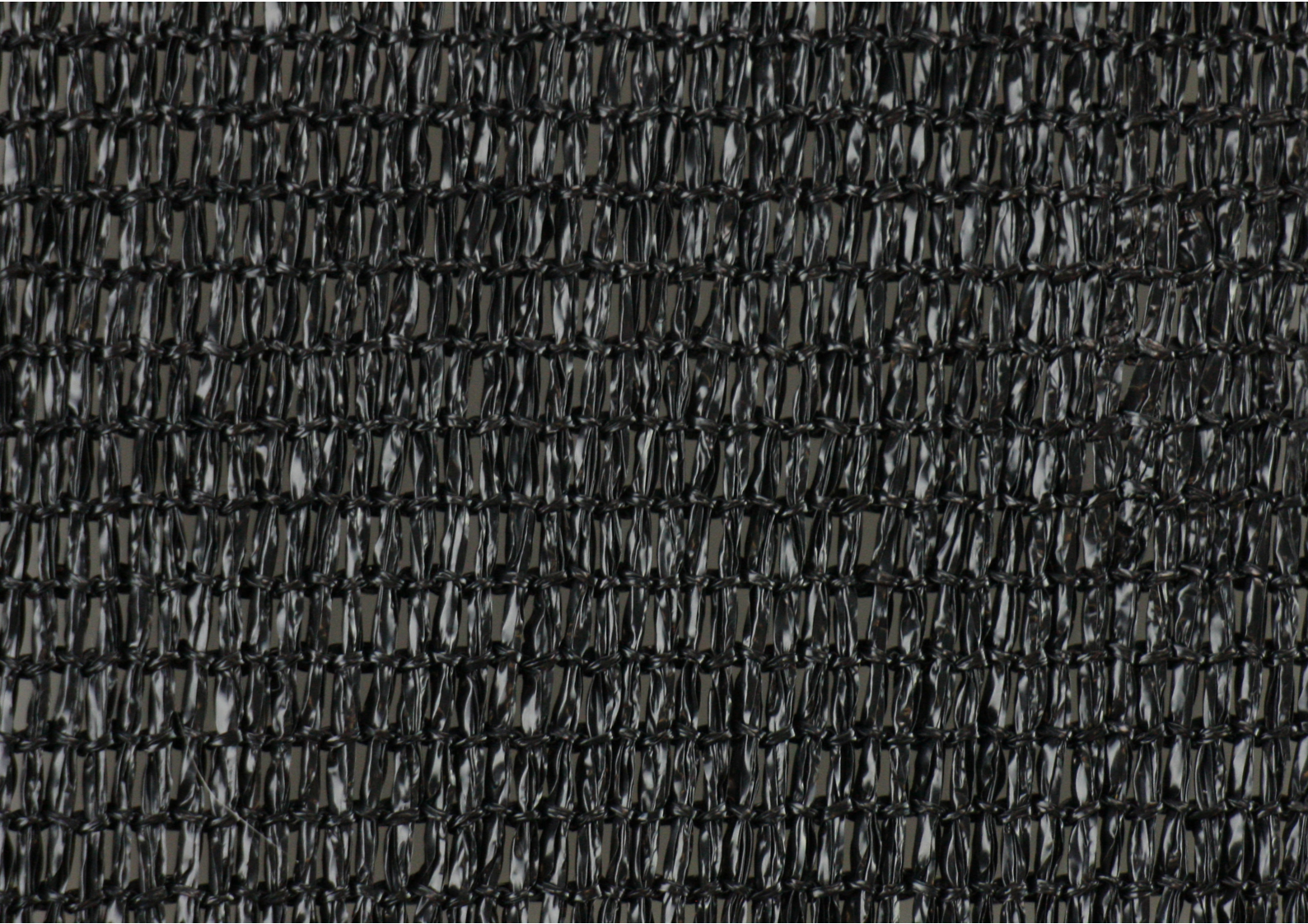


Austornet 204FR 4.0

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



J&C Joel 

the inspiration behind the performance

Contents

Composition & Care

400 cm 3

Fire Certificate

BS5867 Part 2 Type B 4

B1 8

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

To ensure you get the best from the product supplied to you, we advise you follow the care instructions within this datasheet.

Fabric	Flame Retardancy	IFR
	Fire Certification	BS5867, B1
	Brand Name (and Manufacturer)	J&C Joel Ltd.
	Material (Blending Ratio)	100% Polyethylene
	Construction of Fabric	Knitted Mesh
Chemicals	Surface Treatments	Flameproofed
	Brand Name of Flame Retardant Chemicals	N/A
	Chemical name of Flame Retardant Chemicals	N/A
	Process of Flame Retardant Chemicals	N/A
Care	Information	Inherently Flame Retardant to BS5867 Part 2 Type B and B1. This means that the man-made fibres are flame retardant for life and if wet, would not need to be re-flameproofed. Therefore, the cloth will withstand wet cleaning but we would advise and suggest professional dry cleaning only, using the correct chemical process. Notwithstanding the aforementioned, it would be our advice to only dry clean this material periodically. We would suggest that the curtain be soft-brushed on a regular basis and periodically cleaned using a vacuum and drapery attachment. This fabric is not pre-shrunk.
	Laundering Treatment	     Do Not Dry Clean Do Not Wash Do Not Bleach Do Not Iron Do Not Tumble Dry
Notes		



Fire Rating:
IFR



Approx Roll Length:
50m / 164ft



Width:
400cm / 157"



Weight:
200 g/m²



Fire Certification:
BS5867, B1



Colours
Available

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

Fire Test Certificate – Specimen

Fabric: Austronet 204FR 4.0
Type: BS5867 Part 2 Type B

J&C Joel 

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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: 14 September 2017

Our Ref: 53977-3
Your Ref: -

Page: 1 of 4

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

Job Title: Surface Ignition Of Curtains & Drapes

Client's Order No: -

Date of Receipt: 04 September 2017

Date of Test Start: 08 September 2017

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

Work Requested: We were asked to make the following test:
BS 5867: Part 2: 2008 (2015): Type B Curtains, Drapes and Blinds



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Our laboratories are accredited to EN ISO/IEC 17025.

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Fire Test Certificate – Specimen

Fabric: Austronet 204FR 4.0
Type: BS5867 Part 2 Type B

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J. & C. Joel Limited

Sample was identified as follows:

Austronet FR

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: 14 September 2017

Our Ref: 53977-3
Your Ref: -

Page: 2 of 4

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

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

Pre-treatment

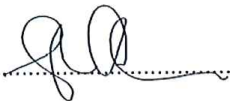
If the fabric is a pass in the 'as received' condition then the fabric is subjected a water soak procedure as specified in BS EN 1021: Annex D: 2006.

