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Test report No. 201186

for applying of a required "Verwendbarkeitsnachweis" issued 26.01.2021

Applicant: Camira Transport Fabrics Ltd

Meltham Mills

Meltham Mills Road

Meltham

West Yorkshire

HD9 4AY

Date of order: 07.12.2020

Date of sampling: no official sampling of the specimen by a representative

of Warringtonfire Frankfurt GmbH

Date of arrival: 23.12.2020

Date of test: 07.01.2021 und 20.01.2021

Order

Testing of the flammability (building class B1) according to DIN 4102-1 (May 1998)

Description / designation of the test object

Product name: XTREME (Collection)

Description of the relevant test procedure

DIN 4102 part 1 (Mai 1998)

DIN 4102-16 (January 2021)

This test report does not replace the required "Verwendbarkeitsnachweis". It is only used for issuing the "Verwendbarkeitsnachweis".





1. Description of the test material

1.1 Details of the customer:

Product name: XTREME (Collection)

Sample 1 Sample 2 Sample 3

 Colour: HYS009
 Colour: HYS108
 Colour: HYS101

 Run: 295293
 Run: 397739
 Run: 312448

Face to be tested: Label on Face

Product description:

Main components: 100% post-consumer recycled polyester

Thickness: 0.9 mm

Grossweight: 310 g/m² 434 g/lin.m

Color: as above

Intended end use of product Contract Seating

1.2 By Warringtonfire Frankfurt GmbH determined values:

Material: <u>fabric sample</u> <u>fabric sample</u> <u>fabric sample</u>

Colour: beige black red

thickness: 0,78 mm 0,84 mm 0,78 mm

square weight: 292 g/m² 319 g/m² 290 g/m²

Testing after storing 14- days under climatic conditions (23°C / 50 % rel. humidity).



2. Test results

2.1 Brandschachtprüfung according to DIN 4102-1

Sample A: Material tested in production direction beige Sample B: Material tested cross to the production direction beige Sample C: Material tested cross to the production direction black Sample D: Material tested cross to the production direction black

Test results of the Brandschacht tests part 1								
line		Measurements test sample						
no.			Α	В	С	D		
1	no. test arrangement according to DIN 4102 part 15, table 1		1	1	1	1		
2	flame height max. over lower sample edge	cm	30	30	30	30		
	time 1)	min : s	00:08	00:07	00:10	80:00		
3	ascertainments on the front side Flaming/glowing time 1)	min : s	00:03	00:03	00:04	00:03		
4	melting / burning through time 1)	min : s	00:05	00:05	00:06	00:05		
5	ascertainments on the back side Flaming/glowing time 1)	min : s	no	no	no	no		
6	discolouring time 1)	min : s	no	no	no	no		
7 8 9	burning droplets begin 1) extent occasional dropping of material	min : s	no	no	no	no		
10 11 12	constant dropping of material separating from burning sample parts begin 1) occasional separating parts constant separating parts	min : s	no	no	no	no		
13	duration of burning on the sieve tray (max.)	min : s	no	no	no	no		
14	influence on the burner flame by dropping of / separating material time 1)	min:s	no	no	no	no		
15 16	earlier end of test end of the fire scenario on the sample 1) time of a possible resulted test stop 1)	min : s	no	no	no	no		
	rest stup "	111111 . 5						

¹⁾ time from start of test



	Test results of the Brandschacht tests part 2								
line		Measurements test sample							
no.			Α	В	Ċ	D			
	flaming after end of test		no	no	no	no			
17	duration		no	no	no	no			
18	number of sample	min : s	no	no	no	no			
19	front side of sample		no	no	no	no			
20 21	backside of sample flame length	cm	no	no	no	no			
	glowing after end of test	Om	/	/	/	/			
22	duration	min . s	no	no	no	no			
23	number of sample		no	no	no	no			
24	place of occurrence		no	no	no	no			
24 25	lower sample part upper sample part		no	no	no	no			
26	front side of sample		no	no	no	no			
27	backside of sample		no	no	no	no			
	smoke density								
28	< 400 % x min		1	1	1	2			
29	> 440 % x min								
28 29 30	diagram in annex no.		1	2	3	4			
	residual length								
31	single results	cm	66 / 71	69 / 65	69 / 69	68 / 68			
			63 / 65	69 / 64	68 / 69	69 / 67			
32	average of the single results	cm	66	66	68	68			
33	photo of the sample on page		7	7	7	7			
	smoke temperature								
34	max. of the average results	°C	116	116	115	114			
35	time 1)	min : s	09:58	09:29	09:53	09:25			
36	diagram in annex no.		1	2	3	4			

