est autorisée que sous sa forme intégrale.

Fait à Champs-sur-Marne, le 03 mars 2022

La Responsable du Pôle Commercial Communication et Développement Feu

Signature numérique de Clemence VOISIN
Date : 2022.03.03 10:36:20 +01'00'

Clémence VOISIN

Sont seules autorisées les reproductions intégrales du présent procès-verbal de classement ou de l'ensemble procès-verbal et rapport d'essais annexé.

CENTRE SCIENTIFIQUE ET TECHNIQUE DU BÂTIMENT
Siège social > 84 avenue Jean Jaurès – Champs-sur-Marne – 77447 Marne-la-Vallée cedex 2
Tél. : +33 (0)1 64 68 84 12 – reaction@cstb.fr – www.cstb.fr
MARNE-LA-VALLÉE / PARIS / GRENOBLE / NANTES / SOPHIA ANTIPOLIS

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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Prüfinstitut Hoch
Lerchenweg 1
D-97650 Fladungen
Tel.: int – 49 – 9778-7480-200
hoch.fladungen@t-online.de www.reaction-to-fire.de

Hoch Fladungen

Test laboratory for the fire behavior of building materials, Dipl.-Ing. (FH) Andreas Hoch
Testing, supervising and certifying body, authorized by the building supervision authority

TEST REPORT
PZ-Hoch-240738

for the proof of fire behaviour according to DIN 4102, part 1

Translation of the German test report – no guarantee for translation of technical terms

company

description of samples	fabric consisting of 100% Cotton in different variants and colours
name of the material	**„Schleiernessel" / „Baumwoll-Cretonne"** **„Dekomolton" / „Baumwollnessel"** **„Eventmolton" / „Bühnenmolton"** **„Satinmolton" / „Kalmuck"**
sampling	by the company itself
content of request	Proof of flammability to classify building materials to class B1 ("schwerentflammbar") according to DIN 4102, part 1
validity of test report	31.05.2029
result	**The examined product meet in raw white, in any colour or bleached the requirements of class B1 for hardly flammable ("schwerentflammbare") building materials according to DIN 4102, pt. 1 (May 1998), suspended freely or with distance of >40 mm to same or other plain materials.**

This test report includes 11 pages and 11 enclosures.

Remark: If the building material mentioned above is not used as a product according to MBO § 2, Abs. 9, Ziffer1, there is no need for a general building supervisory test report.
This test report is not valid if the examined building material is used as product as defined by State Building Prescriptions (MBO § 17, Abs. 3).
This test report does not replace an eventually necessary proof of applicability concerning building supervisory or building laws as defined by State Building Prescriptions. This has to be certified instead by:

- *"allgemeine bauaufsichtliche Zulassung"* (General Building Inspectorate Approval) or by
- *"allgemeines bauaufsichtliches Prüfzeugnis"* (General Building Inspectorate Certificate) or by
- *"Zustimmung im Einzelfall"* (Exceptional Approval)

This test report can underlie building supervisory procedures

- for regular building products for the prescribed proofs of conformity
- for irregular building products for the required proofs of applicability.

Without written consent of the test laboratory, this test report may only be published or duplicated during its denoted period of validity, providing that no changes to appearance or content are made.

1. Description of test material in condition as delivered

PN 39069 **"Schleiernessel"** colour: black
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 97 g/m² thickness: about 0,28 mm

PN 39070 **"Schleiernessel"** colour: light grey
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 92 g/m² thickness: about 0,25 mm

PN 39071 **"Baumwoll-Cretonne"** colour: black
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 170g/m² thickness: about 0,32 mm

PN 39072 **"Dekomolton"** colour: light red
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 176g/m² thickness: about 0,81 mm

PN 39073 **"Baumwollnessel"** colour: black
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 223 g/m² thickness: about 0,34 mm

PN 39074 **"Baumwollnessel"** colour: grey
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 209 g/m² thickness: about 0,33 mm

PN 39075 **"Eventmolton"** colour: black
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 288 g/m² thickness: about 1,06 mm

PN 39076 **"Bühnenmolton"** colour: red
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 352g/m² thickness: about 1,35 mm

PN 39077 "Satinmolton" (bleached) colour: white
-fabric consisting of 100% Cotton-
side A: smoother surface
characteristic values determined by the test laboratory:
area weight: about 309 g/m² thickness: about 0,69 mm

PN 39078 "Satinmolton" (bleached) colour: grey
-fabric consisting of 100% Cotton-
side A: smoother surface
characteristic values determined by the test laboratory:
area weight: about 315 g/m² thickness: about 0,75 mm

PN 39079 "Kalmuck" colour: light beige
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 570g/m² thickness: about 1,67 mm

PN 39080 "Kalmuck" (bleached) colour: white
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 613g/m² thickness: about 1,55 mm

PN 39081 "Kalmuck" colour: grey
-fabric consisting of 100% Cotton-
There is no difference between side A and side B.
characteristic values determined by the test laboratory:
area weight: about 531g/m² thickness: about 1,54 mm

The testing laboratory is not provided with further details concerning composition of the tested building materials. Samples are deposited.

2. Preparation of samples

Samples with a size of 1000 mm height and 190 mm width where cut from the material for fire testing.
The samples were kept in climate chamber 23/50 until they reached constant weight.

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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3. Arrangement of samples mounting: freely suspended

#7820:	flaming side A in warp direction	PN39081
#7821:	flaming side B in weft direction	PN39081
#7822:	flaming side A in warp direction	PN39080
#7825:	flaming side A in warp direction	PN39079
#7824:	flaming side A in warp direction	PN39079
#7823:	flaming side A in warp direction	PN39079
#7819:	flaming side B in weft direction	PN39078
#7818:	flaming side A in warp direction	PN39077
#7817:	flaming side A in warp direction	PN39076
#7816:	flaming side B in weft direction	PN39075
#7815:	flaming side A in warp direction	PN39074
#7814:	flaming side B in weft direction	PN39073
#7813:	flaming side A in warp direction	PN39072
#7799:	flaming side B in weft direction	PN39071
#7798:	flaming side A in warp direction	PN39070
#7797:	flaming side B in weft direction	PN39069

4. Date of test CW 21 until CW in 2024

5.1 Results (part 1) The test has been performed according to DIN 4102 (Mai 1998)

line no.	Measurement	Result with the tested specimen						Dim.
	Test number	#7820	#7821	#7822	#7825	#7824	#7823	
	flaming direction	warp	weft	warp	warp	warp	warp	
	side	A	B	A	A	A	A	
	sample-no	39081		39080	39079			
	fabric	Kalmuck						
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	1	1	1	1	1	1	---
2	Maximum flame height above bottom edge of specimen	60	60	70	80	70	70	---
3	Time [1]	0:17	0:12	0:44	0:40	0:35	0:40	---
4	Burn-through / melting Time [1]	0:45	0:45	0:55	0:13	0:44	0:14	---
	Observations on the back side of specimen							
	Flames / Glowing	X	X	X	X	X	X	---
5	Time [1]	1:40	2:05	2:15	2:05	3:00	1:50	./.
	Change of colour	---	---	---	---	---	---	---
6	Time [1]	./.	./.	./.	./.	./.	./.	./.
7	Falling of burning droplets Start [1]	./.	./.	./.	./.	./.	./.	min:s
	Extent							
8	sporadic falling of burning droplets [2]	-	-	-	-	-	-	
9	continuous falling of burning droplets [2]	-	-	-	-	-	-	min:s
10	Falling of burning parts Start [1]	./.	./.	./.	./.	./.	./.	min:s
	Extent							
11	sporadic falling of burning parts [2]	-	-	-	-	-	-	
12	continuous falling of burning parts [2]	-	-	-	-	-	-	

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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Lerchenweg 1
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line no.	Measurement	Result with the tested specimen						Dim.
	Test number	#7820	#7821	#7822	#7825	#7824	#7823	
	flaming direction	warp	weft	warp	warp	warp	warp	
	side	A	B	A	A	A	A	
	sample-no	39081		39080	39079			
13	Burning duration at sieve plate (max.)	./.	./.	./.	./.	./.	./.	min:s
14	Impairment of burner by dropping or falling material: Time [1]	./.	./.	./.	./.	./.	./.	min:s
15	Premature end of test Final occurrence of burning at the specimen [1]	1:15	1:10	1:20	1:20	2:00	1:50	min:s
16	Time of eventually end of test [1]	./.	./.	./.	./.	./.	./.	min:s
17	Afterburning after end of test Time [1]	./.	./.	./.	./.	./.	./.	min:s
18	Number of specimen	-	-	-	-	-	-	
19	Front side of specimen [2]	-	-	-	-	-	-	
20	Rear side of specimen [2]	-	-	-	-	-	-	
21	flame length	-	-	-	-	-	-	cm
22	Afterglow after end of test Time [1]	./.	./.	./.	./.	./.	./.	min:s
23	Number of specimen	-	-	-	-	-	-	
	Place of appearance							
24	Lower half of the specimen [2]	-	-	-	-	-	-	
25	Upper half of the specimen [2]	-	-	-	-	-	-	
26	Front side of specimen [2]	-	-	-	-	-	-	
27	Rear side of specimen [2]	-	-	-	-	-	-	
28	Density of smoke ≤ 400 % * min	13	13	18	16	19	16	% * min
29	> 400 % * min [4]	-	-	-	-	-	-	% * min
30	Diagram in enclosure no.	1	1	1	2	2	2	
31	Residual lengths: individual values [3] Specimen 1	35	38	35	31	32	26	cm
	Specimen 2	30	35	34	29	31	27	cm
	Specimen 3	33	35	31	26	31	25	cm
	Specimen 4	36	37	33	28	33	24	cm
32	Average residual length [3]	34	36	33	29	32	26	
33	Photo of specimen in enclosure no.	1	1	1	2	2	2	
34	Flue gas temperature Maximum of average values	119	116	119	119	120	122	°C
35	Time [1]	01:47	09:45	02:48	02:45	02:33	02:39	min:s
36	Diagram in enclosure no.	1	1	1	2	2	2	
37	Remarks: - none -							

[1] indication of times relative to beginning of test
[2] checked if applicable
[3] indication of carrier/foam layer separated in case of fire-proofing agents
[4] very strong development of smoke