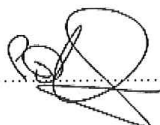
Testing after pre-treatment

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

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.



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Fire Test Certificate – Specimen

Fabric: Austronet 204FR 4.0
Type: BS5867 Part 2 Type B

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J. & C. Joel Limited

RESULTS

Sample Ref: Austronet FR

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: 14 September 2017

Our Ref: 53977-3
Your Ref: -

Page: 3 of 4

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 in 'as received': Pass

Testing after pre-treatment

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 in 'after pre-treatment': Pass



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Fire Test Certificate – Specimen

Fabric: Austronet 204FR 4.0
Type: BS5867 Part 2 Type B

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TESTING • CERTIFICATION • AUDITING

J. & C. Joel Limited

Conclusion

The fabric meets the Type B performance requirements of BS 5867: Part 2: 2008 (2015).

This material should be identified with the manufacturers name, trademark or other identifying mark, the statement 'Flammability complies with the requirements of BS 5867: Part 2: Type B and instructions of any special precautions to be taken concerning care (including cleansing) of the curtain, drape or window blind to be manufactured from the fabric, preferably using an appropriate care labelling symbol in accordance with BS EN 23758 and taking account of the pre-treatment using in this test and the requirements of Clause 4 of BS 5867: Part 2: 2008 (2015). If the fabric is unsuitable for cleansing, this shall be stated.

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.

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

Date: 14 September 2017

Our Ref: 53977-3
Your Ref: -

Page: 4 of 4



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Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

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for the proof of Fire behaviour according to DIN 4102-1

Reference: FLT 3717120 (Translation of the German Prüfzeugnis - no guarantee for translation of technical terms)

Order: 2019-11-12 **Arrived:** 2019-11-12

Description of samples: Uncoated knitted netting made of polyethylene flat yarn in different colours to be used as privacy screen, in textile architecture or for decorative purposes, named "Austronet 202 B1 / UV", "Austronet 700 B1 / UV", "Austronet 203 B1 / UV", "Austronet 710 B1 / UV" and "Austronet 204 B1 / UV", "Austronet 720 B1 / UV". (for details see page 2,3)

Delivered: 2019-11-14

Content of request: Proof of flammability to classify building materials to class B1 "schwerentflammbar" according to DIN 4102-1

Assessment: The examined product meets the requirements of class B1 for "schwerentflammbare" (not easily flammable) building materials according to DIN 4102-1 in any colour, in a freely suspended arrangement or at a distance of > 40 mm to the same or other plain building materials and a weight per unit area range from 105 g/m² to 200 g/m² (for details see page 5).

Validity: 2025-02-28

Sampling: The sample was sent to the laboratory by the sponsor.

Remark: If the above-mentioned building material is not used as product according to MBO § 2, there is no need for a general building supervisory test certificate.

This test certificate is not regarded as the sole proof if the tested building material is used as building product within the meaning of state building prescriptions (MBO § 17).

This test certificate does not replace an eventually necessary proof of applicability concerning building supervisory or building laws in the meaning of state building prescriptions. This has to be verified 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 certificate can serve as a basis for building supervisory procedures for:

- regulated building products for the pre scribed proof of conformity
- non-regulated building products for the needed proof of applicability.

This test certificate comprises 8 pages and 9 enclosures.

Approved testing, inspection and certification body

This test certificate must not be published and copied preceding agreement of the test laboratory and if agreed, only during validity and unchanged concerning appearance and contents. Agreement of the test laboratory has to be given in any case if norms in which the tests are based or other technical standards have changed.



Prüfstelle für das
Brandverhalten
von Baustoffen
Dipl.-Ing. Uwe Kühnast

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Fax: +49 33845 90909
Mail: info@firelabs.de

PÜZ-Stelle (LBO): BRA09

SPECIMEN
TEST CERTIFICATE



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

Test certificate

page 2 of 8

FLT 3717120

1 Description of test material

1.1 Test material (according to the sponsor)

The delivered materials are knitted nettings made of uncoated polyethylene flat yarn (HDPE) with a yarn thickness of approximately 30 µm. The knitted nettings are intended to be used as privacy screens, in textile architecture or for decorative purposes and were named with the trade names "Austronet 202 B1 / UV", "Austronet 700 B1 / UV", "Austronet 203 B1 / UV", "Austronet 710 B1 / UV" und "Austronet 204 B1 / UV", "Austronet 720 B1 / UV" by the sponsor.

1.2 Description of the delivered samples

For the tests the laboratory received 9 sections of uncoated knit fabrics (ribbon knits) made of thermoplastic flat yarn. The materials consisted of plain, uncoated plastic tapes (flat yarn). The flat yarns arranged parallel to each other in the transverse direction were connected with a flat yarn running in the longitudinal direction in mesh-like thread loops.

For the tests, 9 sections in different colours were provided to the laboratory by the client. The samples were marked with the trade names and were provided in the following variants (colours):

Tade names	Dmensions	Clour	Nminal weight
"Austronet 202 B1 / UV" und "Austronet 700 B1 / UV"	length: ca. 4m width: ca. 2 m	black, blue, white	105 g/m ²
"Austronet 203 B1 / UV" und "Austronet 710 B1 / UV"	length: ca. 1m width: ca. 1 m	black, red, white	140 g/m ²
"Austronet 204 B1 / UV" und "Austronet 720 B1 / UV"	length: ca. 4m width: ca. 3 m		200 g/m ²

Characteristic values: see paragraph 4.1; photos: see enclosures 4-9.

Other specifications are not known to the laboratory, samples are stored.

2 Preparation of samples

For the small burner (Brennkasten) test from all delivered materials samples for edge flame exposure (dimensions 190 mm x 90 mm) and samples for surface flame exposure (dimensions 230 mm x 90 mm) have been cut in longitudinal and transverse directions.

For the tests in the fire shaft (Brandschacht), samples of the article with the lowest and the article with the highest weight per unit area in each of the colours delivered were cut to size 1000 mm x 190 mm in both longitudinal and transverse direction. 12 test specimens were assembled from 4 samples each. (Assignment of the samples see page 5 and 7)

Afterwards all samples were kept in a climate chamber acc. DIN 50014-23/50-2 until they reached constant weight.

3 Arrangement of samples

The tests in the fire shaft ("Brandschacht") have been performed acc. DIN 4102-1 and -16 (building materials class B1). The the small burner ("Brennkasten") tests have been performed acc. DIN 4102-1, chapter 6.2.5 (building materials class B2).

