SYCHTA LABORATORIUM Sp. J.
Laboratorium Badań Palności Materiałów
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AB 1501

TEST REPORT

Order no: 83A35150 Signature: SL/Z-1299/DIN4102-B1/1584a/2025 Police, 19.12.2025

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 ignition

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

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

Material: Regent

Composition: 100% Flame Retardant Polyester
(Dark) Belgrade, HREG28 Batch: 544602 , (Medium) Majestic, HREG20 Batch: 551025, (Light) Marquis, HREG23 Batch: 559345
Nominal thickness: 1,36 mm

Manufacturer/supplier: Camira Fabrics
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: 19.12.2030

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

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: seven 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 – Belgrade" (specimen 1 and 2), medium -"Majestic" (specimen 3) and light -"Marquis" (specimen 4)

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	1,36	1,36	1,36	1,36	
Maximum flame height	cm	30	30	30	30	
Time	s	7	9	6	6	
Flaming time	s	32	24	18	17	
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	53	235	78	34	
- 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	0	0	0	0	
- 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	0	0	0	0	
Residual range						
1	cm	65	64	63	67	>0
2	cm	65	55	66	63	
3	cm	64	64	65	59	
4	cm	62	59	63	59	
Average value of the residual range	cm	64	61	64	62	≥15
Maximum flue gas temperature	°C	147	146	142	142	≤200
Time	s	590	600	600	600	
Duration of burning after end of test	s	0	0	0	0	
Maximum light attenuation	%	3,7	5,4	3,7	3,7	
Integrated smoke obscuration	min• %	12	12	13	12	≤400
Impairment of the burner flames by falling particles or droplets	yes/no	no	no	no	no	
Time of the appearance of falls for the burner	s	0	0	0	0	
Premature end of test	yes/no	no	no	no	no	
Time	s	-	-	-	-	

Remark 1: According to DIN 4102-16: 2021-01, Clause 5.2. Color various were selected specimens in dark "Belgrade" (specimen 1 and 2), medium -"Majestic" (specimen 3) and light -"Marquis" (specimen 4). The difference between the three means of measured residual lengths is no greater than 5 cm (respectively 64 cm, 61 cm, 64 cm, 62 cm) and the difference between the three mean flue gas temperatures shall be no greater than 10 K (respectively 147°C, 146°C, 142°C, 142 °C). Total number of tests: four.

Remark 2: 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.

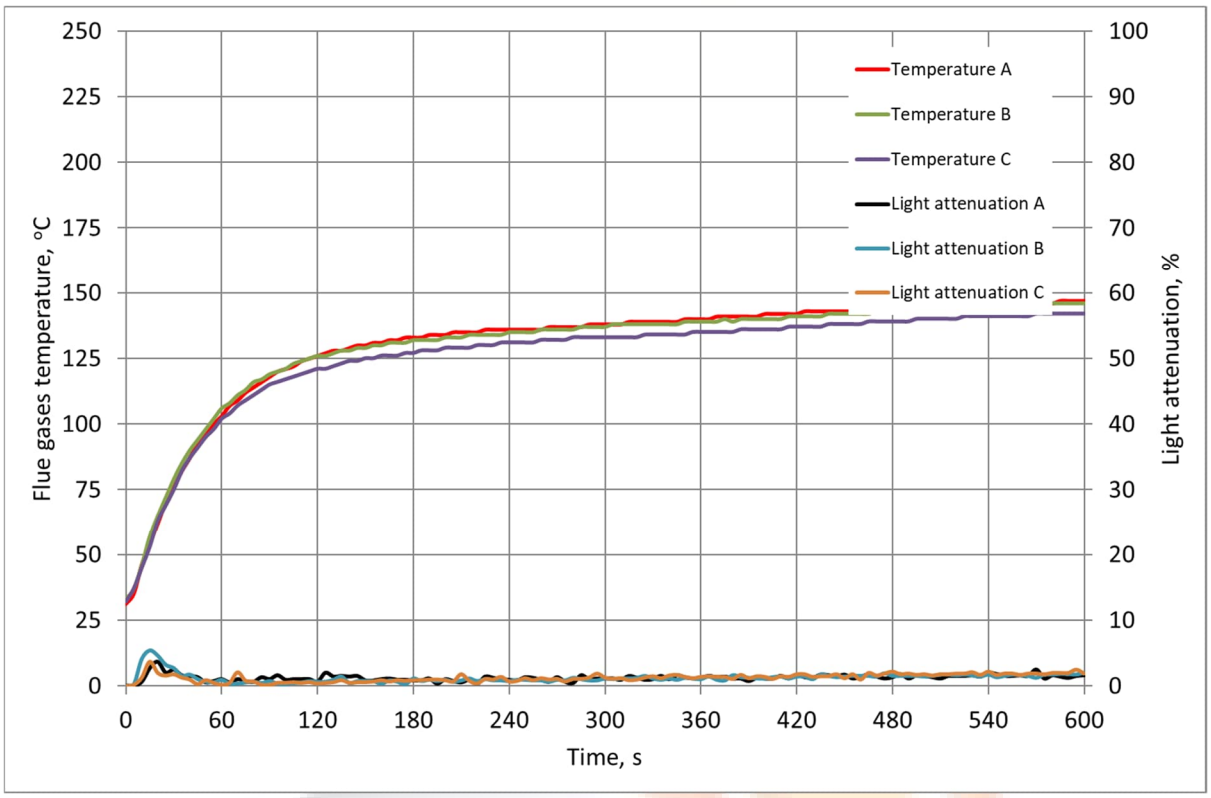


Figure 1. The relation of flue gases temperature and of the light attenuation in the time



Figure 2. Appearance of the specimens 1 after the test - “Belgrade”- lenght direction



Figure 3. Appearance of the specimens 1 after the test - “Belgrade”- cross direction



Figure 4. Appearance of the specimens 1 after the test - “Majestic”



Figure 5. Appearance of the specimens 1 after the test - “Marquis”

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	6	7	8	9	10
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	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
Ignition time	s	9	2	2	2	3	2	3	3	2	3
Extinction time	s	13	15	6	10	16	-	17	-	-	-
Burning time	s	4	13	4	8	13	-	14	-	-	-
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	8	3	7	11	7	9	6	8	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									

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	6	7	8	9	10
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	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
Ignition time	s	4	4	4	5	4	2	3	3	4	5
Extinction time	s	15	16	-	11	10	10	19	15	15	14
Burning time	s	11	12	-	6	6	8	16	12	11	9
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	5	4	13	4	9	6	7	8	7	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.





Edge ignition





Surface ignition

Figure 6. Appearance of the samples after the small burner test - “Bonpas”

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: 28.11.2025

Sampling: Sponsor took and delivered samples.

Description of the test material: fabric in three colours: dark gray-brown, blue and beige. Sponsor delivered one piece with dimensions 1455x5340 mm of blue fabric, described as "(Medium) Majestic HREG20" with thickness of 1,1-1,2 mm, weight per unit area 320-380 g/m^2 and density of 260-350 kg/m^3, two pieces with dimensions 1445x2460 mm and 1445x2706 of beige fabric, described as "(Light) Marquis, HREG23" with thickness of 1,1-1,3 mm, weight per unit area 310-390 g/m^2 and density of 250-300 kg/m^3. Delivered also two pieces with dimensions 1490x2480 mm and 1490x2508 mm of dark gray-brown fabric, described as: "(Dark) Belgrade, HREG28 Batch: 544602" with thickness of 1,2-1,6 mm, weight per unit area 370-390 g/m^2 and density of 240-320 kg/m^3. Laboratory prepared samples for the test.

Conditioning of specimens: after storing 14 days before the tests and/or constant mass at temperature of 23±2 ºC 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 - 18-19.12.2025, Police