¹⁾ time from start of test

Remarks: melting of the samples



2.2 Brandschachtprüfung according to DIN 4102-1

Sample E: Material tested in production direction red Sample F: Material tested cross to the production direction red

colour: light green

Test results of the Brandschacht tests part 1								
line								
no.			Е	F				
1	no. test arrangement according to DIN 4102 part 15, table 1		1	1				
2	flame height max. over lower sample edge	cm	30	30				
	time 1)	min:s	00:08	00:08				
3	ascertainments on the front side Flaming/glowing time 1)	min : s	00:03	00:03				
4	melting / burning through time 1)	min : s	00:06	00:05				
5	ascertainments on the back side Flaming/glowing time 1)	min : s	no	no				
6	discolouring time 1)	min : s	no	no				
7 8 9	burning droplets begin 1) extent occasional dropping of material	min : s	no	no				
10 11 12	constant dropping of material separating from burning sample parts begin 1) occasional separating parts constant separating parts	min : s	no	no				
13	duration of burning on the sieve tray (max.)	min : s	no	no				
14	influence on the burner flame by dropping of / separating material time 1)	min : s	no	no				
15 16	earlier end of test end of the fire scenario on the sample 1) time of a possible resulted test stop 1)	min : s	no	no				
	toot dtop	111111 . 3						

¹⁾ time from start of test



	Test results of the Brandschacht tests part 2									
line			Measurements test sample							
no.			Е	F						
	flaming after end of test		no	no						
17	duration		no	no						
18	number of sample	min : s	no	no						
19	front side of sample		no	no						
20	backside of sample		no	no						
21	flame length	cm	_	_						
22		min . s	/	/						
23		111111 . 5	no	no						
23			no	no						
24	lower sample part		no	no						
25	upper sample part		no	no						
26	front side of sample		no	no						
27	backside of sample		no	no						
	smoke density									
28	< 400 % x min		1	1						
28 29 30	> 440 % x min									
<u>30</u>	diagram in annex no.		5	6						
	residual length									
31	single results	cm	68 / 70	68 / 70						
			65 / 68	68 / 68						
32	average of the single results	cm	67	68						
33	photo of the sample on page		8	8						
	smoke temperature									
34	max. of the average results	°C	118	117						
35	time 1)	min : s	09:21	09:47						
36	diagram in annex no.		5	6						

¹⁾ time from start of test

Remarks: As the residual length was > 45 cm during the Brandschacht test, no further tests were necessary according to DIN 4102-16, melting of the samples



Appearance of the specimen after the test:

Sample A



Sample B



Sample C



Sample D





Appearance of the specimen after the test:

Sample E



Sample F





2.3 Normal flammability test according to DIN 4102-1

Test with edge ignition without deposit Flame application on: lower sample edge Edge ignition

length direction: colour: beige

iorigar an conori.		cologi. Solg						
Sample-no.		1	2	3	4	5		
Time from start of test		l	2	3	4	5		
Ignition point [s]		1	1	1	1	1		
Reaching the measuring ma	ark	20	20	20	20	20		
within 20 seconds		no	no	no	no	no		
Self-extinguishing of the flame [s]		23	-	14	-	-		
Max. flame height	[mm]	80	100	70	80	70		
Time	[s]	8	8	6	20	20		
End of afterflaming	[s]	8	>10	-	>10	>10		
End of afterglowing	[s]	-	-	-	-	-		
Flames extinguished after	[s]	-	25	-	25	25		
Smoke development		strong smoke development						
(visual impression)low / modera		Silong s	inoke deve	iopinent				
Separating from burning ma	terial	no	no	no	no	no		
Time	[s]	-	-	-	-	-		

Remarks: none

cross direction: colour: beige

Sample-no.		1	2	3	4	5
Time from start of test		1		3	4	5
Ignition point [s]		1	1	1	1	1
Reaching the measuring ma	ark	20	20	20	no	20
within 20 seconds		no	no	no	no	no
Self-extinguishing of the flar	ne [s]	7	5	10	6	7
Max. flame height	[mm]	50	40	70	50	60
Time	[s]	5	4	8	5	6
End of afterflaming	[s]	-	-	ı	ı	ı
End of afterglowing	[s]	-	-	ı	ı	ı
Flames extinguished after	[s]	-	-	ı	ı	ı
Smoke development			moderate	smoke dov	olonmont	
(visual impression)low / modera	ate / strong	moderate smoke development				
Separating from burning ma	ıterial	no	no	no	no	no
Time	[s]	-	-	-	-	-