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5.2 Results (part 2) The test has been performed according to DIN 4102 (Mai 1998)

line no	Measurement	Result with the tested specimen						Dim.
	Test number	#7819	#7818	#7817	#7816	#7815	#7814	
	flaming direction	weft	warp	warp	weft	warp	weft	
	side	B	A	A	B	A	B	
	sample-no	39078	39077	39076	39075	39074	39073	
	fabric	Satin		Bühnen	Event	Baumwollnessel		
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	1	1	1	1	1	1	---
2	Maximum flame height above bottom edge of specimen	60	70	60	60	60	60	---
3	Time [1]	0:15	0:20	0:21	0:10	0:11	0:11	---
4	Burn-through / melting Time [1]	0:23	0:22	0:28	0:30	0:13	0:15	---
5	Observations on the back side of specimen Flames / Glowing	./.	./.	./.	./.	./.	./.	---
	Time [1]	./.	./.	./.	./.	./.	./.	./.
6	Change of colour Time [1]	--- ./.	--- ./.	--- ./.	--- ./.	--- ./.	--- ./.	--- ./.
7	Falling of burning droplets Start [1]	./.	./.	./.	./.	./.	./.	min:s
	Extent							
8	sporadic falling of burning droplets [2]	-	-	-	-	-	-	
9	continuous falling of burning droplets [2]	-	-	-	-	-	-	min:s
10	Falling of burning parts Start [1]	./.	./.	./.	./.	./.	./.	min:s
	Extent							
11	sporadic falling of burning parts [2]	-	-	-	-	-	-	
12	continuous falling of burning parts [2]	-	-	-	-	-	-	
13	Burning duration at sieve plate (max.)	./.	./.	./.	./.	./.	./.	min:s
14	Impairment of burner by dropping or falling material: Time [1]	./.	./.	./.	./.	./.	./.	min:s
15	Premature end of test Final occurrence of burning at the specimen [1]	0:30	0:30	1:00	1:00	0:25	0:35	min:s
16	Time of eventually end of test [1]	./.	./.	./.	./.	./.	./.	min:s
17	Afterburning after end of test Time [1]	./.	./.	./.	./.	./.	./.	min:s
18	Number of specimen	-	-	-	-	-	-	
19	Front side of specimen [2]	-	-	-	-	-	-	
20	Rear side of specimen [2]	-	-	-	-	-	-	
21	flame length	-	-	-	-	-	-	cm

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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line no.	Measurement	Result with the tested specimen						Dim.
	Test number	#7819	#7818	#7817	#7816	#7815	#7814	
	flaming direction	weft	warp	warp	weft	warp	weft	
	side	B	A	A	B	A	B	
	sample-no	39078	39077	39076	39075	39074	39073	
	fabric	Satin		Bühnen	Event	Baumwollnessel		
	Afterglow after end of test	-	-	-	-	-	-	
22	Time [1]	./.	./.	./.	./.	./.	./.	min:s
23	Number of specimen							
	Place of appearance							
24	Lower half of the specimen [2]	-	-	-	-	-	-	
25	Upper half of the specimen [2]	-	-	-	-	-	-	
26	Front side of specimen [2]	-	-	-	-	-	-	
27	Rear side of specimen [2]	-	-	-	-	-	-	
	Density of smoke							
28	≤ 400 % * min	9	10	4	9	1	5	% * min
29	> 400 % * min [4]	-	-	-	-	-	-	% * min
30	Diagram in enclosure no.	3	3	3	4	4	4	
	Residual lengths: individual values [3]							
31	Specimen 1	46	41	42	35	43	52	cm
	Specimen 2	42	42	44	35	42	49	cm
	Specimen 3	49	42	43	36	32	45	cm
	Specimen 4	46	41	42	35	35	45	cm
32	Average residual length [3]	46	42	43	35	38	48	
33	Photo of specimen in enclosure no.	3	3	3	4	4	4	
34	Flue gas temperature							
35	Maximum of average values	114	111	117	115	116	116	°C
	Time [1]	09:54	0:25	09:48	10:00	09:42	09:54	min:s
36	Diagram in enclosure no.	3	3	3	4	5	6	
37	Remarks: - none -							

[1] indication of times relative to beginning of test
[2] checked if applicable
[3] indication of carrier/foam layer separated in case of fire-proofing agents
[4] very strong development of smoke

United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

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Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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5.3 Results (part 3) The test has been performed according to DIN 4102 (Mai 1998)

line no.	Measurement	Result with the tested specimen				Dim.
	Test number	#7813	#7799	#7798	#7797	
	flaming direction	warp	weft	warp	weft	
	side	A	B	A	B	
	sample-no	39072	39071	39070	39069	
	fabric	Deko	BW-Cretonne	Schleiernessel		
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	1	1	1	1	---
2	Maximum flame height above bottom edge of specimen	60	60	60	50	---
3	Time [1]	0:09	0:11	0:08	0:08	---
4	Burn-through / melting Time [1]	0:16	0:14	0:08	0:10	---
5	Observations on the back side of specimen Flames / Glowing Time [1]	--- ./.	--- ./.	--- ./.	--- ./.	--- ./.
6	Change of colour Time [1]	--- ./.	--- ./.	--- ./.	--- ./.	--- ./.
7	Falling of burning droplets Start [1]	./.	./.	./.	./.	min:s
8	Extent sporadic falling of burning droplets [2]	-	-	-	-	
9	continuous falling of burning droplets [2]	-	-	-	-	min:s
10	Falling of burning parts Start [1]	./.	./.	./.	./.	min:s
11	Extent sporadic falling of burning parts [2]	-	-	-	-	
12	continuous falling of burning parts [2]	-	-	-	-	
13	Burning duration at sieve plate (max.)	./.	./.	./.	./.	min:s
14	Impairment of burner by dropping or falling material: Time [1]	./.	./.	./.	./.	min:s
15	Premature end of test Final occurrence of burning at the specimen [1]	0:30	1:05	0:19	0:55	min:s
16	Time of eventually end of test [1]	./.	./.	./.	./.	min:s
17	Afterburning after end of test Time [1]	./.	./.	./.	./.	min:s
18	Number of specimen	-	-	-	-	
19	Front side of specimen [2]	-	-	-	-	
20	Rear side of specimen [2]	-	-	-	-	
21	flame length	-	-	-	-	cm

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
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line no.	Measurement	Result with the tested specimen				Dim.
	Test number	#7813	#7799	#7798	#7797	
	flaming direction	warp	weft	warp	weft	
	side	A	B	A	B	
	sample-no	39072	39071	39070	39069	
	fabric	Deko	BW-Cretonne	Schleiernessel		
	Afterglow after end of test	-	-	-	-	
22	Time [1]	./.	./.	./.	./.	min:s
23	Number of specimen					
	Place of appearance					
24	Lower half of the specimen [2]	-	-	-	-	
25	Upper half of the specimen [2]	-	-	-	-	
26	Front side of specimen [2]	-	-	-	-	
27	Rear side of specimen [2]	-	-	-	-	
	Density of smoke					
28	≤ 400 % * min	4	4	2	1	% * min
29	> 400 % * min [4]	-	-	-	-	% * min
30	Diagram in enclosure no.	5	5	5	6	
	Residual lengths: individual values [3]					
31	Specimen 1	40	46	51	79	cm
	Specimen 2	42	50	40	74	cm
	Specimen 3	40	50	46	76	cm
	Specimen 4	42	52	46	74	cm
32	Average residual length [3]	41	50	46	76	
33	Photo of specimen in enclosure no.	5	5	5	6	
34	Flue gas temperature					
	Maximum of average values	112	116	113	118	°C
35	Time [1]	09:39	10:00	07:39	07:37	min:s
36	Diagram in enclosure no.	5	5	5	6	
37	Remarks: - none -					

[1] indication of times relative to beginning of test
[2] checked if applicable
[3] indication of carrier/foam layer separated in case of fire-proofing agents
[4] very strong development of smoke

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6. **Explanations concerning the testing procedure** -none-

7. **Summary of results and additional establishments to Fire Behaviour**

lineno.	Measurement / test-no.	Result with the tested specimen						dimension
		#7820 warp dir. side A	#7821 weft dir. side B	#7822 warp dir. side A	#7825 warp dir. side A	#7824 warp dir. side A	#7823 warp dir. side A	
	sample-no	39081		39080	39079			
	fabric	Kalmuck						
1	residual length	34	36	33	29	32	26	cm
2	max. smoke temperature	119	116	119	119	120	122	°C
3	integral of smoke density	13	13	18	16	19	16	%min
4	remarks: none							

lineno.	Measurement / test-no.	Result with the tested specimen						dimension
		#7819 weft dir. side B	#7818 warp dir. side A	#7817 warp dir. side A	#7816 weft dir. side B	#7815 warp dir. side A	#7814 weft dir. side B	
	sample-no	39078	39077	39076	39075	39074	39073	
	fabric	Satin		Bühnen	Event	Baumwollnessel		
1	residual length	46	42	43	35	38	48	cm
2	max. smoke temperature	114	111	117	115	116	116	°C
3	integral of smoke density	9	10	4	9	1	5	%min
4	remarks: none							

lineno.	Measurement / test-no.	Result with the tested specimen				dimension
		#7813 warp dir. side A	#7799 weft dir. side B	#7798 warp dir. side A	#7797 weft dir. side B	
	sample-no	39072	39071	39070	39069	
	fabric	Deko	BW-Cretonne	Schleiernessel		
1	residual length	41	50	46	76	cm
2	max. smoke temperature	112	116	113	118	°C
3	integral of smoke density	4	4	2	1	%min
4	remarks: none					

According to DIN 4102, pt. 1, hardly flammable ("schwerentflammbare") building materials must meet the requirements of class B2.

After performing additional tests in the ignitability apparatus, this could be verified (encl. 7 - 11).

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8. Special remarks

- This report is only valid for the material as described in paragraph 1. In combination with other materials or with additional coatings or primers etc., the burning behaviour may differ.
- This test report is not valid for the exposure to outdoor climate conditions, washing or cleaning with chemicals.
- This test report is not valid if the material is used as a building product in the sense of the State Building Regulations ("Landesbauordnungen", MBO § 17, par. 3).
- This test report is no substitute for a General Building Inspectorate Certificate.
- This test report is granted without prejudice to the rights of third parties, in particular private proprietary rights.
- For legal interests, only the German original version is relevant.
- In General Building Inspectorates procedures, this test report can be used for
  - regular building materials for the required proof of accordance
  - for not regular building materials for the required proof of applicability

9. Validity

This test report is valid until the denoted date on page 1. The test report becomes invalid in case the standards on which these tests are based are changed.

