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

AB 1501

TEST REPORT

Order no: PO: 83A34020 Signature: SL/Z-974/DIN4102-B1/1169a/2025 Police, 03.10.2025

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

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

Sponsor: Camira Fabrics Ltd.
The Watermill, Wheatley Park
WF14 8HE Mirfield West Yorkshire,
United Kingdom

Material: Upland

Composition: 100% Flame Retardant Polypropylene
Color: Light Grey D1644C, Aubergine D1644D, Green D1644B
Light Grey batch - 568749, Aubergine batch - 568750, Green batch - 568748
Thickness: 1.4 mm (nominal)

Manufacturer/supplier: Camira Fabrics Ltd.
The Watermill, Wheatley Park
WF14 8HE Mirfield West Yorkshire,
United Kingdom

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

Validity of test report: 03.10.2030

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

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	1,3	1,3	1,3	1,3	
Maximum flame height	cm	30	30	30	30	
Time	s	7	6	6	6	
Flaming time	s	30	21	27	17	
Ignition sample backside	yes/no	yes	yes	yes	yes	
Time	s	6	6	7	7	
Burning droplets	yes/no	yes	yes	yes	yes	
Duration falling of burning droplets	s	148	65	55	46	
- 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	4	167	18	117	
Residual range						
1	cm	68	69	69	70	>0
2	cm	69	70	69	69	
3	cm	69	71	70	70	
4	cm	70	71	69	71	
Average value of the residual range	cm	69	70	69	70	≥15
Maximum flue gas temperature	°C	137	135	136	133	≤200
Time	s	595	600	600	600	
Duration of burning after end of test	s	0	0	0	0	
Maximum light attenuation	%	0,6	0,7	0,6	1,4	
Integrated smoke obscuration	min• %	1	1	1	2	≤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	570	564	583	562	
Premature end of test	yes/no	no	no	no	no	
Time	s	-	-	-	-	

Remark 1: Because of the residual length of > 45 cm in one test, the number of tests was reduced, according to Clause 6.2 b) DIN 4102-16:2021-01.

Remark 2: According to DIN 4102-16: 2021-01, Clause 5.2. Color various were selected in aubergine (specimens 1 and 2 - Aubergine D1644D), light grey (specimen 3 - Light Grey D1644C) and white and green (specimen 4 - Green D1644B) colors. The difference between the means of measured residual lengths is no greater than 5 cm (respectively 69 cm, 70 cm, 69 cm and 70 cm) and the difference between the four mean flue gas temperatures shall be no greater than 10 K (respectively 137°C, 135°C, 136°C and 133°C).
Total number of tests: four.

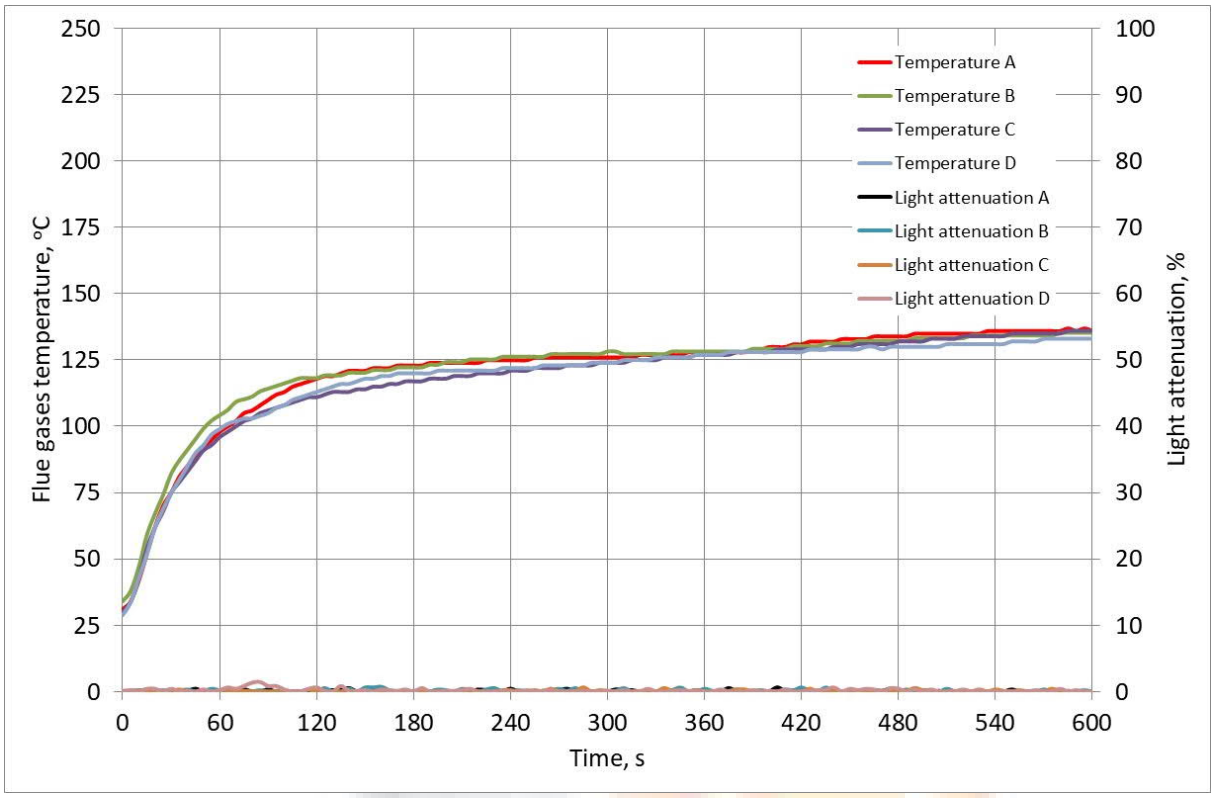

Figure 1. The relation of flue gases temperature and of the light attenuation in the time

Figure 2. Appearance of the sample 1 after the test - Aubergine D1644D, length direction

Figure 3. Appearance of the sample 2 after the test – Aubergine D1644D, cross direction

Figure 4. Appearance of the sample 3 after the test – Light Grey D1644C, length direction

Figure 5. Appearance of the sample 4 after the test – Green D1644B, length direction

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
Minimum specimen thicknesses	mm	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2
Maximum specimen thicknesses	mm	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3
Ignition time	s	3	3	3	3	3	4	4	2	3	2
Extinction time	s	19	18	12	-	-	16	11	-	8	-
Burning time	s	16	15	9	17	17	12	7	18	5	18
Flame hight 150 mm within 20 s	YES/NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Time to reach 150 mm	s	-	-	-	-	-	-	-	-	-	-
Max. flame height	cm	7	7	5	6	7	8	7	8	4	6
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)	-	lack 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
Minimum specimen thicknesses	mm	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2
Maximum specimen thicknesses	mm	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3
Ignition time	s	6	3	4	4	4	4	4	5	4	4
Extinction time	s	11	13	-	11	-	10	-	13	14	11
Burning time	s	5	10	16	7	16	6	16	8	10	7
Flame hight 150 mm within 20 s	YES/NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Time to reach 150 mm	s	-	-	-	-	-	-	-	-	-	-
Max. flame height	cm	4	7	7	5	9	5	7	5	5	4
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)	-	lack of smoke									

Remarks: none.

length direction

cross direction

length direction

cross direction

Figure 4. Appearance of the sample after the small burner test

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: 15.09.2025

Sampling: Sponsor took and delivered samples.

Description of the test material: Sponsor delivered one piece of fabric "Light Grey D1644C (batch 568749)" in light grey colour with dimensions of 5000x1430 mm. Thickness of approx. 1,3 mm and weight per unit area approx. 330 g/m^2; One piece of fabric "Green D1644B (batch 568748)" in green colour with dimensions of 5000x1400 mm. Thickness of approx. 1,3 mm and weight per unit area approx. 340 g/m^2; One piece of fabric "Aubergine D1644D (batch 568750)" in aubergine colour with dimensions of 5000x1430 mm. Thickness of 1,2-1,3 mm and weight per unit area approx. 340-350 g/m^2.
Laboratory prepared samples for the tests.

Conditioning of specimens: after storing 14 days before the tests or constant mass at temperature of 23±2 ^{o}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:

lic. Krzysztof Fidrysiak

lic. Anna Tuziak

SYCHTA LABORATORIUM Sp. J.
72-010 Police, ul. Ofiar Stutthofu 90
tel./fax +48 91 4210 214, tel. 502078855
e-mail: biuro@sychta.eu www:sychta.eu
KRS 0000387681 REGON 321023120
NIP 8513152392

Authorised by:

KIEROWNIK TECHNICZNY
dr inż. Krzysztof Sychta

Date and place of test - 25-26.09 and 30.09.2025, Police