SYCHTA LABORATORIUM Sp. J.
Laboratorium Badań Palności Materiałów
ul. Ofiar Stutthofu 90
72-010 Police

AB 1501

TEST REPORT

Order no: 83A26763 Signature: SL/Z-346/DIN4102-B1/0332a/2024 Police, 06.05.2024

Test methods:

1. DIN 4102-1:1998-05 Fire behaviour of building materials and building components - Part 1: Building materials; concepts, requirements and tests.
2. DIN 4102-15:1990-05 Fire behaviour of building materials and building components - Part 15: "Brandschacht"
3. DIN 4102-16:2021-01 Fire behaviour of building materials and building components - Part 16: "Brandschacht" tests
4. DIN 53438-2:1984-06 Testing of combustible materials; response to ignition by a small flame; edge ignition
5. DIN 53438-3:1984-06 Testing of combustible materials; response to ignition by a small flame; surface ignition

Content of request: Testing according to DIN 4102-1:1998-05 (building class B1)

Sponsor: Camira Fabrics Ltd.
Hopton Mills
Mirfield HD9 4 AY, United Kingdom

Material: Track

Composition: **Composition details:** 100% Trevira CS Polyester
Sample 1: Batch /Colour: 539749/Route
Sample 2: Batch /Colour: 534861/Clue
Sample 3: Batch /Colour: 523569/Passage
Fabric type: Woven chenille

Manufacturer/supplier: Camira Fabrics Ltd.
Hopton Mills
Mirfield HD9 4 AY, United Kingdom

Assessment: The material fulfils the requirements of the building class B1 according to DIN 4102-1:1998-05

Validity of test report: 06.05.2029

The reprint and the copying: only with the agreement of Camira Fabrics Ltd.

Without the written consent of the Sychta Laboratory the report can be copied only in one piece.

Report applies only to the sample tested and is not necessarily indicative of the qualities of apparently identical or similar products.

Content of test report: eight pages with signature and numbers.

1. Test results class B1 according to DIN 4102-15 and DIN 4102-16 – Brandschacht tests

Table 1.1. Results for tested material

Name of measured quantity	Unit	Specimen				Requirement
		1	2	3	4	
No. test arrangement according to DIN 4102-15	-	1	1	1	1	
Specimen thickness	mm	1,5	1,5	1,5	1,5	
Maximum flame height	cm	30	30	30	30	
Time	s	12	9	8	7	
Flaming time	s	102	70	90	65	
Ignition sample backside	yes/no	no	no	no	no	
Time	s	-	-	-	-	
Burning droplets	yes/no	yes	yes	yes	yes	
Duration falling of burning droplets	s	88	36	147	76	
- sporadic falling of burning droplets	yes/no	yes	yes	yes	yes	
- continuous falling of burning droplets	yes/no	no	no	no	no	
Burning separating sample parts	yes/no	no	no	no	no	
Duration falling of burning parts	s	-	-	-	-	
- sporadic falling of burning parts	yes/no	no	no	no	no	
- continuous falling of burning droplets	yes/no	no	no	no	no	
Duration of burning on the sieve tray	s	-	-	-	-	
Residual range						
1	cm	64	56	56	64	>0
2	cm	62	58	57	58	
3	cm	57	52	57	58	
4	cm	54	55	55	56	
Average value of the residual range	cm	59	55	56	59	≥15
Maximum flue gas temperature	ºC	122	122	121	119	≤200
Time	s	600	600	580	600	
Duration of burning after end of test	s	0	0	0	0	
Maximum light attenuation	%	1,6	1,4	2,6	2,0	
Integrated smoke obscuration	min• %	1	2	2	3	≤400
Impairment of the burner flames by falling particles or droplets	yes/no	yes	yes	yes	yes	
Time of the appearance of falls for the burner	s	-	-	-	-	
Premature end of test	yes/no	no	no	no	no	
Time	s	-	-	-	-	

Remarks:

Remark: According to DIN 4102-16: 2021-01, Clause 5.2. Color various were selected in: white-light green color (specimens 1 - Route), orange color (specimen 2 - Clue) and dark blue color (specimen 3 and 4 - Passage). The difference between the means of measured residual lengths is no greater than 5 cm (respectively 59 cm, 55 cm, 56 cm and 59 cm) and the difference between the four mean flue gas temperatures shall be no greater than 10 K (respectively 122˚C, 122˚C, 121˚C and 119˚C). Total number of tests: four.

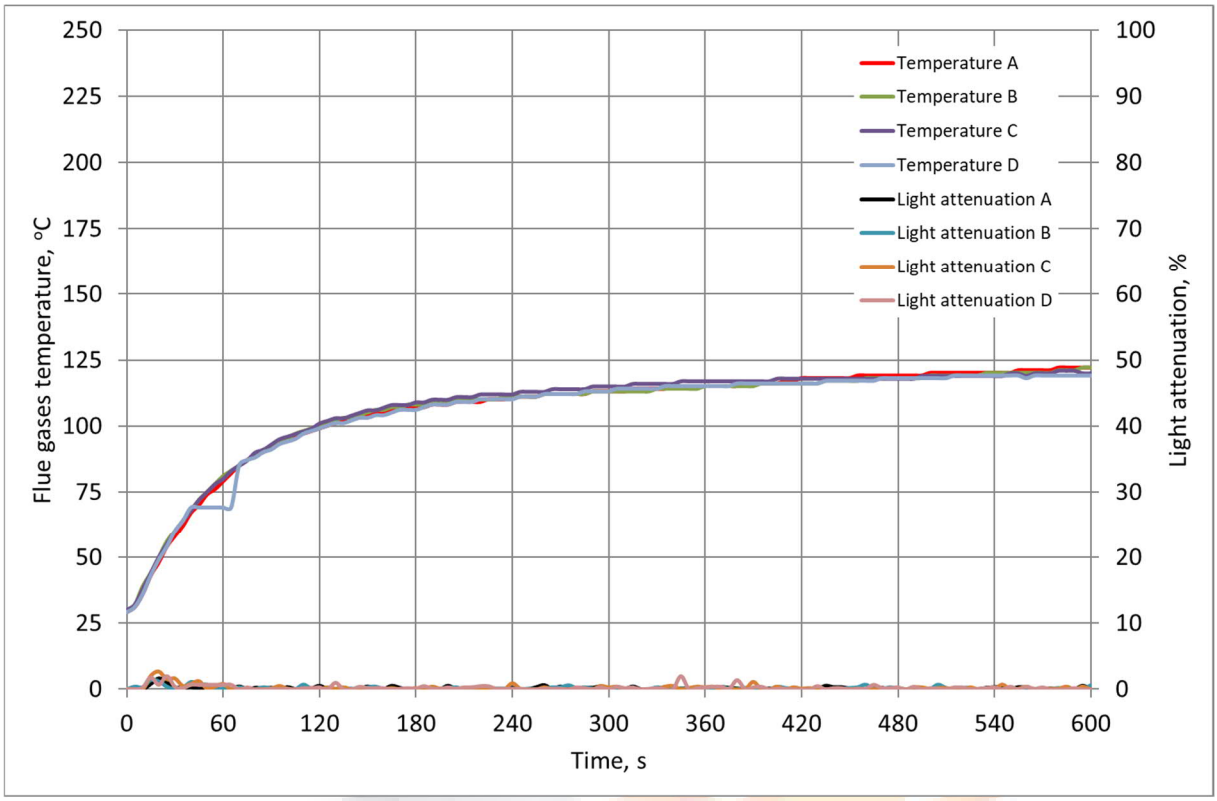

Figure 1. The relation of flue gases temperature and of the light attenuation in the time

Figure 2. Appearance of the specimens 1 after the test – white-light green color

Figure 3. Appearance of the specimens 2 after the test – orange color

Figure 4. Appearance of the specimens 3 after the test – dark blue color

Figure 5. Appearance of the specimens 4 after the test – dark blue color

2. Test results class B2 according to DIN 4102-1 (DIN 53438-2 and DIN 53438-3)

2.1. Edge ignition

Exposure time of pilot burner flame - 15 s
Time from start of test.

Name of measured quantity	Unit	Specimen no./Test direction									
		length direction					cross direction				
		1	2	3	4	5	1	2	3	4	5
Specimen thickness	mm	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Ignition time	s	1	1	2	2	1	1	1	1	2	1
Flame height 150 mm within 20 s	yes/no	no	no	no	no	no	no	no	no	no	no
Max. flame height	cm	9	8	9	9	6	5	6	3	6	5
Time	s	-	-	-	-	-	-	-	-	-	-
Extinction time	s	-	-	-	-	-	-	-	-	-	-
Flaming particles or droplets	yes/no	no	no	no	no	no	no	no	no	no	no
Ignition of paper	yes/no	no	no	no	no	no	no	no	no	no	no
Smoke development (visual impression)	-	a small amount of smoke									

2.2. Surface ignition

Exposure time of pilot burner flame - 15 s
Time from start of test.

Name of measured quantity	Unit	Specimen no./Test direction									
		length direction					cross direction				
		1	2	3	4	5	1	2	3	4	5
Specimen thickness	mm	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Ignition time	s	6	9	6	7	6	4	9	2	6	5
Flame height 150 mm within 20 s	yes/no	no	no	no	no	no	no	no	no	no	no
Max. flame height	cm	3	2	4	4	2	3	2	4	2	4
Time	s	-	-	-	-	-	-	-	-	-	-
Extinction time	s	16	14	16	18	9	16	17	17	11	17
Flaming particles or droplets	yes/no	no	no	no	no	no	no	no	no	no	no
Ignition of paper	yes/no	no	no	no	no	no	no	no	no	no	no
Smoke development (visual impression)	-	a small amount of smoke									

Remarks: none.

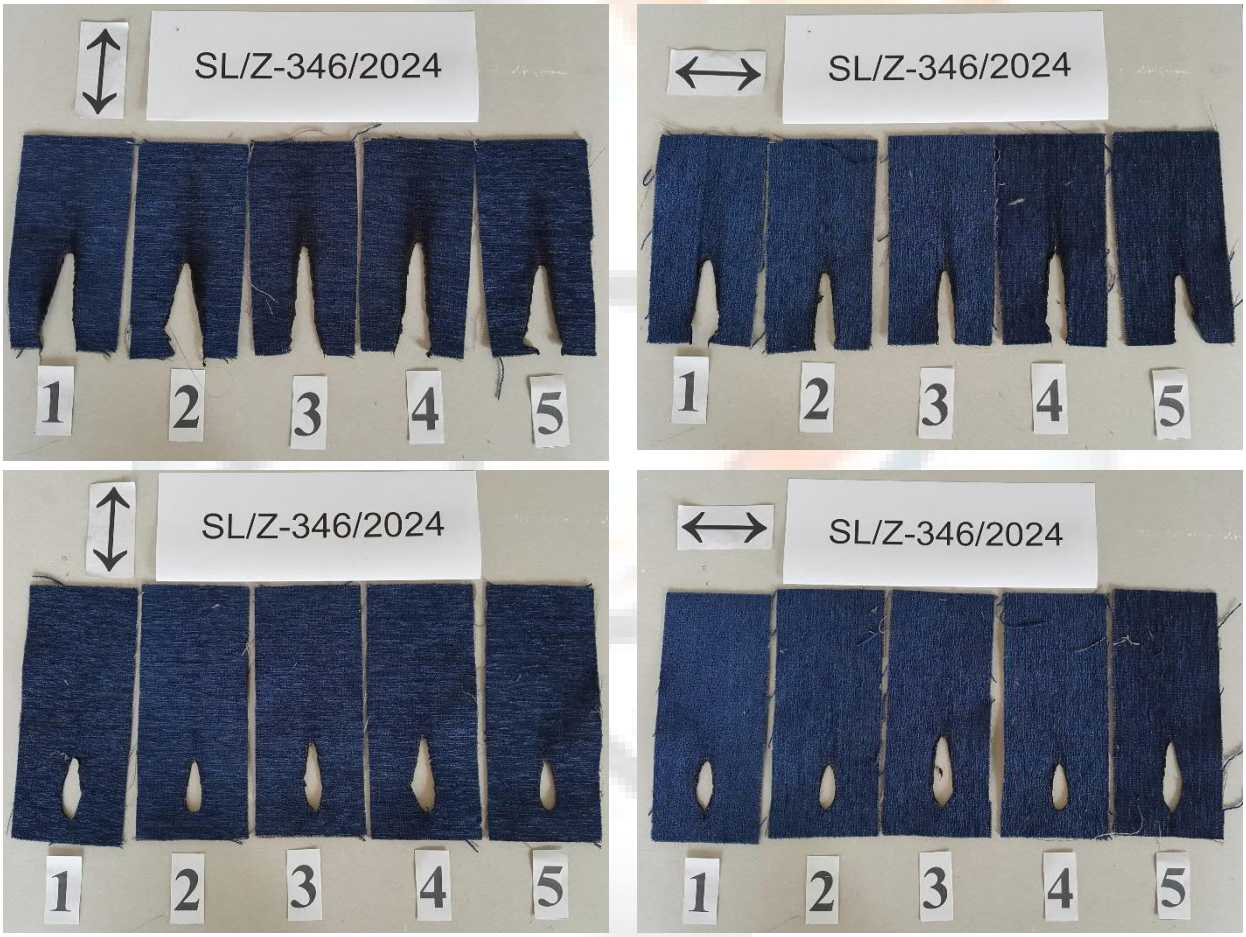

Figure 6. Appearance of the samples after the small burner test – dark blue color

3. Assessment

The determined test results show that the material fulfils the requirements of the building class B2 according to DIN 4102-1:1998-05.

The determined test results show that the material fulfils the requirements **of the building class B1** according to DIN 4102-1:1998-05.

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 report does not determine admission to the use of the product, when tested material is used as a construction product within the meaning of terrestrial technical requirements.
In the process of construction supervision test results can be the basis for a preliminary assessment of the compatibility/suitability.

4. Remaining required information

Date of receipt of samples: 16.04.2024

Sampling: sponsor took and delivered samples.

Description of the test material: Sponsor delivered three rolls of different colours fabric. One roll of fabric in white-light green colour, with width of 1450 mm, thickness of 1,5 mm and weight per unit area 540 g/m^2, one roll of fabric in orange colour with width of 1450 mm, thickness of 1,5-1,6 mm and weight per unit area 550 g/m^2 and one roll of fabric in dark blue colour with width of 1450 mm, thickness of 1,5 mm and weight per unit area 545 g/m^2. Laboratory prepared samples for the tests.

Conditioning of specimens: after storing 14 days before the tests and/or constant mass at temperature of 23±2°C and relative humidity of 50±5 % (DIN 50014-23/50-2).

Declarations:

1. The test results relate to the behaviour of the test specimens under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the products in use.
2. The information provided on the first page of the report concerning the scope of research and identification of the tested object/objects were provided by the Sponsor.

Operators:

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KIEROWNIK TECHNICZNY
dr inż. Krzysztof Sychta

Date and place of test - 22.04 and 02.05.2024, Police