Arrangement of all samples: single layered, freely suspended.

Examination period: February 2020



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

Test certificate

page 3 of 8

FLT 3717120

4 Results

- Table 1 Material characteristics
- Table 2.1-2.6 Test results class B2 (Brennkasten), see enclosures 1-3
- Table 3.1-3.2 Test results class B1 (Brandschacht)

4.1 Material characteristics

Table 1

Trade names	Colour	Manufacturer's data	Measured values		
		Weight per unit area [g/m ²]	Thickness (m.v.) [mm]	Thickness (s) [mm]	Weight per unit area [g/m ²]
"Austronet 202 B1 / UV" and "Austronet 700 B1 / UV"	black	105	1.26	0.038	106
	blue		1.27	0.017	106
	white		1.10	0.028	101
"Austronet 203 B1 / UV" and "Austronet 710 B1 / UV"	black	140	1.37	0.063	130
	blue		1.31	0.074	138
	white		1.44	0.018	155
"Austronet 204 B1 / UV" and "Austronet 720 B1 / UV"	black	200	1.50	0.066	178
	blue		1.62	0.048	183
	white		1.53	0.055	196

J./ not received/not measured
m.v. mean value
s standard deviation

4.2 Results of the fire behaviour

4.2.1 Test results class B2 (Brennkasten)

All building materials class B1 must also meet the requirements of materials class B2 (flammable). The material, tested in "Brennkasten" acc. DIN 50 050 meets the requirements class B2; the material does not show burning particles/droplets during these tests.
(Results see enclosures 1-3, tables 2.1-2.6)

4.2.2 Test results class B1 (Brandschacht)

The results of these tests are summarized in the following tables:

- 3.1 Tests on article "Austronet 202 B1 / UV" and "Austronet 700 B1 / UV" (minimum weight per unit area) and
- 3.2 Tests on article "Austronet 204 B1 / UV" and "Austronet 720 B1 / UV" (maximum weight per unit area)



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

Test certificate

page 4 of 8

FLT 3717120

Table 3.1

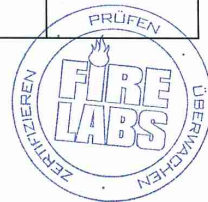
Test results "Brandschachtprüfung" (part 1)								
line no.		test results specimen-no.						requirements
		A	B	C	D	E	F	
1	Number of specimen arrangement acc. DIN 4102 –15 Table 1	1	1	1	1	1	1	
2	Maximal flame height above bottom edge cm	20	20	20	20	20	20	*)
3	Time ¹⁾ min	1	1	1	1	1	1	
4	Burning / melting through Time ¹⁾min	1	1	1	1	1	1	
5	Reverse side of samples: Flames / glowing Time ¹⁾min:s	./.	./.	./.	./.	./.	./.	
6	Discolouring Time ¹⁾min:s	./.	./.	./.	./.	./.	./.	
7	Falling of burning droplets Begin ¹⁾min	No	No	No	No	No	No	
8	Extend: Sporadic falling of burning droplets							
9	Continuous falling of burning droplets							
10	Falling of burning parts Begin ¹⁾min:s	No	No	No	No	No	No	
11	Extend: Sporadic falling of burning parts							
12	Continuous falling of burning parts							
13	Afterflame time at the bottom of the sieve (max.) min:s	./.	./.	./.	./.	./.	./.	
14	Impairment of the burner flames by dropping or falling Material Time ¹⁾min:s	No	No	No	No	No	No	
15	Premature end of test	No	No	No	No	No	No	
16	Final occurrence of burning at the specimen ¹⁾min Time of eventually end of test ¹⁾min:s	2	3	3	2	3	3	

¹⁾ Indication of time: from the beginning of testing procedure

- No data / Not tested

./. Not occurred

*) No cause for complaint



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

Test certificate

page 5 of 8

FLT 3717120

Test results "Brandschachtprüfung" (part 2)								
line no.		test results specimen-no.						requirements
		A	B	C	D	E	F	
17	<u>Afterflame after end of test</u>							
18	Timemin:s	No	No	No	No	No	No	
19	Number of samples							
20	Front side of sample							
21	Back side of sample							
21	Flame lengthcm							
22	<u>Afterglow after end of test</u>							
23	Timemin:s	No	No	No	No	No	No	
23	Number of sample							
24	<u>Place of appearance:</u>							
24	Lower half of sample							
25	Upper half of sample							
26	Front side of sample							
27	Back side of sample							
28	<u>Smoke density</u>							
28	≤ 400 % min							
29	≥ 400 % min (very strong smoke density)	1.4	1.3	1.4	0.5	1.4	1.6	
30	Diagram fig. no.	./.	./.	./.	./.	./.	./.	
31	<u>Residual length</u>							
	Individual valuecm	60 48 62 47	60 56 49 39	53 50 50 59	54 48 48 65	66 55 49 52	51 45 58 53	> 0
32	Average valuecm	54	51	53	53	55	51	≥ 15
33	Photo of the test specimen fig. no.	2	4	6	8	10	12	
34	<u>Flue gas temperature</u>							
35	Maximum of average value °C	108	110	112	116	112	115	≤ 200
36	Time ¹⁾min:s	10:00	9:22	10:00	9:38	9:32	9:40	
	Diagram fig. no.	1	3	5	7	9	11	
37	<u>Remarks:</u> line 32: Due to the residual length of > 45 cm no additional tests were proceed (DIN 4102-16: 2015-09, 5.2 b)). (Graphs and photos: see enclosures 4 - 6)							

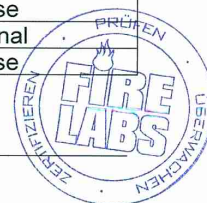
¹⁾ Indication of time: from the beginning of testing procedure

- Not tested

./. Not occurred

*) No cause for complaint

Test specimen	Test-no.	Product	Colour	Sample orientation
A	717120-001	"Austronet 202 B1 / UV" and "Austronet 700 B1 / UV"	black	longitudinal
B	717120-002		black	transverse
C	717120-003		blue	longitudinal
D	717120-004		blue	transverse
E	717120-005		white	longitudinal
F	717120-006		white	transverse



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

Test certificate

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FLT 3717120

Table 3.2

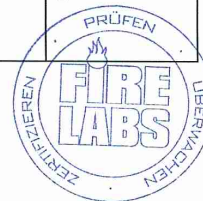
Test results "Brandschachtprüfung" (part 1)								
line no.		test results specimen-no.						requirements
		G	H	I	K	L	M	
1	Number of specimen arrangement acc. DIN 4102 –15 Table 1	1	1	1	1	1	1	-
2	Maximal flame height above bottom edge cm	20	20	20	20	20	20	*)
3	Time ¹⁾ min	1	1	1	1	1	1	
4	Burning / melting through Time ¹⁾min	1	1	1	1	1	1	-
5	Reverse side of samples: Flames / glowing Time ¹⁾min:s	./.	./.	./.	./.	./.	./.	-
6	Discolouring Time ¹⁾min:s	./.	./.	./.	./.	./.	./.	-
7	Falling of burning droplets Begin ¹⁾min	Yes 1	No	Yes 1	No	No	No	-
8	Extend: Sporadic falling of burning droplets	Yes		Yes				
9	Continuous falling of burning droplets	No		No				
10	Falling of burning parts Begin ¹⁾min:s	No	No	No	No	No	No	-
11	Extend: Sporadic falling of burning parts							
12	Continuous falling of burning parts							
13	Afterflame time at the bottom of the sieve (max.) min:s	0:08	./.	0:04	./.	./.	./.	-
14	Impairment of the burner flames by dropping or falling Material Time ¹⁾min:s	No	No	No	No	No	No	-
15	Premature end of test	No	No	No	No	No	No	-
16	Final occurrence of burning at the specimen ¹⁾min Time of eventually end of test ¹⁾min:s	4	5	5	6	4	6	-

¹⁾ Indication of time: from the beginning of testing procedure

- Not tested

./. Not occurred

*) No cause for complaint



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

Test certificate

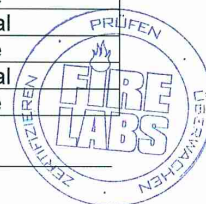
page 7 of 8

FLT 3717120

Test results "Brandschachtprüfung" (part 2)								
line no.		test results specimen-no.						requirements
		G	H	I	K	L	M	
17	<u>Afterflame after end of test</u>	No	No	No	No	No	No	-
18	Timemin:s							
19	Number of specimen							
20	Front side of specimen							
21	Back side of specimen							
22	Flame lengthcm							
23	<u>Afterglow after end of test</u>	No	No	No	No	No	No	-
24	Timemin:s							
25	Number of specimen							
26	<u>Place of appearance:</u>							
27	Lower half of specimen							
28	Upper half of specimen							
29	Front side of specimen							
30	Back side of specimen							
31	<u>Smoke density</u>							
32	≤ 400 % min	4.2	1.5	1.8	3.6	4.2	2.5	
33	≥ 400 % min (very strong smoke density)	./.	./.	./.	./.	./.	./.	
34	Diagram fig. no.	14	16	18	20	22	24	
35	<u>Residual length</u>							
36	Individual valuecm	64	45	56	30	48	55	> 0
37		60	56	50	49	43	54	
38		51	54	58	54	48	48	
39		52	52	48	45	54	51	
40	Average valuecm	56	51	53	44	48	52	≥ 15
41	Photo of the test specimen fig. no.	13	15	17	19	21	23	
42	<u>Flue gas temperature</u>							
43	Maximum of average value.°C	115	115	117	113	114	117	≤ 200
44	Time ¹⁾min:s	10:00	9:38	9:50	9:52	9:38	9:30	
45	Diagram fig. no.	14	16	18	20	22	24	
46	<u>Remarks:</u>	line 13: Afterflame time at the bottom of the sieve < 20 sec. is not rated as "falling of burning parts or droplets"						
47		line 32: Due to the residual length of the samples of > 45 cm, no additional tests were carried out (DIN 4102-16, 5.2 b))						
48		(Graphs and photos: see enclosures 7 - 9)						

- ¹⁾ Indication of time: from the beginning of testing procedure
- No data / Not tested
./. Not occurred
*) No cause for complaint

Test specimen	Test-no.	Product	Colour	Sample orientation
G	717120-007	"Austronet 204 B1 / UV" and "Austronet 720 B1 / UV"	black	longitudinal
H	717120-008			transverse
I	717120-009		blue	longitudinal
K	717120-010			transverse
L	717120-011		white	longitudinal
M	717120-012			transverse



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

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5 Assessment

According to the test results in section 4.2 the material, described in section 1 and 4.1, fulfils the requirements of a building material class B1 according to DIN 4102-1 if the material is used suspended freely or with a distance of > 40 mm to the same or other plain materials.

The test results are valid for the tested weight per unit area from 105 g/m² - 200 g/m² in any colour (darkest colour: black, lightest colour: white).

The requirements of building materials class B2 are also fulfilled. No falling of burning parts or droplets occurred during these tests.

The verification

- for outdoor usage (ageing behaviour by outdoor weathering)
- after washing or cleaning with chemicals

has not been proved.

6 Special remarks

This certificate is only valid for the material as described under paragraph 1. In combination with other materials or with additional coatings or surfaces etc. the burning behaviour may differ.

This test certificate is not regarded as the sole proof if the tested building material is used as a building product within the meaning of state building prescriptions (MBO § 17).

This test certificate is no substitute for a General Building Inspectorate Certificate. This test certificate is granted without prejudice to the rights of third parties, or particular private proprietary rights.

In General Building Inspectorates procedures this test certificate can be based for

- regulated building materials for the required proof of accordance
- for not regulated building materials for the required proof of applicability

The explanations given in DIN 4102-1 app. D, especially concerning an external production control has to be considered.

This test certificate is valid until 2025-02-28, provided that the test methods, the classification rules and the technology do not change during this period.

Borkheide, 1st of March 2020




Head of the test laboratory
(Dipl.-Ing. Uwe Kühnast)

This translation was issued 1st of March 2020, in a case of doubt the German version is valid solely.

Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

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Test results class B2 (Brennkasten)

Table 2.1

“Austronet 202 B1 / UV“ und “Austronet 700 B1 / UV“:

	black							white							dim.	requirements
Sample-No.	1	2	3	4	5	6	-	1	2	3	4	5	6	-	-	-
Ignition of the sample	1	1	1	1	1	1	-	1	1	1	1	1	1	-	s	-
Maximum flame height	2	3	2	3	3	3	-	3	3	2	4	4	3	-	cm	-
Time of the maximum	2	2	2	3	4	3	-	2	3	2	3	4	3	-	s	-
Flame tip reached the 150 mm test mark	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	≥ 20
Flame has extinguished before reaching the test mark	3	3	4	4	4	4	-	3	4	2	4	5	4	-	s	-
Ignition of filter paper	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	¹⁾
Smoke density (visual)	very low							very low							-	-
Flames have been extinguished	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-
Afterburning time	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-

View of the samples after the test (20 seconds after exposure the flame):

The samples were destroyed at flame impingement area in transverse and longitudinal direction: max. length of approx. 2 cm and approx. 1.5 cm in width, above sintered about 8 cm.

Samples 1, 2: Edge flame exposure, longitudinal
Sample 3: Surface flame exposure, transverse
Samples 4, 5: Edge flame exposure, longitudinal
Sample 6: Surface flame exposure, transverse

Table 2.2: blue, complete set of samples

	longitudinal							transverse							dim.	requirements
Sample-No.	1	2	3	4	5	6	-	1	2	3	4	5	6	-	-	-
Ignition of the sample	1	1	1	1	1	2	-	1	1	1	1	1	2	-	s	-
Maximum flame height	3	3	4	3	3	2	-	4	4	4	4	4	3	-	cm	-
Time of the maximum	2	3	3	4	3	2	-	3	4	3	4	4	3	-	s	-
Flame tip reached the 150 mm test mark	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	≥ 20
Flame has extinguished before reaching the test mark	3	4	4	4	4	2	-	4	5	5	4	5	4	-	s	-
Ignition of filter paper	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	¹⁾
Smoke density (visual)	very low							very low							-	-
Flames have been extinguished	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-
Afterburning time	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-

View of the samples after the test (20 seconds after exposure the flame):

The samples were destroyed at flame impingement area in transverse and longitudinal direction: max. length of approx. 3 cm and approx. 2 cm in width, above sintered about 2-5 cm.

Samples 1-5: Edge flame exposure

Sample 6: Surface flame exposure

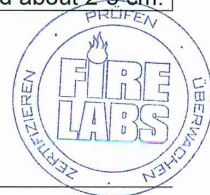
¹⁾ No ignition within 20 seconds

.J. Not occurred

dim. Dimension

Indication of time: from the beginning of testing procedure

Indication of measurements: from reference line of the flame



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

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Table 2.3

“Austronet 203 B1 / UV” und “Austronet 710 B1 / UV”:

	black							white							dim.	requirements
Sample-No.	1	2	3	4	5	6	-	1	2	3	4	5	6	-	-	-
Ignition of the sample	1	1	1	1	1	1	-	1	1	2	1	1	2	-	s	-
Maximum flame height	3	3	2	3	3	2	-	2	3	2	6	5	2	-	cm	-
Time of the maximum	3	3	2	3	3	4	-	4	4	3	5	5	4	-	s	-
Flame tip reached the 150 mm test mark	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	≥ 20
Flame has extinguished before reaching the test mark	3	4	3	3	4	5	-	4	4	4	6	6	4	-	s	-
Ignition of filter paper	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	¹⁾
Smoke density (visual)	very low							very low							-	-
Flames have been extinguished	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-
Afterburning time	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-

View of the samples after the test (20 seconds after exposure the flame):

The samples were destroyed at flame impingement area in transverse and longitudinal direction: max. length of approx. 2 cm and approx. 1.5 cm in width, above sintered about 6 cm.

Samples 1, 2: Edge flame exposure, longitudinal

Sample 3: Surface flame exposure, transverse

Samples 4, 5: Edge flame exposure, longitudinal

Sample 6: Surface flame exposure, transverse

Table 2.4: red, complete set of samples

	longitudinal							transverse							dim.	requirements
Sample-No.	1	2	3	4	5	6	-	1	2	3	4	5	6	-	-	-
Ignition of the sample	1	1	1	1	1	2	-	1	1	1	1	1	2	-	s	-
Maximum flame height	3	3	3	4	3	1	-	4	3	4	4	3	1	-	cm	-
Time of the maximum	4	3	3	4	3	3	-	3	3	6	5	4	3	-	s	-
Flame tip reached the 150 mm test mark	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	≥ 20
Flame has extinguished before reaching the test mark	5	4	3	4	3	3	-	4	3	6	5	5	4	-	s	-
Ignition of filter paper	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	¹⁾
Smoke density (visual)	very low							very low							-	-
Flames have been extinguished	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-
Afterburning time	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-

View of the samples after the test (20 seconds after exposure the flame):

The samples were destroyed at flame impingement area in transverse and longitudinal direction: max. length of approx. 2 cm and approx. 1.5 cm in width, above sintered about 2 cm.

Samples 1-5: Edge flame exposure

Sample 6: Surface flame exposure

¹⁾ No ignition within 20 seconds

.J. Not occurred

dim. Dimension

Indication of time: from the beginning of testing procedure

Indication of measurements: from reference line of the flame



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

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Table 2.5

“Austronet 204 B1 / UV” und “Austronet 720 B1 / UV”:

	black							red							dim.	requirements
Sample-No.	1	2	3	4	5	6	-	1	2	3	4	5	6	-	-	-
Ignition of the sample	1	1	3	1	1	3	-	1	1	2	1	1	2	-	s	-
Maximum flame height	3	3	1	3	3	1	-	4	4	2	4	4	2	-	cm	-
Time of the maximum	4	3	5	4	4	4	-	6	3	3	5	4	3	-	s	-
Flame tip reached the 150 mm test mark	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	≥ 20
Flame has extinguished before reaching the test mark	6	5	5	4	5	5	-	5	4	3	6	5	4	-	s	-
Ignition of filter paper	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	¹⁾
Smoke density (visual)	very low							very low							-	-
Flames have been extinguished	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-
Afterburning time	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-

View of the samples after the test (20 seconds after exposure the flame):

The samples were destroyed at flame impingement area in transverse and longitudinal direction: max. length of approx. 3 cm and approx. 2 cm in width, above sintered about 3 cm.

Samples 1, 2: Edge flame exposure, longitudinal

Sample 3: Surface flame exposure, transverse

Samples 4, 5: Edge flame exposure, longitudinal

Sample 6: Surface flame exposure, transverse

Table 2.6: white, complete set of samples

	longitudinal							transverse							dim.	requirements
Sample-No.	1	2	3	4	5	6	-	1	2	3	4	5	6	-	-	-
Ignition of the sample	1	1	1	1	1	4	-	1	1	1	1	1	3	-	s	-
Maximum flame height	4	5	4	5	4	1	-	3	3	5	4	3	1	-	cm	-
Time of the maximum	7	9	6	5	8	4	-	5	4	3	5	4	3	-	s	-
Flame tip reached the 150 mm test mark	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	≥ 20
Flame has extinguished before reaching the test mark	7	11	9	5	10	5	-	5	4	6	5	4	6	-	s	-
Ignition of filter paper	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	s	¹⁾
Smoke density (visual)	very low							very low							-	-
Flames have been extinguished	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-
Afterburning time	.J.	.J.	.J.	.J.	.J.	.J.	-	.J.	.J.	.J.	.J.	.J.	.J.	-	-	-

View of the samples after the test (20 seconds after exposure the flame):

The samples were destroyed at flame impingement area in transverse and longitudinal direction: max. length of approx. 4 cm and approx. 1.5 cm in width, above sintered about 2 cm.

Samples 1-5: Edge flame exposure

Sample 6: Surface flame exposure

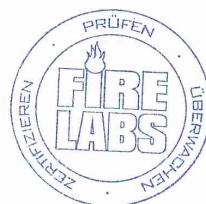
¹⁾ No ignition within 20 seconds

.J. Not occurred

dim. Dimension

Indication of time: from the beginning of testing procedure

Indication of measurements: from reference line of the flame



Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

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Test specimen A

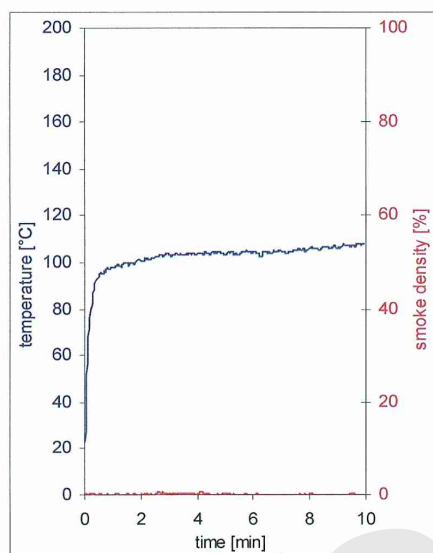


fig. 1
Graphs of the flue gas temperature and the smoke density

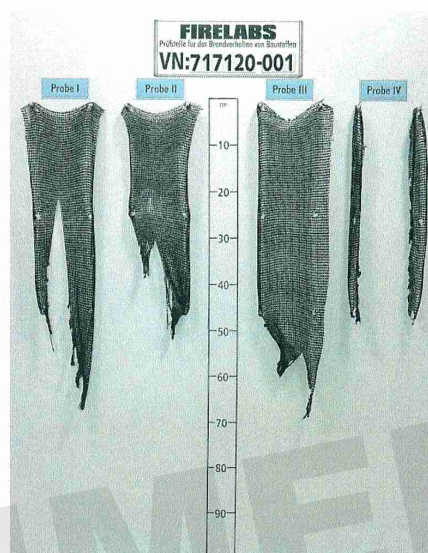


fig. 2
Photo of test specimen after the test

Test specimen B

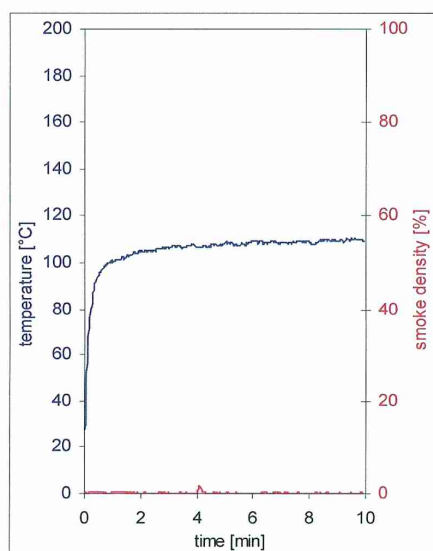


fig. 3
Graphs of the flue gas temperature and the smoke density

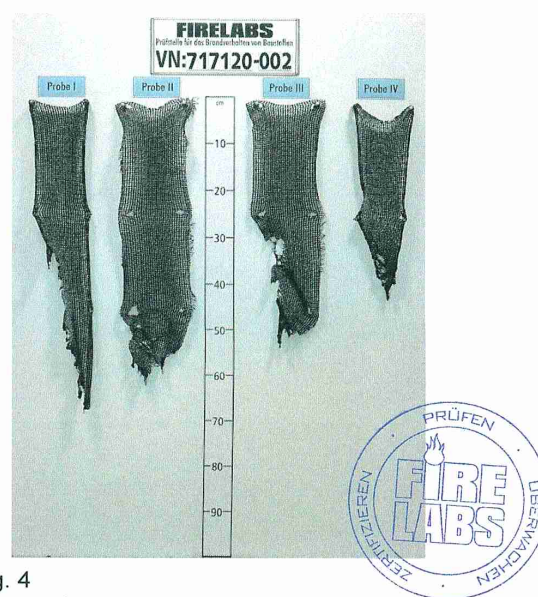


fig. 4
Photo of test specimen after the test

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Fabric: Austronet 204FR
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Test specimen C

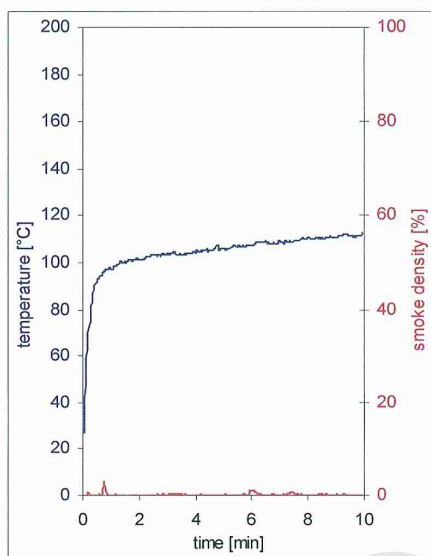


fig. 5
Graphs of the flue gas temperature and
the smoke density

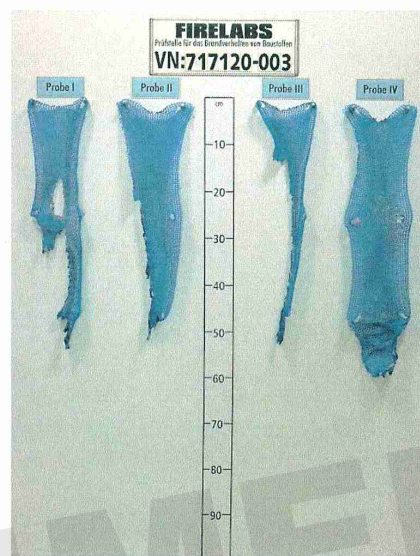


fig. 6
Photo of test specimen after the test

Test specimen D

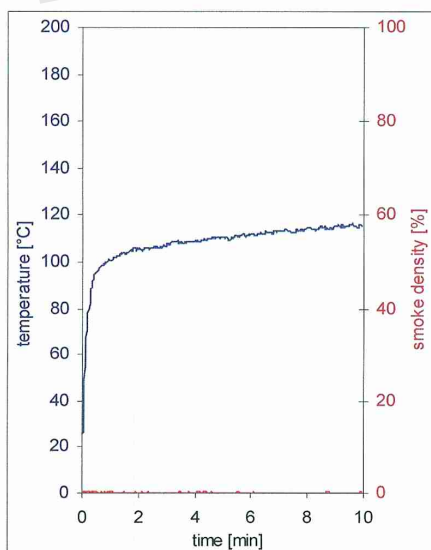


fig. 7
Graphs of the flue gas temperature and
the smoke density



fig. 8
Photo of test specimen after the test

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Fabric: Austronet 204FR
Type: B1

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FLT 3717120

Test specimen E

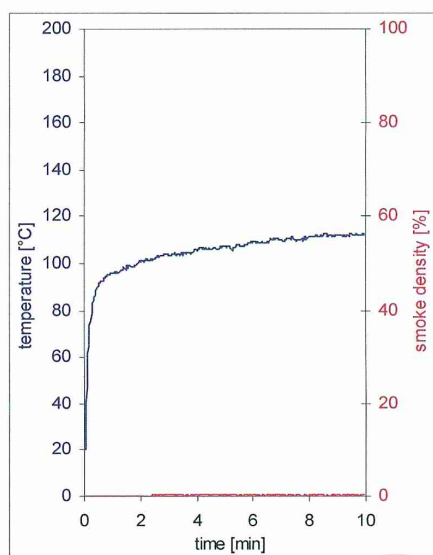


fig. 9
Graphs of the flue gas temperature and
the smoke density

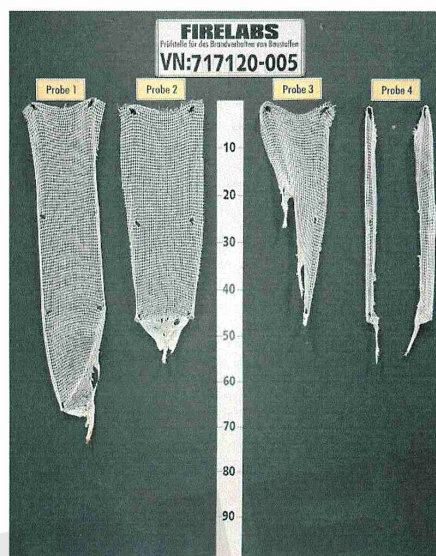


fig. 10
Photo of test specimen after the tes)

Test specimen F

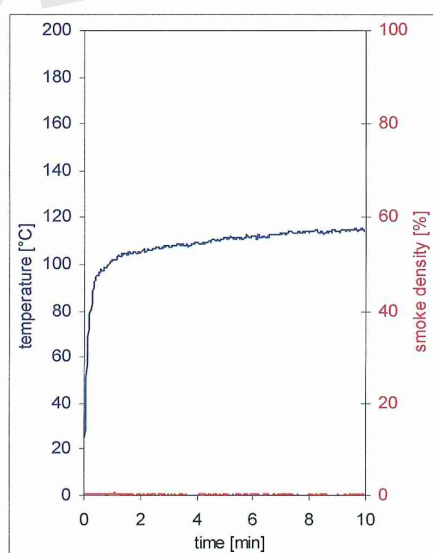


fig. 11
Graphs of the flue gas temperature and
the smoke density

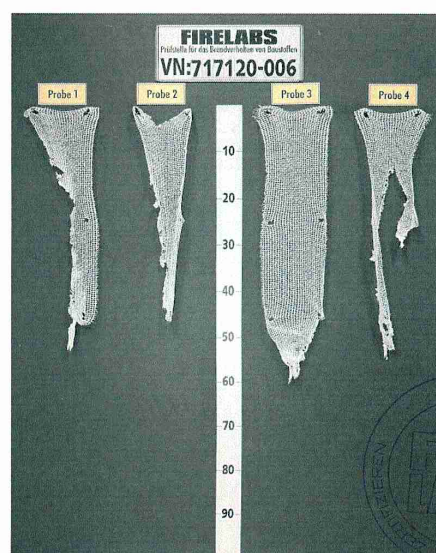


fig. 12
Photo of test specimen after the test

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Fabric: Austronet 204FR
Type: B1

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FLT 3717120

Test specimen G

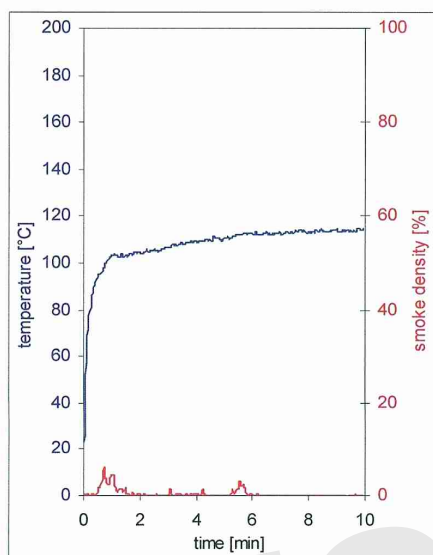


fig. 13
Graphs of the flue gas temperature and
the smoke density

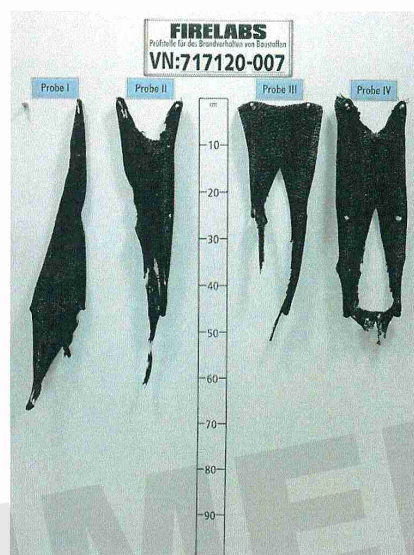


fig. 14
Photo of test specimen after the test

Test specimen H

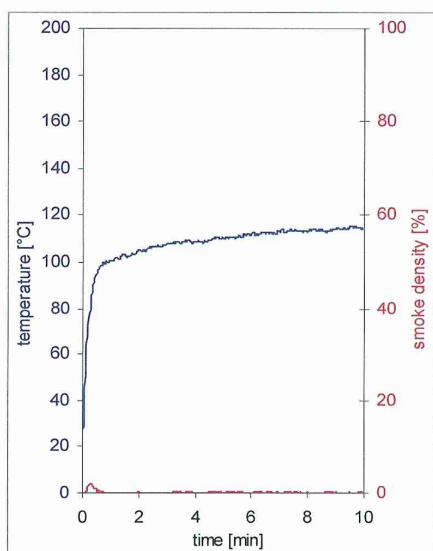


fig. 15
Graphs of the flue gas temperature and
the smoke density



fig. 16
Photo of test specimen after the test

Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

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FLT 3717120

Test specimen I

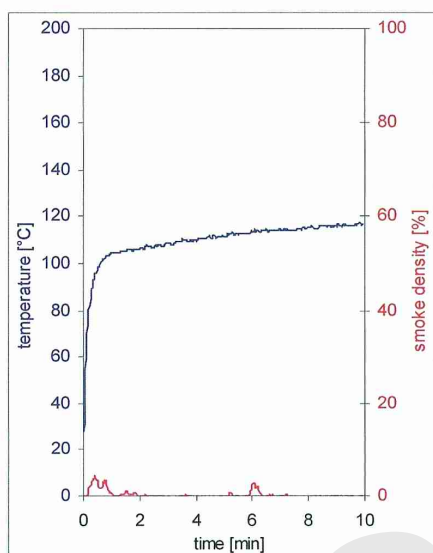


fig. 17
Graphs of the flue gas temperature and the smoke density

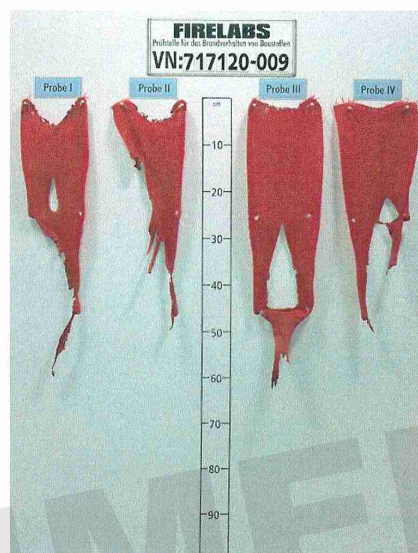


fig. 18
Photo of test specimen after the test

Test specimen K

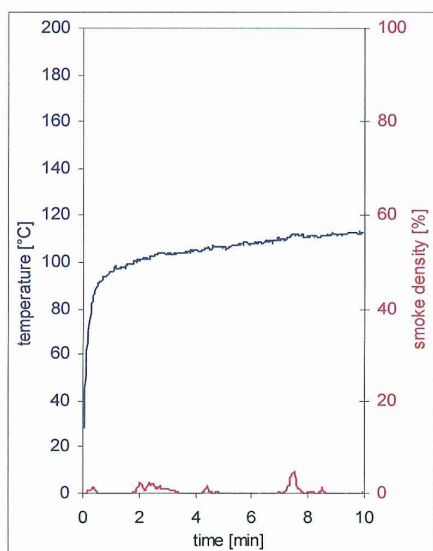


fig. 19
Graphs of the flue gas temperature and the smoke density



fig. 20
Photo of test specimen after the test

Fire Test Certificate – Specimen

Fabric: Austronet 204FR
Type: B1

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Test specimen L

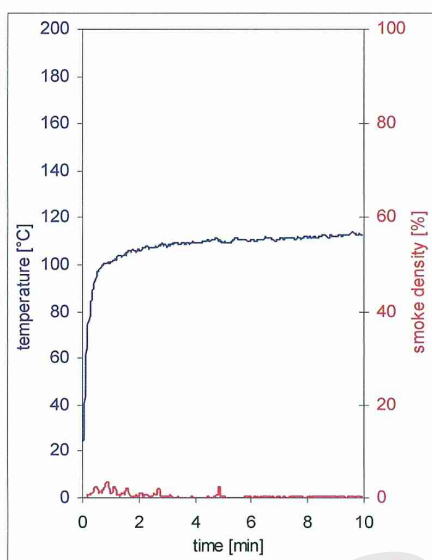


fig. 21
Graphs of the flue gas temperature and the smoke density

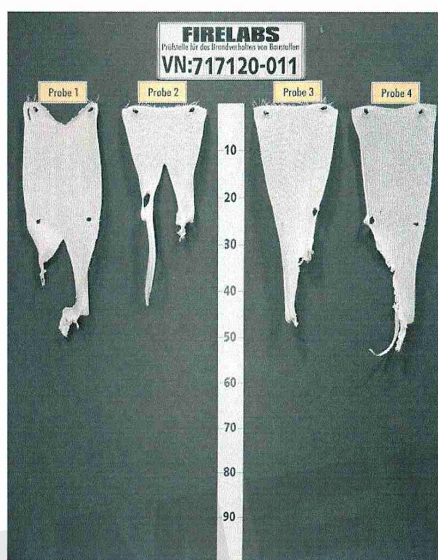


fig. 22
Photo of test specimen after the test

Test specimen M

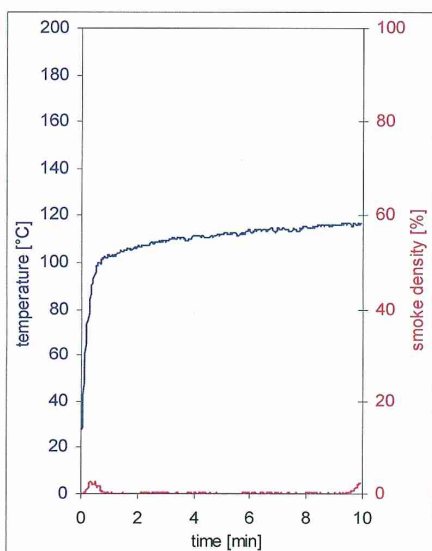


fig. 23
Graphs of the flue gas temperature and the smoke density

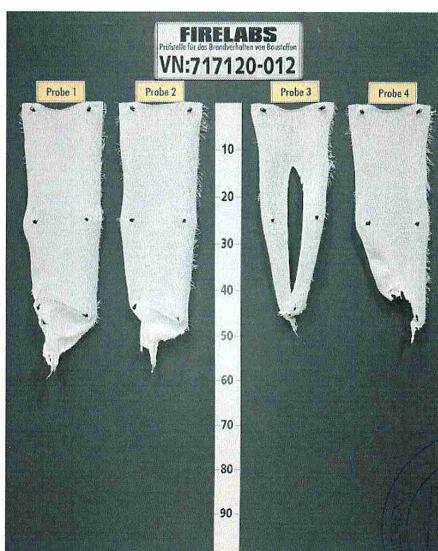


fig. 24
Photo of test specimen after the test

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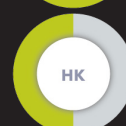
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