Remarks: none



2.4 Normal flammability test according to DIN 4102-1

Test with edge ignition without deposit Flame application on: lower sample edge

Edge ignition

length direction: colour: black

iongin ancodon.	coloui.	DIGON						
Sample-no.		1	2	3	4	5		
Time from start of test		ı		3	4	5		
Ignition point [s]		1	1	1	1	1		
Reaching the measuring mark within 20 seconds		no	no	no	no	no		
Self-extinguishing of the flame [s]		-	-	-	-	-		
Max. flame height	[mm]	130	140	140	140	140		
Time	[s]	20	20	20	20	20		
End of afterflaming	[s]	>10	>10	>10	>10	>10		
End of afterglowing	[s]	ı	-	-	ı	-		
Flames extinguished after	[s]	25	25	25	25	25		
Smoke development		atrong amaka dayalanmant						
(visual impression)low / modera		strong smoke development						
Separating from burning ma	ıterial	yes	yes	yes	yes	yes		
Time	[s]	9	10	9	9	10		

Remarks: Burning droplets

cross direction: colour: black

Sample-no.		1	2	3	4	5
Time from start of test		1	2	3	4	5
Ignition point [s]		1	1	1	1	1
Reaching the measuring ma	ark	no	no	no	no	no
within 20 seconds		no	no	no	no	no
Self-extinguishing of the flat	me [s]	-	-	ı	ı	-
Max. flame height	[mm]	140	130	130	140	130
Time	[s]	20	20	20	20	20
End of afterflaming	[s]	>10	>10	>10	>10	>10
End of afterglowing	[s]	-	-	ı	ı	-
Flames extinguished after	[s]	25	25	25	25	25
Smoke development			ctrong	emaka daya	lonmont	
(visual impression)low / moder	ate / strong	strong smoke development				
Separating from burning ma	aterial	yes	yes	yes	yes	yes
Time	[s]	8	8	9	9	9

Remarks: Burning droplets



2.5 Normal flammability test according to DIN 4102-1

Test with edge ignition without deposit Flame application on: lower sample edge Edge ignition

length direction: colour: red

lengin direction.	coloui.	ica						
Sample-no.		4	2	3	4	5		
Time from start of test		ı		3	4	5		
Ignition point [s]		1	1	1	1	1		
Reaching the measuring mark within 20 seconds		no	no	no	no	no		
Self-extinguishing of the flan	ne [s]	-	-	-	-	-		
Max. flame height	[mm]	90	80	100	90	90		
Time	[s]	20	20	20	20	20		
End of afterflaming	[s]	>10	>10	>10	>10	>10		
End of afterglowing	[s]	-	-	-	-	-		
Flames extinguished after	[s]	25	25	25	25	25		
Smoke development		strong smoke development						
(visual impression)low / modera		strong s	moke deve	iopment				
Separating from burning ma	terial	no	no	no	no	no		
Time	[s]	-	-	-	- 1	-		

Remarks: Burning droplets

cross direction: colour: red

Sample-no.		1	2	3	4	5
Time from start of test		'		3	7]
Ignition point [s]		1	1	1	1	1
Reaching the measuring ma	ark					200
within 20 seconds		no	no	no	no	no
Self-extinguishing of the flame [s]		14	12	11	11	-
Max. flame height	[mm]	90	70	70	70	90
Time	[s]	10	8	8	8	20
End of afterflaming	[s]	-	-	ı	ı	>10
End of afterglowing	[s]	-	1	ı	ı	-
Flames extinguished after	[s]	-	1	ı	ı	25
Smoke development			otrona	maka daya	lonmont	
(visual impression)low / modera	ate / strong	strong smoke development				
Separating from burning ma	terial	no	no	no	no	no
Time	[s]	-	-	-	-	-

Remarks: none



Appearance of the sample after the small burner test:









Assessment

The material described in chapter one fulfils the requirements of the building class B2 according to DIN 4102-1 (Mai 1998).

The determined test results show that the material also fulfils the requirements

of the building class B1 with burning droplets

according to DIN 4102-1 (Mai 1998).