Fladungen, 10.06.2024

Clerk in charge:

(Dipl.-Ing. (FH) Jürgen Hammer)

ANERKANNTE PRÜF-, ÜBERWACHUNGS- UND ZERTIFIZIERUNGSSTELLE Hoch Fladungen

Head of test laboratory:

(Dipl.-Ing. (FH) Andreas Hoch)

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

J&C Joel
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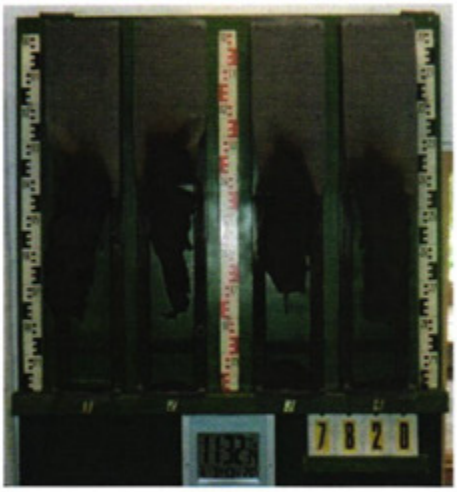
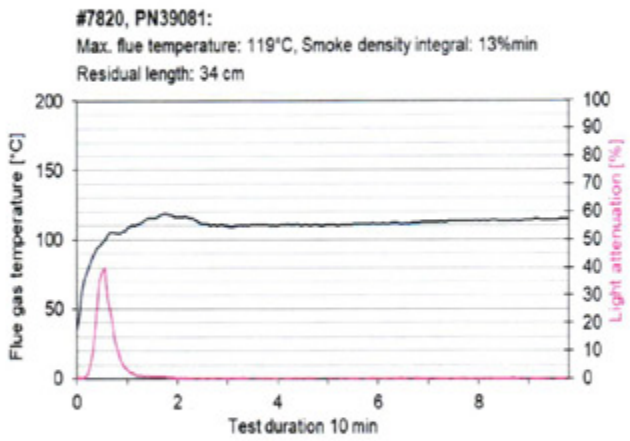
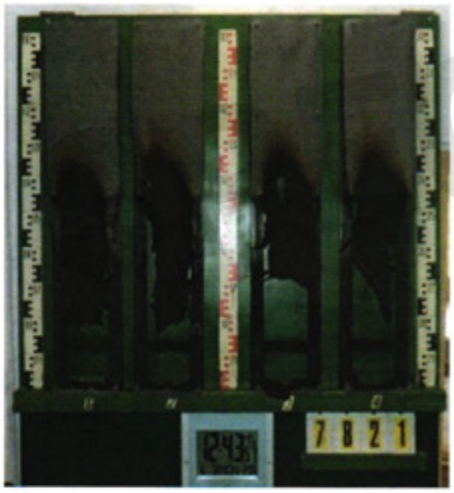
enclosure 1 test report
PZ-Hoch-240738

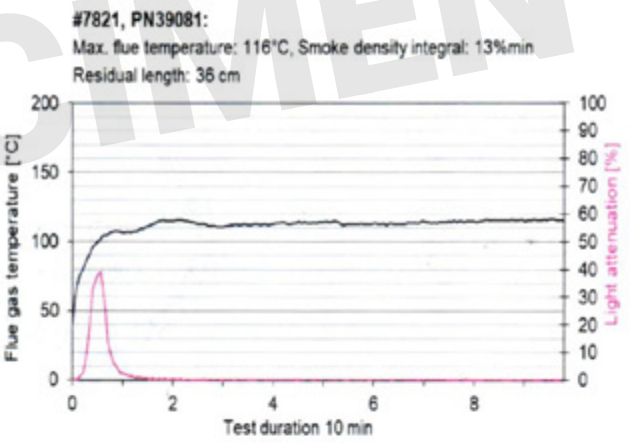
Fire shaft test #7820



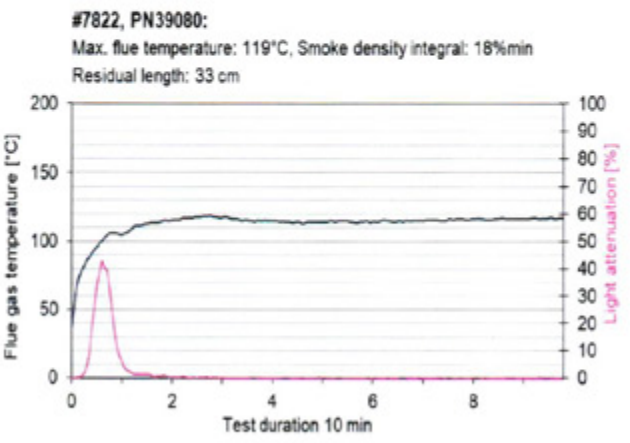


Fire shaft test #7821





Fire shaft test #7822



United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

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Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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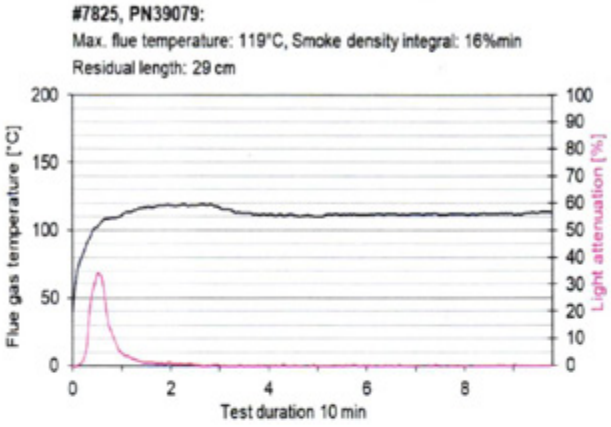
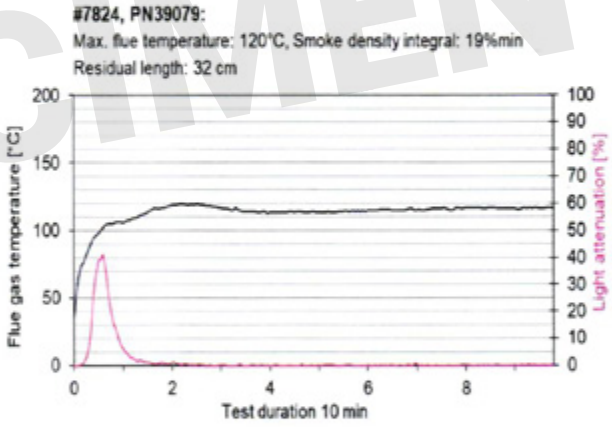
enclosure 2 test report
PZ-Hoch-240738

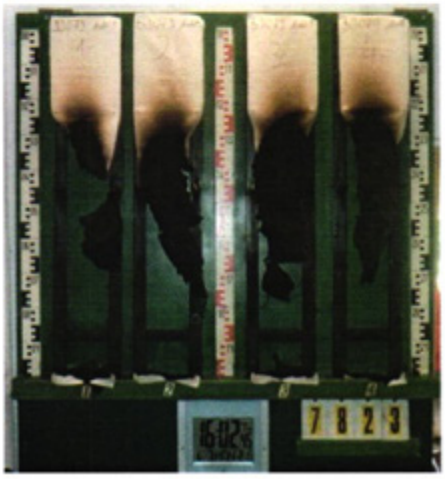
Fire shaft test #7825

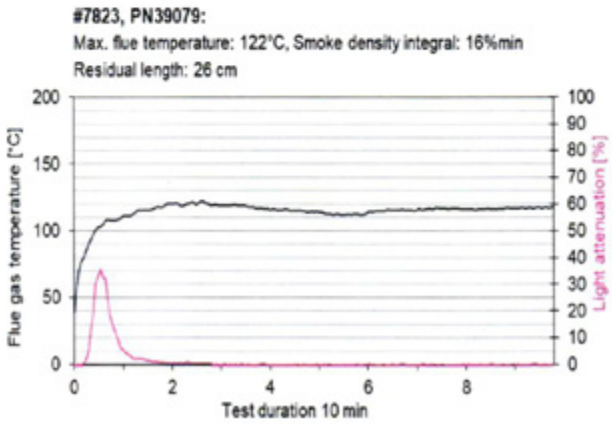


Fire shaft test #7824



Fire shaft test #7823





Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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enclosure 3 test report
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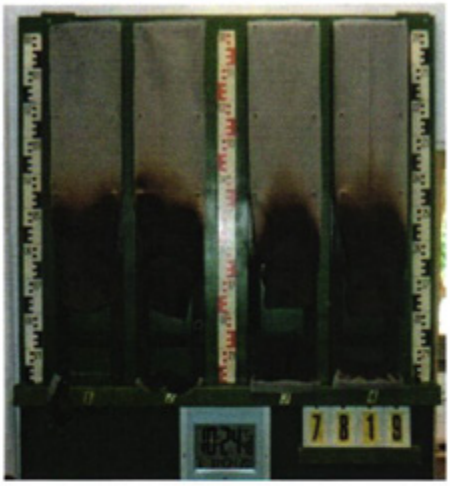
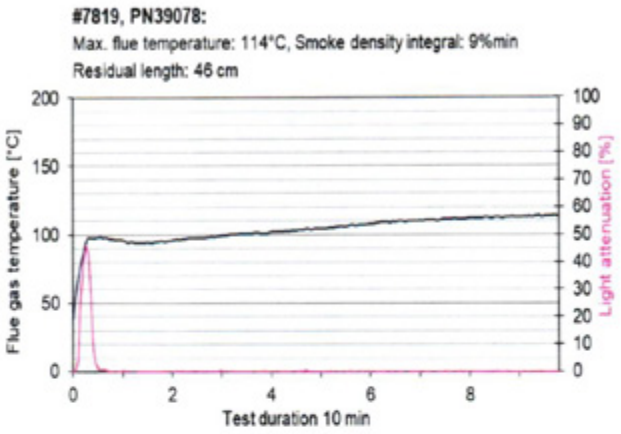
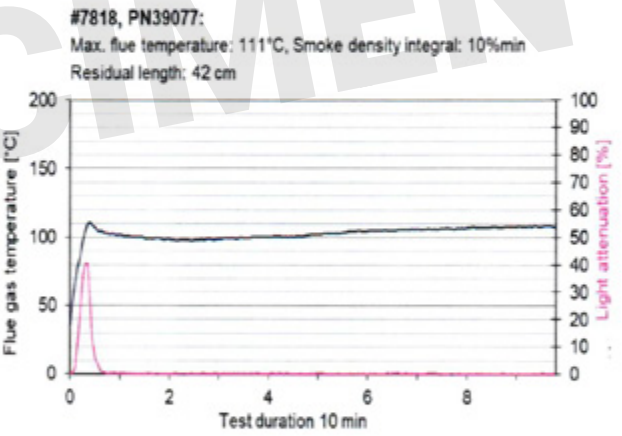
Fire shaft test #7819

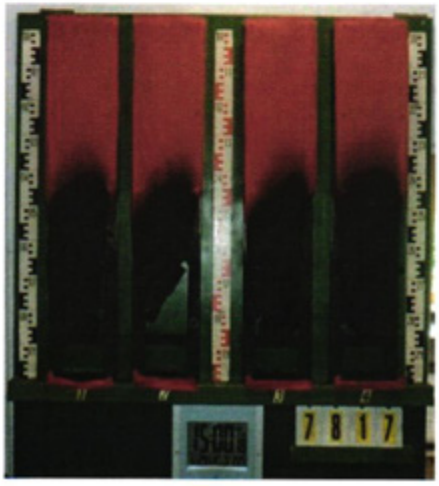


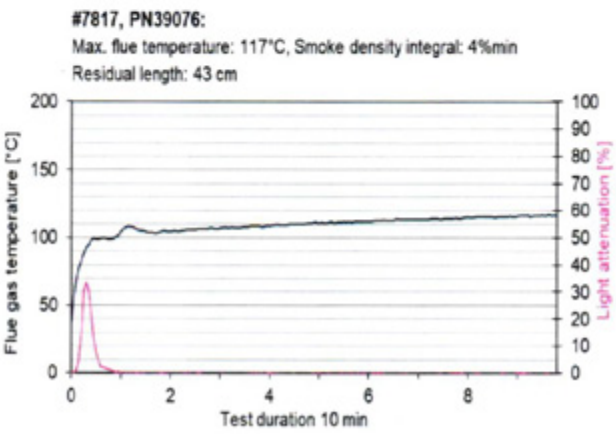


Fire shaft test #7818



Fire shaft test #7817





United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

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Fire Test Certificate - Specimen

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enclosure 4 test report
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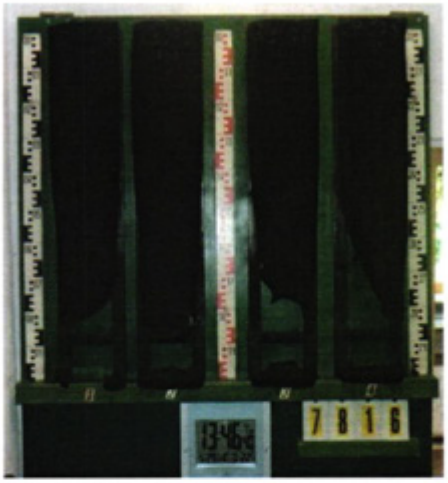
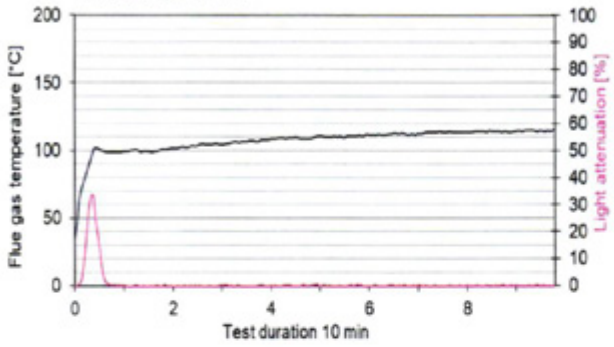
Fire shaft test #7816

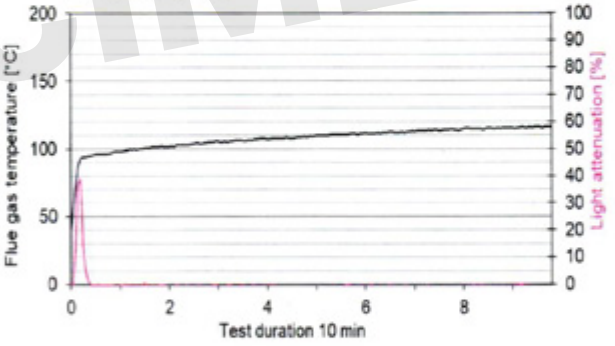


#7816, PN39075:
Max. flue temperature: 115°C, Smoke density integral: 9%min
Residual length: 35 cm

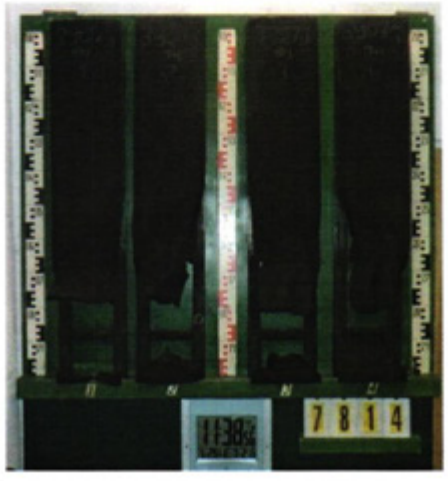


Fire shaft test #7815

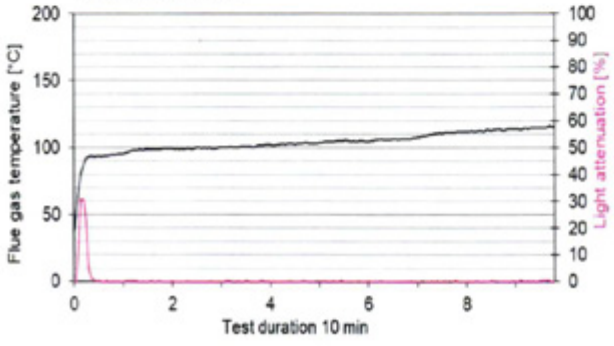
#7815, PN39074:
Max. flue temperature: 116°C, Smoke density integral: 1%min
Residual length: 38 cm



Fire shaft test #7814



#7814, PN39073:
Max. flue temperature: 116°C, Smoke density integral: 5%min
Residual length: 48 cm



Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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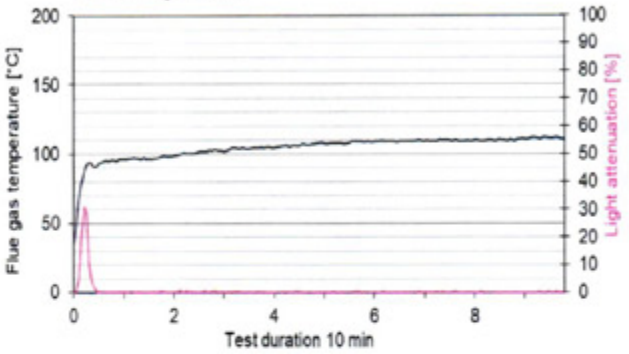
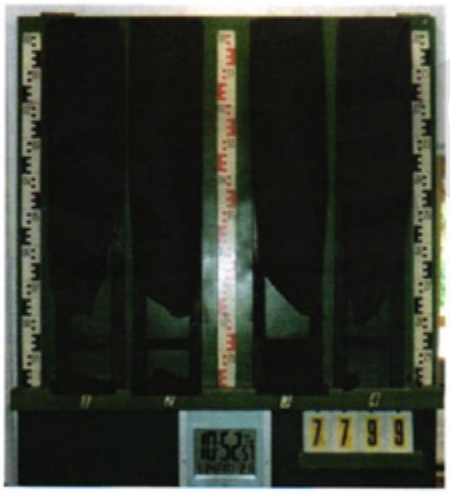
Fire shaft test #7813

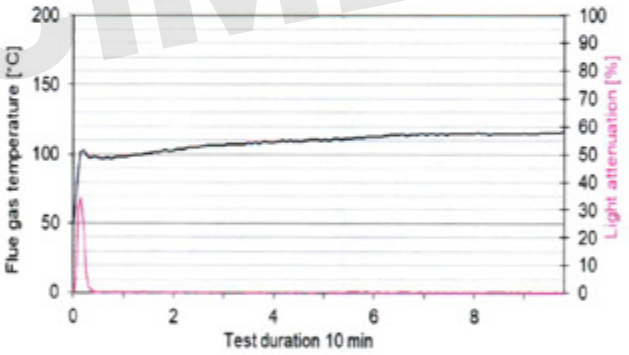
#7813, PN39072:
Max. flue temperature: 112°C, Smoke density integral: 4%min
Residual length: 41 cm



Fire shaft test #7799

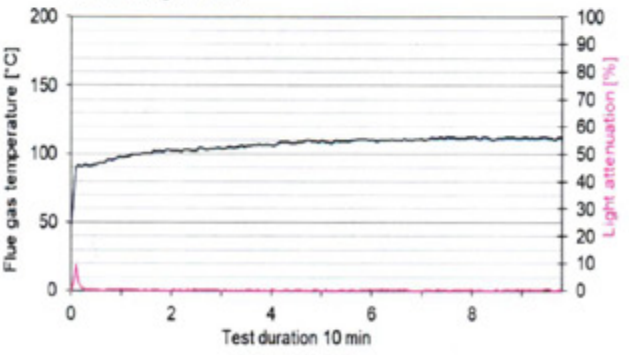


#7799, PN39071:
Max. flue temperature: 116°C, Smoke density integral: 4%min
Residual length: 50 cm



Fire shaft test #7798

#7798, PN39070:
Max. flue temperature: 113°C, Smoke density integral: 2%min
Residual length: 46 cm



Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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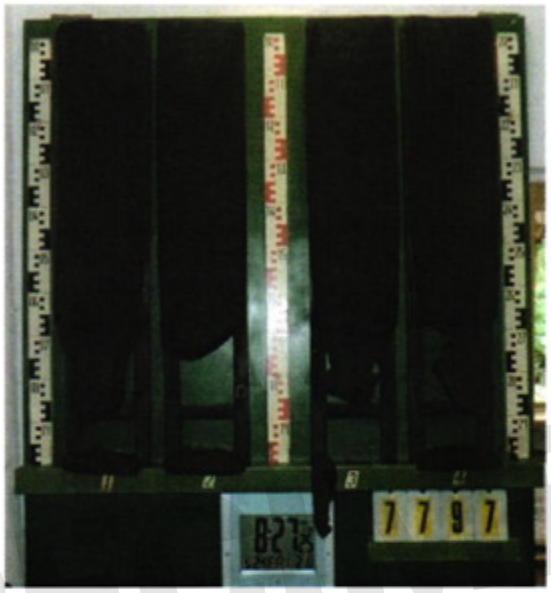
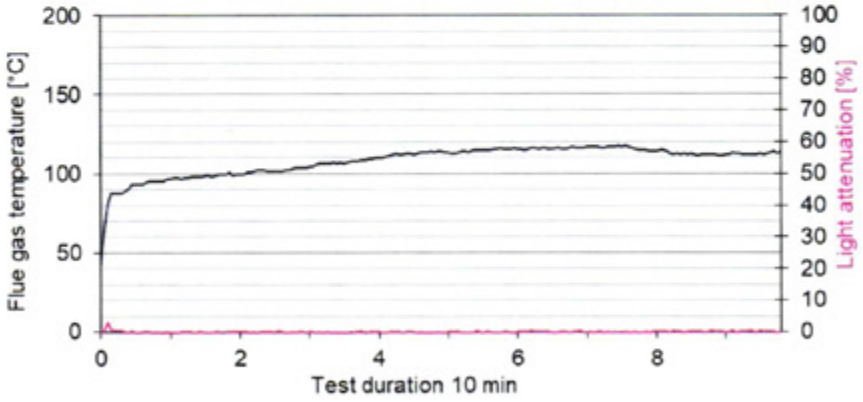
PZ-Hoch-240738

Fire shaft test #7797



measurement

#7797, PN39069:
Max. flue temperature: 118°C, Smoke density integral: 1%min
Residual length: 76 cm



United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

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Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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enclosure 7 test report
PZ-Hoch-240738

Test for normal flammability
classifying B2 according to DIN 4102 with fire tests according to EN ISO 11925-2

1. Description of test material in condition as delivered cf. page 2
2. Preparation of samples
   Samples for the ignitability apparatus were cut from the sample.
   The samples were kept in a climate 23/50 until they reached constant weight.
   Durance of flaming: 15 seconds
3. Arrangement of samples freely suspended
   Flaming side A and side B in warp and in weft direction
4. Date of test CW 20 in 2024
5. Results

PN 39070:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AS	BS	AK	BK	BK	BS	AS	BS	AK	BK	BK	BS	
ignition[1]	1	1	1	1	1	1	2	2	2	1	1	2	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	s
maximum flame height	**5**	**6**	**5**	**4**	**4**	**5**	**4**	**5**	**5**	**4**	**4**	**6**	cm
time of max. flame height	5	3	3	3	2	4	5	5	5	3	3	4	s
Self-cessation of flames[1)]	6	5	5	4	4	5	6	6	6	5	5	6	s
end of glowing	15	16	16	15	15	15	15	15	15	15	15	15	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	s
smoke development (visually)	little						moderate						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	s
Appearance after test: burned out till max. width 2 cm x height 7 cm													

PN 39070:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	-/-	2	-/-	-/-	--	--	4	3	2	2	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**2**	**2**	**2**	**2**	--	--	**3**	**4**	**4**	**4**	--	--	cm
time of max. flame height	-/-	5	-/-	-/-	--	--	6	6	4	5	--	--	s
Self-cessation of flames[1)]	-/-	15	-/-	-/-	--	--	8	8	7	6	--	--	s
end of glowing	15	15	15	15	--	--	15	15	15	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	very little						little						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2 cm x height 9 cm													

[1)] time denoted relative to beginning of test [2)] during 20 Sec -/- no occurrence -- no information
A side A B side B K warp S weft

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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enclosure 8 test report
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PN 39071:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	1	1	1	1	--	--	3	3	3	3	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**4**	**4**	**4**	**5**	--	--	**5**	**6**	**6**	**6**	--	--	cm
time of max. flame height	3	2	3	3	--	--	7	10	9	9	--	--	s
Self-cessation of flames[1)]	5	5	5	5	--	--	10	11	11	11	--	--	s
end of glowing	15	16	15	16	--	--	16	16	15	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	moderate						moderate						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 1,7 cm x height 8 cm													

PN 39072:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	2	2	2	1	--	--	3	4	3	3	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**5**	**4**	**3**	**3**	--	--	**5**	**5**	**5**	**5**	--	--	cm
time of max. flame height	6	7	4	5	--	--	7	11	9	11	--	--	s
Self-cessation of flames[1)]	10	9	7	8	--	--	13	14	15	14	--	--	s
end of glowing	16	16	15	15	--	--	16	16	16	16	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	little						moderate						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,0 cm x height 7,5 cm													

PN 39073:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	1	1	1	2	--	--	3	3	3	3	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**3**	**3**	**4**	**3**	--	--	**5**	**5**	**4**	**4**	--	--	cm
time of max. flame height	5	5	6	5	--	--	9	13	11	9	--	--	s
Self-cessation of flames[1)]	7	8	8	7	--	--	15	15	15	15	--	--	s
end of glowing	16	15	15	15	--	--	./.	15	15	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	little						heavy						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 1,5 cm x height 6,0 cm													

United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

www.jcjoel.com

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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PN 39074:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	1	1	1	1	--	--	3	4	3	3	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**5**	**5**	**4**	**3**	--	--	**5**	**5**	**5**	**5**	--	--	cm
time of max. flame height	7	8	5	4	--	--	7	8	9	10	--	--	s
Self-cessation of flames[1)]	10	9	7	6	--	--	10	11	15	15	--	--	s
end of glowing	16	15	15	15	--	--	-/-	-/-	-/-	-/-	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	moderate						heavy						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,0 cm x height 8,0 cm													

PN 39075:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	5	4	4	4	--	--	4	4	5	3	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**4**	**3**	**3**	**3**	--	--	**2**	**5**	**4**	**4**	--	--	cm
time of max. flame height	6	8	10	9	--	--	6	13	11	12	--	--	s
Self-cessation of flames[1)]	8	10	14	12	--	--	15	15	15	15	--	--	s
end of glowing	15	16	15	16	--	--	15	15	15	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	little						moderate						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,3 cm x height 7,0 cm													

PN 39076:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	2	1	2	3	--	--	6	5	6	5	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**3**	**3**	**3**	**3**	--	--	**2**	**2**	**2**	**2**	--	--	cm
time of max. flame height	5	4	7	8	--	--	15	15	8	7	--	--	s
Self-cessation of flames[1)]	7	14	15	13	--	--	10	15	15	15	--	--	s
end of glowing	16	15	15	17	--	--	15	15	15	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	moderate						heavy						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,0 cm x height 6,0 cm													

United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

www.jcjoel.com

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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PN 39077:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	1	1	1	1	--	--	-/-	-/-	10	9	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**5**	**4**	**5**	**4**	--	--	**2**	**2**	**5**	**5**	--	--	cm
time of max. flame height	10	11	9	11	--	--	-/-	-/-	14	13	--	--	s
Self-cessation of flames[1)]	13	14	11	13	--	--	-/-	-/-	15	15	--	--	s
end of glowing	16	15	16	15	--	--	15	16	15	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	moderate						moderate						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,0 cm x height 9,0 cm													

PN 39078:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	5	1	1	2	--	--	-/-	6	7	5	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**3**	**3**	**3**	**4**	--	--	**2**	**5**	**4**	**3**	--	--	cm
time of max. flame height	9	7	6	8	--	--	-/-	14	12	10	--	--	s
Self-cessation of flames[1)]	12	11	11	11	--	--	-/-	15	15	15	--	--	s
end of glowing	15	15	15	15	--	--	-/-	15	15	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	little						little						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,0 cm x height 8,0 cm													

PN 39079:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	5	3	4	3	--	--	-/-	-/-	-/-	-/-	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**2**	**3**	**2**	**2**	--	--	**2**	**2**	**2**	**2**	--	--	cm
time of max. flame height	6	8	7	8	--	--	-/-	-/-	-/-	-/-	--	--	s
Self-cessation of flames[1)]	15	15	15	15	--	--	-/-	-/-	-/-	-/-	--	--	s
end of glowing	22	22	22	22	--	--	15	15	-/-	-/-	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	moderate						moderate						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,0 cm x height 6,0 cm													

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: B1

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PN 39080:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**2**	**2**	**2**	**2**	--	--	**2**	**2**	**2**	**2**	--	--	cm
time of max. flame height	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Self-cessation of flames[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
end of glowing	22	22	22	22	--	--	-/-	16	15	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	little						little						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,0 cm x height 5,0 cm													

PN 39081:	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
side/direction	AK	BK	AS	BS	--	--	AK	BK	AS	BS	--	--	
ignition[1)]	6	7	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
measurement mark reached[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
maximum flame height	**2**	**2**	**2**	**2**	--	--	**2**	**2**	**2**	**2**	--	--	cm
time of max. flame height	10	10	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Self-cessation of flames[1)]	15	15	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
end of glowing	15	18	22	22	--	--	-/-	-/-	12	15	--	--	s
flames were extinguished after[1)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
smoke development (visually)	moderate						moderate						
dropping of burning material[1)2)]	-/-	-/-	-/-	-/-	--	--	-/-	-/-	-/-	-/-	--	--	s
Appearance after test: burned out till max. width 2,0 cm x height 6,0 cm													

[1)] time denoted relative to beginning of test
A side A B side B K warp S weft

[2)] during 20 Sec -/- no occurrence -- no information

6. Remarks and explanations to the testing procedure - none –
7. Opinion concerning the dropping of burning material
   The test for normal flammability shows no dropping burning material.

Hoch Fladungen

Prüfinstitut Hoch
Lerchenweg 1
D-97650 Fladungen
Tel.: 09778–7480-200
hoch.fladungen@t-online.de www.brandverhalten.de
Prüfinstitut für das Brandverhalten von Bauprodukten, Dipl.-Ing. (FH) Andreas Hoch
Bauaufsichtlich anerkannte Prüf-, Überwachungs- und Zertifizierungsstelle

KB-Hoch-241380-2

KLASSIFIZIERUNGSBERICHT

Klassifizierung des Brandverhaltens nach EN 13501-1 [1]

CLASSIFICATION REPORT

Reaction to fire classification according to EN 13501-1 [1]

Auftraggeber *Client*	
Herstellwerk *Production site*	
Gegenstand *Subject*	**"Art. 14/50 Schleiernessel / *Gauze/Muslin*"** **"Art. 60/20 Baumwoll-Cretonne / *Cotton Sheeting light*"** **"Art. 15/14 Dekomolton / *Decomolton*"** **"Art. 24/28 Baumwollnessel / *Cotton Canvas*"** **"Art. 11/06 Eventmolton / *Eventmolton*"** **"Art. 22/20 Satinmolton / *Satinmolton*"** **"Art. 13/07 Bühnenmolton / *Stagemolton*"** **"Art. 28/08 Kalmuck / *Calmuc/Soundabsorber*"**
Beschreibung *Description*	Gewebe aus 100% Baumwolle in verschiedenen Varianten und Farben *100% cotton fabric in different variations and colors*
Klassifizierung *Classification*	**B – s1,d0**
Berichtsdatum *Issue date*	09.12.2024
Geltungsdauer *Validity*	30.11.2029 [2] (siehe Abschnitt 5.1 / *confer to section 5.1*)

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[1] EN 13501-1:2018
[2] Verlängerung auf Antrag / *Prolongation on request*

Mitglied der notified body: 1508 egolf

Durch die DAkkS nach DIN EN ISO/IEC 17025 akkreditiertes Prüflaboratorium.
Die Akkreditierung gilt für die in der Urkunde aufgeführten Prüfverfahren

DAkkS Deutsche Akkreditierungsstelle D-PL-11085-01-00

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1. **Einführung** / *Introduction*

Dieser Klassifizierungsbericht zum Brandverhalten definiert die Klassifizierung, die dem Bauprodukt in Übereinstimmung mit den Verfahren nach EN 13501-1:2018 zugeordnet wird.
This classification report defines the classification assigned to the construction product in accordance with the procedures given in EN 13501-1:2018.

2. **Beschreibung zum Bauprodukt** / *Description of the construction product*

Das Produkt wird in den in Punkt 3.1 aufgeführten Prüfberichten, die der Klassifizierung zugrunde liegen, vollständig beschrieben. Dabei wurde das Produkt mit den folgenden Produktparametern getestet.
The product is fully described in the test reports in support of this classification listed in section 3.1. The product was tested adhering to the following product parameters.

"Art. 14/50 Schleiernessel / *Gauze/Muslin*"
"Art. 60/20 Baumwoll-Cretonne / *Cotton Sheeting light*"
"Art. 15/14 Dekomolton / *Decomolton*"
"Art. 24/28 Baumwollnessel / *Cotton Canvas*"
"Art. 11/06 Eventmolton / *Eventmolton*"
"Art. 22/20 Satinmolton / *Satinmolton*"
"Art. 13/07 Bühnenmolton / *Stagemolton*"
"Art. 28/08 Kalmuck / *Calmuc/Soundabsorber*"

Geprüfte Gesamtdicke *Tested total thickness*	≈ 0,26 mm	bis *up to*	≈ 1,77 mm
Nominelles Flächengewicht des geprüften Materials *Nominal weight per unit area of the tested material*	≈ 75 g/m²	bis *up to*	≈ 500 g/m²
Materialzusammensetzung *Material composition*	100 % Baumwolle *100% cotton*		
Geprüfte Farben *Tested colours*	Wie in den zugrundeliegenden Berichten angegeben *With the density given in the underlying reports*		

Das Produkt erfüllt nach Angaben des Auftraggebers keine harmonisierte europäische technische Spezifikation (z.B. Produktnorm oder EAD).
According to the applicant, the product is not compliant with any harmonised European technical specification (e.g. product standard or EAD).

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3. Prüfberichte und Prüfergebnisse als Grundlage dieser Klassifizierung
Test reports and test results as a basis for this classification

3.1. Prüfberichte / *Test reports*

Name des Labors *Name of laboratory*	Auftraggeber *Sponsor*	Prüfverfahren *Test method*	Prüfbericht, Datum *Test report, date*
Prüfinstitut Hoch		EN ISO 11925-2 (Einzelflammentest / *single flame source test)*	PB-Hoch-241378-2 09.12.2024
		EN 13823 (SBI)	PB-Hoch-241379-2 09.12.2024

3.2. Ergebnisse / *Results*

Prüfverfahren *Test method*	Parameter *Parameter*	Anzahl der Prüfungen *Number of tests*	Ergebnisse *Results*	Anforderung für B – s1,d0 *Requirements*
EN ISO 11925-2	F_s	12 (insg. / *total* 57)	max. 60 mm	–
	$F_s \leq 150$ mm Flammenausbreitung höchstens 150 mm *flame spread no more than 150 mm*		ja *yes*	erfüllt *compliant*
	Brennendes Abtropfen *flaming droplets*		nein *no*	erfüllt *compliant*

F_s Maximale vertikale Flammenausbreitung [mm].
Maximum vertical flame spread [mm].

Tabelle / *Table* 1: Prüfergebnis der Kleinbrennerprüfung / *Result of single-flame source test*

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: EN13501-1

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Prüfverfahren *Test method*	Parameter *Parameter*	Anzahl der Prüfungen *Number of tests*	Ergebnisse (Mittelwert) *Results (average value)*	Anforderung *Requirement*
EN 13823	$FIGRA_{0,2MJ}$	3 (insg. / *total* 19)	92 W/s	A2 / B: ≤ 120 W/s
	$FIGRA_{0,4MJ}$		92 W/s	C: ≤ 250 W/s D: ≤ 750 W/s
	THR_{600s}		2,3 MJ	A2 / B: ≤ 7,5 MJ C: ≤ 15 MJ
	SMOGRA		29 m^2/s^2	s1: ≤ 30 m^2/s^2 s2: ≤ 180 m^2/s^2
	TSP_{600s}		16 m^2	s1: ≤ 50 m^2 s2: ≤ 200 m^2
	FDP		d0	d0: Kein Brennen / *no flaming* d1: ≤ 10 s Brenndauer / *flaming* d2: > 10 s Brenndauer / *flaming*
	LSF		erfüllt *compliant*	Rand der Probe nicht erreicht *Sample edge not reached*

Erläuterungen / *remarks:*

$FIGRA_{0,2MJ}$	Feuerwachstumswert [W/s] nach Erreichen des THR-Schwellenwertes 0,2 MJ *Fire Growth Rate [W/s] after reaching a THR threshold of 0,2 MJ*
$FIGRA_{0,4MJ}$	Feuerwachstumswert [W/s] nach Erreichen des THR-Schwellenwertes 0,4 MJ *Fire Growth Rate [W/s] after reaching a THR threshold of 0,4 MJ*
THR_{600s}	Gesamte freigesetzte Wärme während der ersten 600 Sekunden Beflammung [MJ] *Total heat release during the first 600 seconds of flame impingement [MJ]*
SMOGRA	Rauchentwicklungsrate [m^2/s^2] *Smoke Growth Rate [m^2/s^2]*
TSP_{600s}	gesamte freigesetzte Rauchmenge während der ersten 600 Sekunden Beflammung [m^2] *Total smoke production during the first 600 seconds of flame impingement [m^2]*
LSF	seitliche Flammenausbreitung bis zur Außenkante des langen Probenflügels *lateral spread of flame, reaching the far edge of the large sample wing*
FDP	brennendes Abtropfen während der ersten 600 Sekunden Beflammung [s] *flaming droplets / particles during the first 600 seconds of flame impingement [s]*

Tabelle / *Table* 2: Prüfergebnisse der SBI-Prüfungen / *SBI test results*

United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

www.jcjoel.com

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Lerchenweg 1
D-97650 Fladungen

4. Klassifizierung und Anwendungsgebiet / *Classification and field of application*

4.1. Klassifizierung / *Classification*

Die Klassifizierung ist nach EN 13501-1:2018, Abschnitt 11 (Bauprodukte mit Ausnahme von Bodenbelägen) erfolgt.
This classification has been carried out acc. to EN 13501-1:2018, section 11 (construction products, excluding floorings).

Brandverhalten *reaction to fire*		Rauchentwicklung *smoke production*			Brennendes Abtropfen/Abfallen *flaming droplets*	
B	–	s	1	,	d	0

Klassifizierung / *Classification*: **B – s1,d0**

4.2. Anwendungsgebiet / *Field of application*

Die Klassifizierung in Abschnitt 4.1 ist nur für das auf Seite 1 genannte und im Abschnitt 2 sowie den in Abschnitt 3.1 genannten Prüfberichten näher beschriebene Bauprodukt gültig.

Die Klassifizierung ist außerdem für die folgenden Produktparameter gültig:
Farbe beliebig
- Dekomolton leicht 130 g/m²

Diese Klassifizierung gilt für folgende Endanwendungsbedingungen:
- Freihängend.
- Evtl. angrenzende flächige Baustoffe müssen mindestens der Klasse A1 oder A2-s1,d0 nach EN 13501-1 entsprechen und eine Dicke von mindestens 9 mm und eine Rohdichte von mindestens 653 kg/m³ aufweisen. Der Abstand des Produkts zu diesen Baustoffen, muss mindestens 40 mm betragen. Ausgenommen davon sind Untergründe aus Gipsplatten, die nicht in diesem Endanwendungsbereich mitinbegriffen sind.

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The classification in section 4.1 is valid solely for the product referred to on page 1 and described in detail in section 2 as well as in the test reports listed in section 3.1.

The classification is additionally valid for the following product parameters:

- *Arbitrary colour*
- *Decomolton light 130 g/m²*

This classification is valid for the following end use conditions:

- *Freely suspended.*
- *If fixed in front of underlying materials, these have to be at least of class A1 or A2-s1,d0 (EN 13501-1) and must have a thickness of at least 9 mm and a gross density of no less than 653 kg/m³. The distance of the product to these underlying materials must be at least 40 mm. Gypsum plasterboards are exempt as underlying materials and are not included in this end use condition.*

Hoch Fladungen

5. Einschränkungen / *Limitations*

5.1. Geltungsdauer / *Duration of validity*

Die Klassifizierung gilt bis zum auf Seite 1 angegebenem Datum. Sie kann nach einer Überprüfung des Brandverhaltens verlängert werden. Der Klassifizierungsbericht verliert außerdem seine Gültigkeit, wenn sich die Klassifizierungskriterien gemäß DIN EN 13501-1 ändern oder ergänzt werden, oder wenn die Produktzusammensetzung oder der Produktaufbau geändert werden.
Wenn keine kontinuierliche Überprüfung des Brandverhaltens durch den Hersteller stattfindet, verliert dieser Klassifizierungsbericht bei jeder Änderung des Produktionsprozesses, des Produktionsumfeldes, der Ausgangsstoffe oder der Zulieferer der Komponenten seine Gültigkeit. Das Brandverhalten muss dann erneut nachgewiesen werden.
This classification remains valid no later than until the date stated on page 1. It can be renewed after re-evaluation of the reaction to fire. This classification also loses its validity as soon as the classification criteria according to DIN EN 13501-1 are altered or amended, or as soon as the product formulation or its composition are altered.
If the fire behaviour of the product is not continuously monitored by the manufacturer, each change in either of production process, production environment, raw materials, or chain of suppliers causes this classification to become invalid. In this case, the fire behaviour has to be reassessed.

5.2. Hinweise / *Remarks*

In Verbindung mit anderen Baustoffen, mit anderen Abständen, Befestigungen, Fugenausbildungen/Verbindungen, Dicken- oder Rohdichtenbereichen, Beschichtungen als in den Abschnitten 2 und 4.2 angegeben, kann das Brandverhalten negativ beeinflusst werden, so dass die Klassifizierung in Abschnitt 4.1 nicht mehr gilt. Das Brandverhalten von anderen als den oben angegebenen Parametern ist gesondert nachzuweisen.
Used in combination with other materials, esp. other substrates/backings, air gaps/voids, types of fixation joints, thickness or density ranges, coatings than those given in sections 2 and 4.2, the fire performance is likely to be influenced negatively, so that the classification assigned in section 4.1 will no longer be valid. The fire performance with parameters other than those given above has to be tested and classified separately.

Dieser Klassifizierungsbericht ersetzt nicht einen gegebenenfalls notwendigen baurechtlichen / bauaufsichtlichen Nachweis nach Landesbauordnung
This classification report is in no case a substitute for any required certification according to German building regulations.

Fire Test Certificate - Specimen

Fabric: Acoustic Molton
Type: EN13501-1

Inspiration in every performance

Dieses Dokument stellt keine Typzulassung oder Zertifizierung des Produktes dar.
This document does not represent type approval or certification of the product.

Fladungen, 09.12.2024

Sachbearbeiterin
Clerk in charge

(B. Eng. Susanne Hart)

Leiter der Prüfstelle
Head of test laboratory

(Dipl.-Ing.(FH) Andreas Hoch)

Acoustic Test Report - Absorption

Absorption Class: C
Calculated to EN ISO 11654-1997

Fabric: Acoustic Molton
Fullness: Flat

J&C Joel
Inspiration in every performance

Data Sheet 9

Laboratory Measurement of Sound Reduction Index to BS EN ISO 10140-2:2021

			Source	Receiving
Test Number:	9	**Test Room:**		
Client:	J&C Joel Ltd	**Air Temperature:**	11.3 °C	15.6 °C
Test Date:	28/02/2023	**Air Humidity:**	53 %	46 %
Sample Height:	2.20 m	**Volume:**	115 m³	300.1 m³
Sample Width:	2.00 m	**Air Pressure:**	1022 mbar	
Sample Weight:	0.5 kg/m²			

Product Identification: Acoustic Molton 500g/m² at 0% Fullness

Frequency Hz	Sound Reduction Index, dB	
	⅓ Oct	Octave
50+	2.8	1.8
63+	1.1	
80+	1.7	
100	1.7	2.3
125	1.4	
160	4.2	
200	0.8	1.9
250	1.7	
315	3.8	
400	4.7	5.6
500	5.9	
630	6.5	
800	7.6	8.4
1000	8.6	
1250	9.3	
1600	9.5	9.6
2000	9.7	
2500	9.7	
3150	9.5	9.6
4000	9.6	
5000	9.6	
6300+	9.7	9.6
8000+	9.8	
10000+	9.4	
Average 100-3150	5.9	SRL Version 1.1

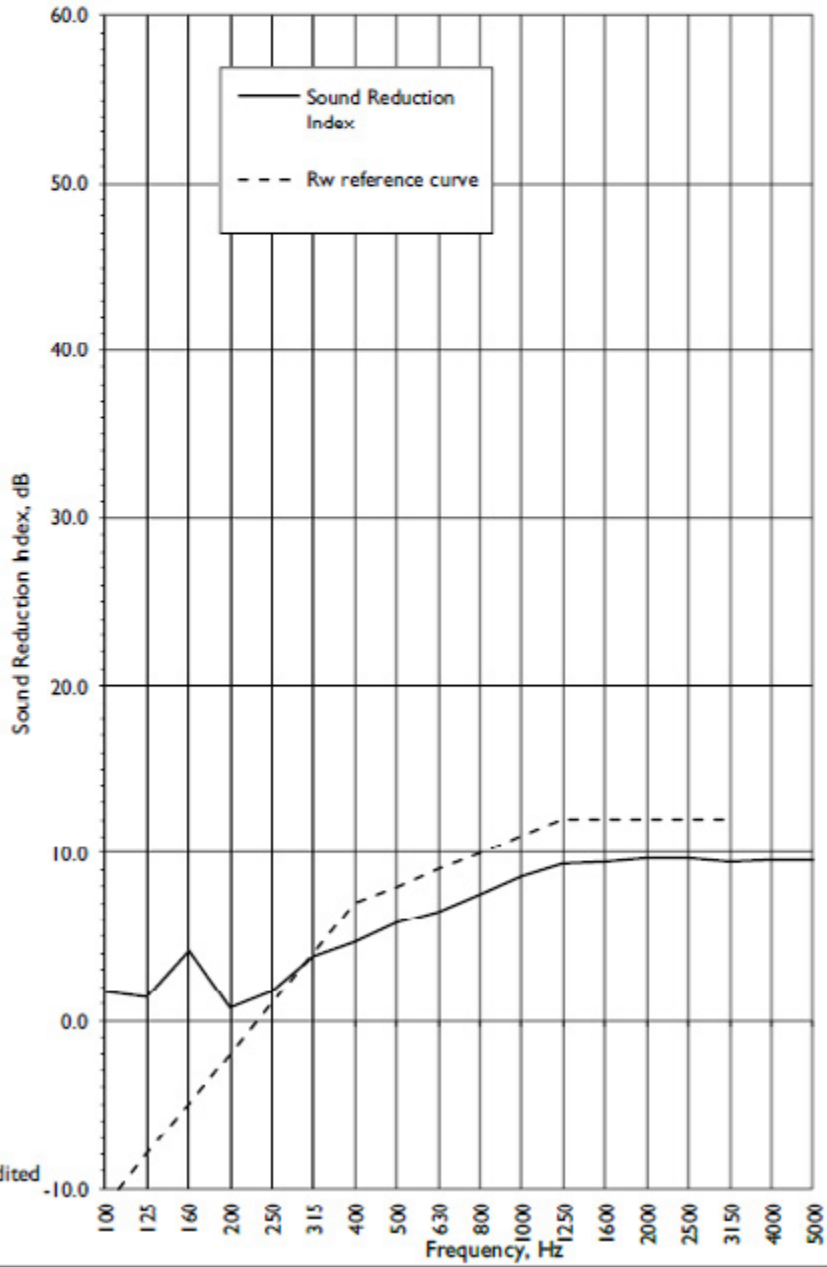
* shows measurement corrected for background

> shows measurement limited by background

\+ shows Frequency beyond standard and not UKAS accredited

Rating according to BS EN ISO 717-1:2020

$R_w(C;C_{tr})$= 8 (0;-1) dB



United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

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Acoustic Test Report - Absorption

Absorption Class: A
Calculated to EN ISO 11654-1997

Fabric: Acoustic Molton
Fullness: 50%
Cavity from Wall: 350mm

J&C Joel
Inspiration in every performance

Data Sheet 8

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:**	15.4	°C	**Humidity:**	43	%RH	**Pressure:**	1001 mbar

Sample Description: Acoustic Molton - Single Layer - 50% fullness (Approx. weight 500g/m2) 350mm cavity from wall

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

Test 9

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
*50**	*4.96*	*4.75*	*0.05*	
*63**	*5.39*	*4.91*	*0.10*	*n/a*
*80**	*7.08*	*6.53*	*0.07*	
100	9.00	7.17	0.15	
125	7.30	5.54	0.24	0.25
160	6.60	4.40	0.41	
200	6.86	4.05	0.55	
250	7.22	3.91	0.64	0.65
315	6.99	3.50	0.78	
400	6.36	3.28	0.81	
500	5.64	3.01	0.85	0.85
630	5.09	2.69	0.96	
800	5.10	2.62	1.01	
1000	5.74	2.77	1.01	1.00
1250	5.63	2.77	0.99	
1600	5.18	2.58	1.04	
2000	4.76	2.38	1.10	1.00
2500	4.22	2.21	1.11	
3150	3.35	1.85	1.21	
4000	2.59	1.54	1.26	1.00
5000	2.04	1.23	1.49	
*6300**	*1.39*	*0.91*	*1.68*	
*8000**	*1.14*	*0.77*	*1.77*	*n/a*
*10000**	*0.80*	*0.59*	*1.77*	

α_w 0.90

Class A

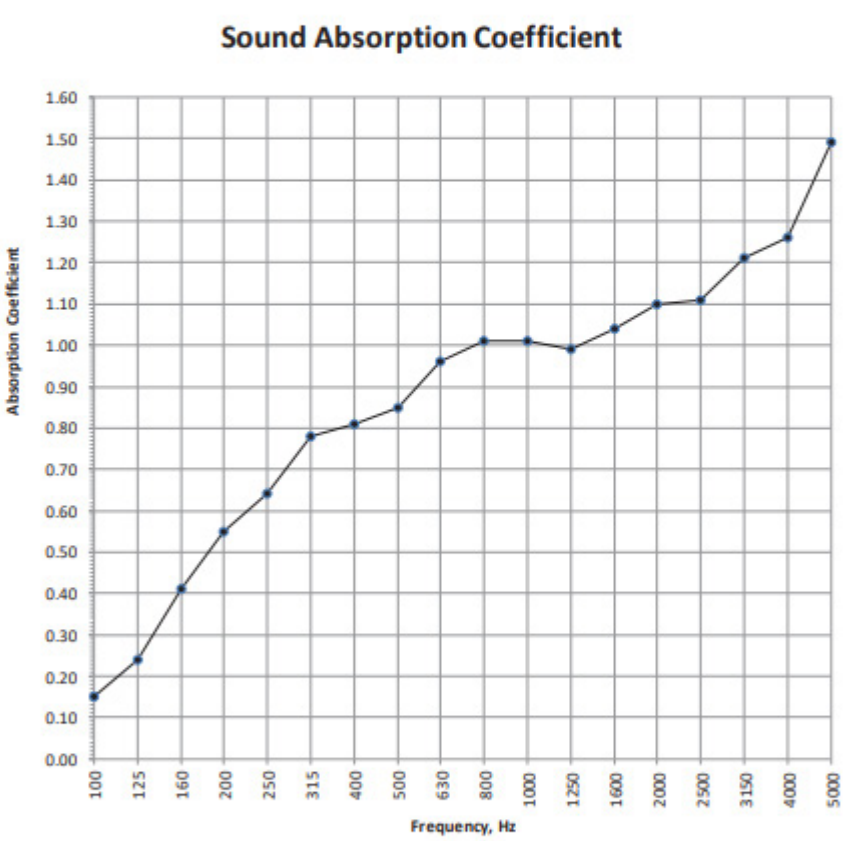
Calculated to EN ISO 11654:1997

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



Practical absorption coefficient, BS EN ISO 11654:1997

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United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

www.jcjoel.com

Acoustic Test Report - Absorption

Absorption Class: A
Calculated to EN ISO 11654-1997

Fabric: Acoustic Molton
Fullness: 100%
Cavity from Wall: 100mm

J&C Joel
Inspiration in every performance

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: 30/11/2020

Empty Room:	**Temperature:**	16.4	°C	**Humidity:**	57	%RH	**Pressure:**	1016 mbar
Room with Sample:	**Temperature:**	15.7	°C	**Humidity:**	55	%RH	**Pressure:**	1009 mbar

Sample Description: Acoustic Molton - Single Layer - 100% Fullness (Approx. Weight 500g/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 α_s	Practical Absorp Coeff #
*50**	*5.15*	*5.18*	*0.00*	
*63**	*4.83*	*5.19*	*-0.08*	*n/a*
*80**	*7.33*	*7.40*	*-0.01*	
100	7.42	6.58	0.09	
125	7.17	5.33	0.26	0.20
160	6.75	4.99	0.28	
200	6.77	4.49	0.41	
250	6.80	3.99	0.56	0.60
315	6.65	3.45	0.76	
400	6.46	2.84	1.07	
500	5.63	2.72	1.03	1.00
630	5.00	2.49	1.10	
800	5.22	2.59	1.06	
1000	5.79	2.80	1.00	1.00
1250	5.75	2.82	0.98	
1600	5.33	2.73	0.97	
2000	4.93	2.60	0.98	1.00
2500	4.35	2.40	0.99	
3150	3.55	2.14	0.97	
4000	2.92	1.82	1.06	1.00
5000	2.34	1.55	1.09	
*6300**	*1.60*	*1.18*	*1.06*	
*8000**	*1.30*	*1.00*	*1.04*	*n/a*
*10000**	*0.93*	*0.76*	*1.01*	

α_w 0.90

Class A

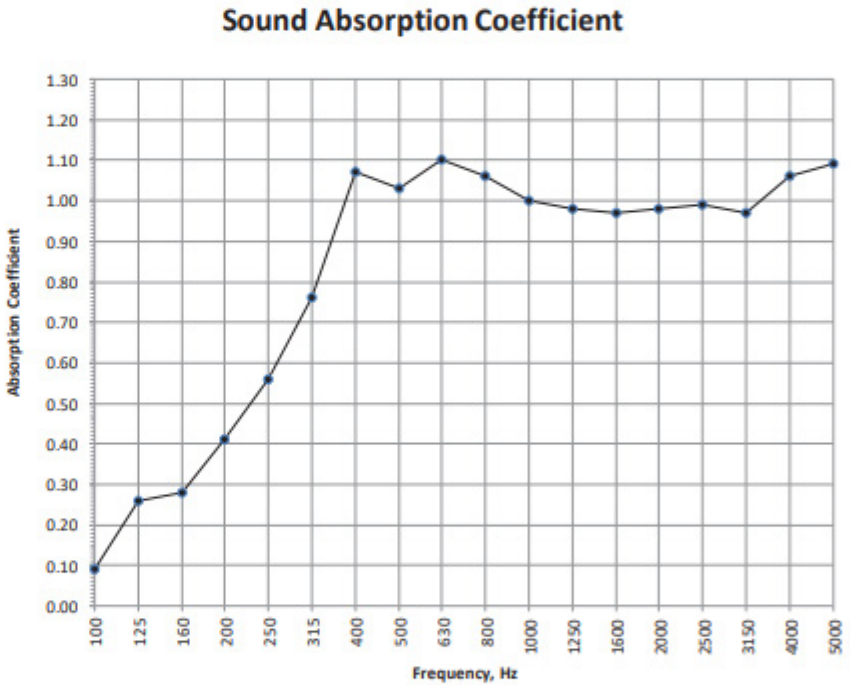
Calculated to EN ISO 11654:1997

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

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United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

www.jcjoel.com

Acoustic Test Report - Absorption

Absorption Class: A
Calculated to EN ISO 11654-1997

Fabric: Acoustic Molton
Fullness: 100%
Cavity from Wall: 350mm

J&C Joel
Inspiration in every performance

Data Sheet 7

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:**	15.4	°C	**Humidity:**	44	%RH	**Pressure:**	1001 mbar

Sample Description: Acoustic Molton - Single Layer - 100% fullness (Approx. weight 500 g/m2) 350mm cavity from wall

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

Test 8

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_s	Practical Absorp Coeff #
*50**	*4.96*	*4.66*	*0.07*	
*63**	*5.39*	*4.95*	*0.09*	*n/a*
*80**	*7.08*	*6.47*	*0.07*	
100	9.00	7.41	0.13	
125	7.30	5.44	0.26	0.30
160	6.60	4.19	0.47	
200	6.86	4.09	0.54	
250	7.22	3.73	0.71	0.70
315	6.99	3.49	0.78	
400	6.36	3.14	0.88	
500	5.64	2.90	0.92	0.95
630	5.09	2.64	1.00	
800	5.10	2.56	1.06	
1000	5.74	2.71	1.06	1.00
1250	5.63	2.69	1.05	
1600	5.18	2.53	1.08	
2000	4.76	2.39	1.10	1.00
2500	4.22	2.17	1.16	
3150	3.35	1.87	1.20	
4000	2.59	1.53	1.31	1.00
5000	2.04	1.24	1.50	
*6300**	*1.39*	*0.91*	*1.75*	
*8000**	*1.14*	*0.78*	*1.77*	*n/a*
*10000**	*0.80*	*0.58*	*2.04*	

α_w 0.95

Class A

Calculated to EN ISO 11654: 1997

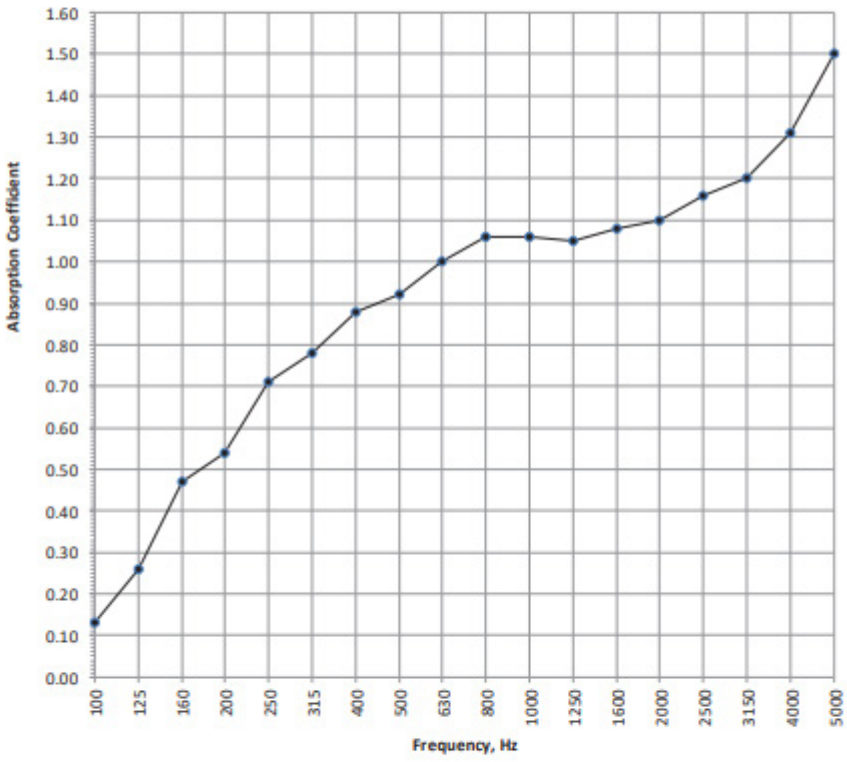
NRC 0.95

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

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United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

www.jcjoel.com

United Kingdom
+44 1422 833835
uksales@jcjoel.com

United Arab Emirates
+971 4 884 7801
menasales@jcjoel.com

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