Special note

The fire test result is only valid for the material described in chapter one in the tested colours, square weights and thicknesses.

The test was carried out in free hanging configuration.

The distance to another plane material must be more or equal then 40 mm.

According to DIN 4102-16 Section 5.2, the test result includes all colour settings.

The material wasn't tested after an outside storage.

In combination with other materials (for example coatings, deposits) the burning behaviour could be influenced unfavourable so that the classification above is not valid any longer. According to DIN 4102-1 the burning behaviour in combination with other materials has to be tested separately.

This test report does not replace the required "Verwendbarkeitsnachweis". It is only used for issuing the "Verwendbarkeitsnachweis".

Frankfurt, the 26th January 2021

H. Anders

Tester in Charge

P. Scheinkönig

Prüfstellenleiter Bau-PVO



This Test report is valid until 06.01.2026

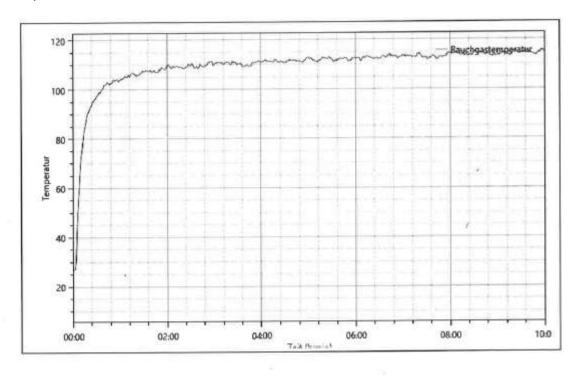
The results of the tests relate only to the behaviour of the test specimen which is designated on the top.

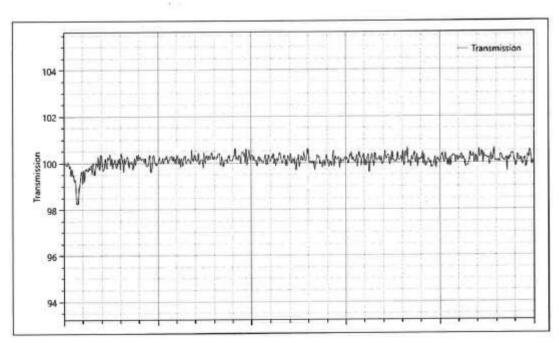
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Annex 1 to the Test report No. 201186 issued 26.01.2021

Sample A:

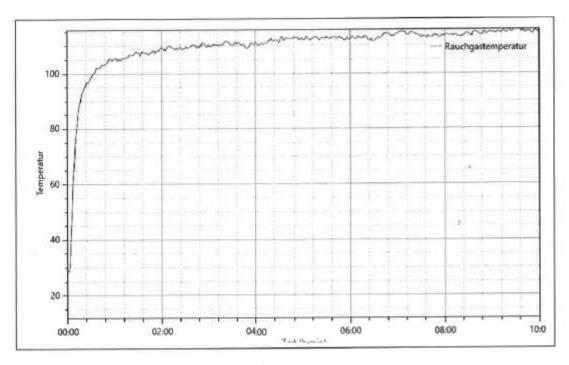


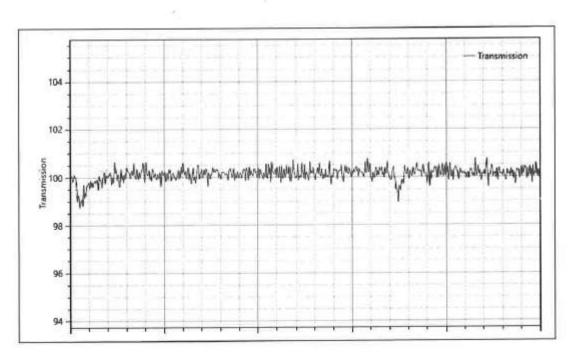




Annex 2 to the Test report No. 201186 issued 26.01.2021

Sample B:

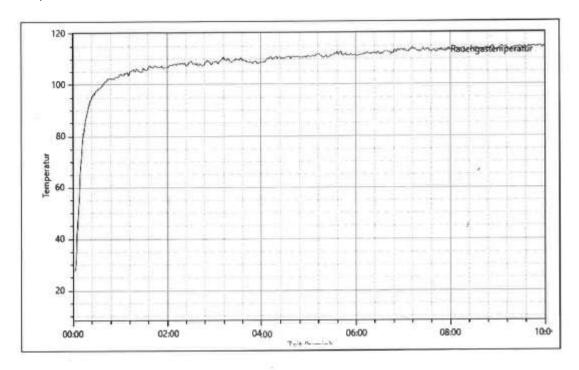


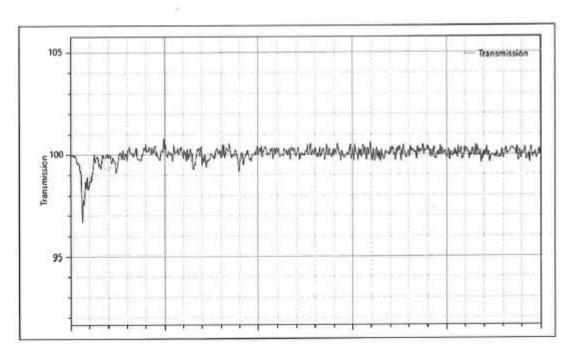




Annex 3 to the Test report No. 201186 issued 26.01.2021

Sample C:

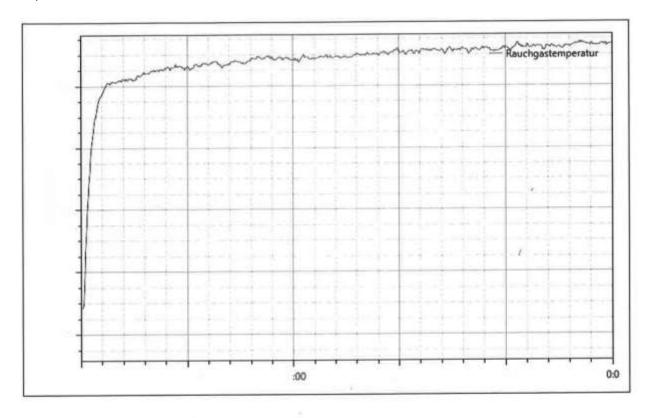


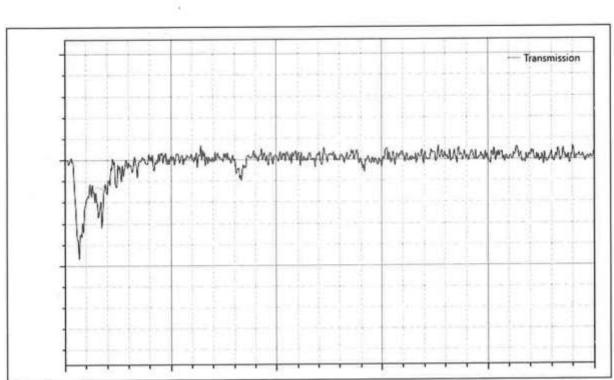




Annex 4 to the Test report No. 201186 issued 26.01.2021

Sample D:

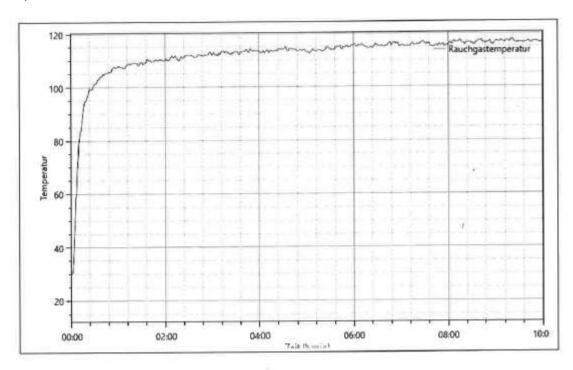


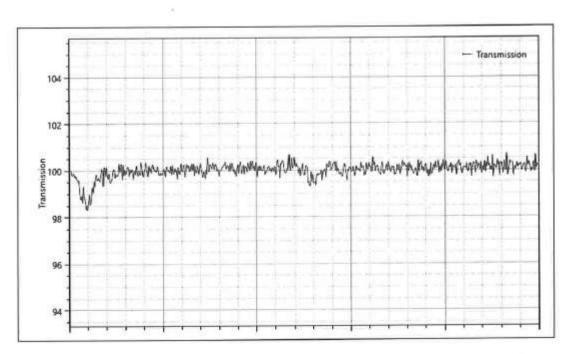




Annex 5 to the Test report No. 201186 issued 26.01.2021

Sample E:







Annex 6 to the Test report No. 201186 issued 26.01.2021

Sample F:

