

Test laboratory for the fire behavior of building materials
Testing, supervising and certifying body, authorized by the building supervision authority

TEST REPORT

PZ-Hoch-261061

for the proof of fire behaviour according to DIN 4102, part 1

Translation of the German test report – no guarantee for translation of technical terms

company	Kvadrat High Performance Textiles BV Kieftse 18 NL- 7151 HZ Eibergen
description of samples	white polyester fabric with acrylic coating on both sides
name of the material	„Athos / KHPT Fabric 310“
sampling	by the company itself
content of request	Proof of flammability to classify building materials to class B1 ("schwerentflammbar") according to DIN 4102, part 1
validity of test report	31.07.2031
result	The examined product meets the requirements of class B1 for hardly flammable ("schwerentflammbare") building materials according to DIN 4102, pt. 1 (May 1998), suspended freely or with distance of >40 mm to same or other plain materials.

This test report includes 4 pages and 3 enclosures.

Remark: If the building material mentioned above is not used as a product according to MBO § 2, Abs. 10, there is no need for a general building supervisory test report.

This test report does not replace an eventually necessary proof of applicability concerning building supervisory or building laws as defined by State Building Prescriptions. This has to be certified instead 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 report can underlie building supervisory procedures

- for regular building products for the prescribed proofs of conformity
- for irregular building products for the required proofs of applicability.

Without written consent of the test laboratory, this test report may only be published or duplicated during its denoted period of validity, providing that no changes to appearance or content are made.

1. Description of test material in condition as delivered

PN 44606 „Athos / KHPT Fabric 310“

white polyester fabric with acrylic coating on both sides
Side A and side B are identical.

characteristic values determined by the test laboratory:

area weight: about 214 g/m² thickness: about 0,33 mm

All values determined by the laboratory are marked as such. All other information (including the material designation) is declared by the manufacturer.

The testing laboratory is not provided with further details concerning composition of the tested building materials. Samples are deposited.

2. Preparation of samples

Samples with a size of 1000 mm height and 190 mm width where cut from the material for fire testing.

The samples were kept in climate chamber 23/50 until they reached constant weight.

3. Arrangement of samples

mounting: freely suspended

4. Date of test

CW 32 in 2026

5. Results

The test has been performed according to DIN 4102 (Mai 1998)

line no.	Measurement	Result with the tested specimen				Dim.
	Test number	#2107	#2108	---	---	
	flaming direction	warp	weft	---	---	
	side	A	B	---	---	
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	1	1	---	---	
2	Maximum flame height above bottom edge of specimen	30	30			cm
3	Time ¹⁾	0:04	0:03	---	---	min:s
4	Burn-through / melting Time ¹⁾	0:05	0:04	---	---	min:s
	Observations on the back side of specimen					
5	Flames / Glowing Time ¹⁾	./.	./.	---	---	min:s
6	Change of colour Time ¹⁾	./.	./.	---	---	min:s
7	Falling of burning droplets Start ¹⁾	./.	./.			min:s
8	Extent			---	---	
9	sporadic falling of burning droplets ²⁾	./.	./.	---	---	min:s
10	continuous falling of burning droplets ²⁾	./.	./.	---	---	min:s
	Falling of burning parts					
11	Start ¹⁾	./.	./.			min:s
12	Extent	./.	./.			
13	sporadic falling of burning parts ²⁾	./.	./.	---	---	min:s
	continuous falling of burning parts ²⁾	./.	./.	---	---	min:s
	Burning duration at sieve plate (max.)	./.	./.	---	---	min:s

line no.	Measurement	Result with the tested specimen				Dim.
	Test number	#2107	#2108	---	---	
	flaming direction	warp	weft	---	---	
	side	A	B	---	---	
14	<u>Impairment of burner by dropping or falling material:</u> Time ¹⁾	./.	./.	---	---	min:s
15	Premature end of test					
	Final occurrence of burning at the specimen ¹⁾	0:40	0:35	./.	---	min:s
16	Time of eventually end of test ¹⁾	./.	./.	./.	---	min:s
17	<u>Afterburning after end of test</u> Time ¹⁾	./.	./.	---	---	min:s
18	Number of specimen	./.	./.	---	---	
19	Front side of specimen ²⁾	./.	./.	---	---	
20	Rear side of specimen ²⁾	./.	./.	---	---	
21	flame length	./.	./.	---	---	cm
22	<u>Afterglow after end of test</u> Time ¹⁾	./.	./.	---	---	min:s
23	Number of specimen	./.	./.	---	---	
	<u>Place of appearance</u>	./.	./.	---	---	
24	Lower half of the specimen ²⁾	./.	./.	---	---	
25	Upper half of the specimen ²⁾	./.	./.	---	---	
26	Front side of specimen ²⁾	./.	./.	---	---	
27	Rear side of specimen ²⁾	./.	./.	---	---	
28	<u>Density of smoke</u> ≤ 400 % * min	1	1	---	---	% * min
29	> 400 % * min ⁴⁾	./.	./.	---	---	% * min
30	Diagram in enclosure no.	1	2	---	---	
31	<u>Residual lengths:</u> individual values ³⁾ Specimen 1 Specimen 2 Specimen 3 Specimen 4	54 27 ^{*)} 61 55	63 71 66 62	---	---	cm cm cm cm
32	<u>Average residual length³⁾</u>	57	66	---	---	
33	<u>Photo of specimen in enclosure no.</u>	1	2	---	---	
34	<u>Flue gas temperature</u> Maximum of average values	109	119	---	---	°C
35	Time ¹⁾	9:54	09:15	---	---	min:s
36	Diagram in enclosure no.	1	2	---	---	
37	Remarks: - none -					

¹⁾ indication of times relative to beginning of test

²⁾ checked if applicable

³⁾ indication of carrier/foam layer separated in case of fire-proofing agents

⁴⁾ very strong development of smoke

^{*)} not evaluated, as the specimen tipped over from the front during the test

6. Explanations concerning the testing procedure

The remaining tests could be skipped as the residual lengths exceeded 45cm.

7. Summary of results and additional establishments to Fire Behaviour

line no.	Measurement	Result with the tested specimen				dimension
	test-no.	#2107 warp direction side A	#2108 warp direction side B	---	---	
1	residual length	57	66	---	---	cm
2	max. smoke temperature	109	119	---	---	°C
3	integral of smoke density	1	1	---	---	%min
4	remarks: none					

According to DIN 4102, pt. 1, hardly flammable ("schwerentflammbare") building materials must meet the requirements of class B2.

After performing additional tests in the ignitability apparatus, this could be verified (encl. 3).

8. Special remarks

- This report is only valid for the material as described in paragraph 1. In combination with other materials or with additional coatings or primers etc., the burning behaviour may differ.
- This test report is not valid for the exposure to outdoor climate conditions, washing or cleaning with chemicals.
- This test report is no substitute for a General Building Inspectorate Certificate.
- This test report is granted without prejudice to the rights of third parties, in particular private proprietary rights.
- For legal interests, only the German original version is relevant.
- No measurement uncertainties of the results were taken into account in the assessment
- In General Building Inspectorates procedures, this test report can be used for
 - regular building materials for the required proof of accordance
 - for not regular building materials for the required proof of applicability

9. Validity

This test report is valid until the denoted date on page 1. The test report becomes invalid in case the standards on which these tests are based are changed.

Fladungen, 11.08.2026

Clerk in charge:

M. Vey

(Martin Vey)



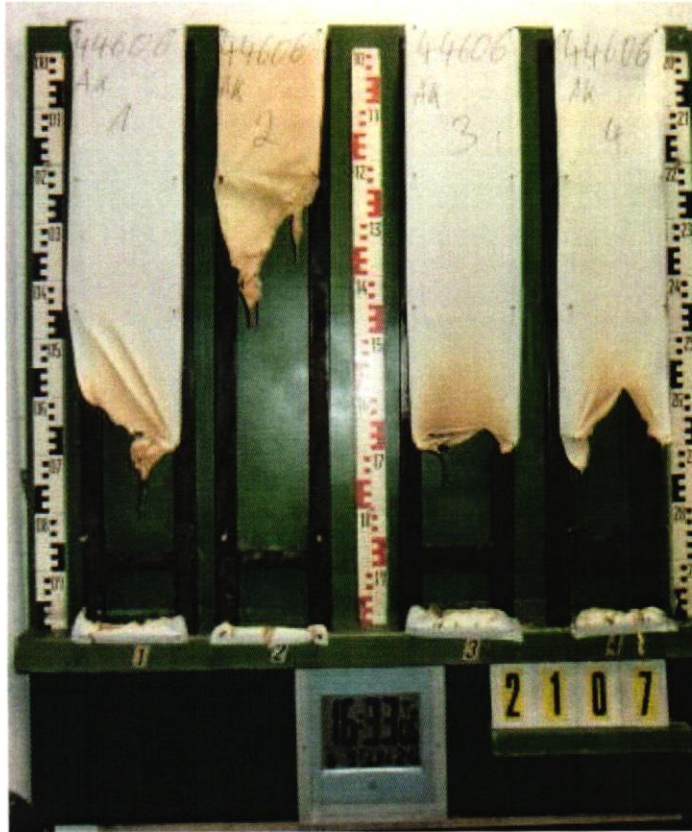
Head of test laboratory:

Andreas Hoch

(Dipl.-Ing. (FH) Andreas Hoch)

----- End of report -----

Fire shaft test #2107

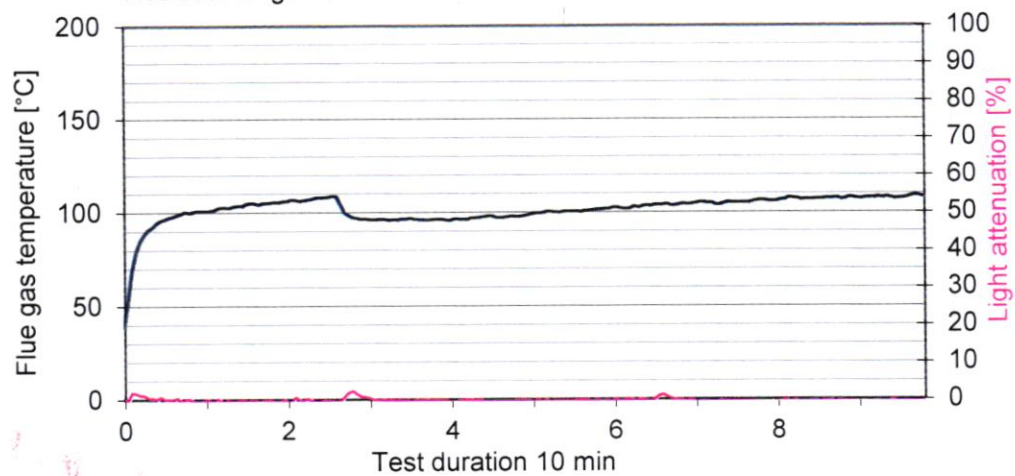


measurement

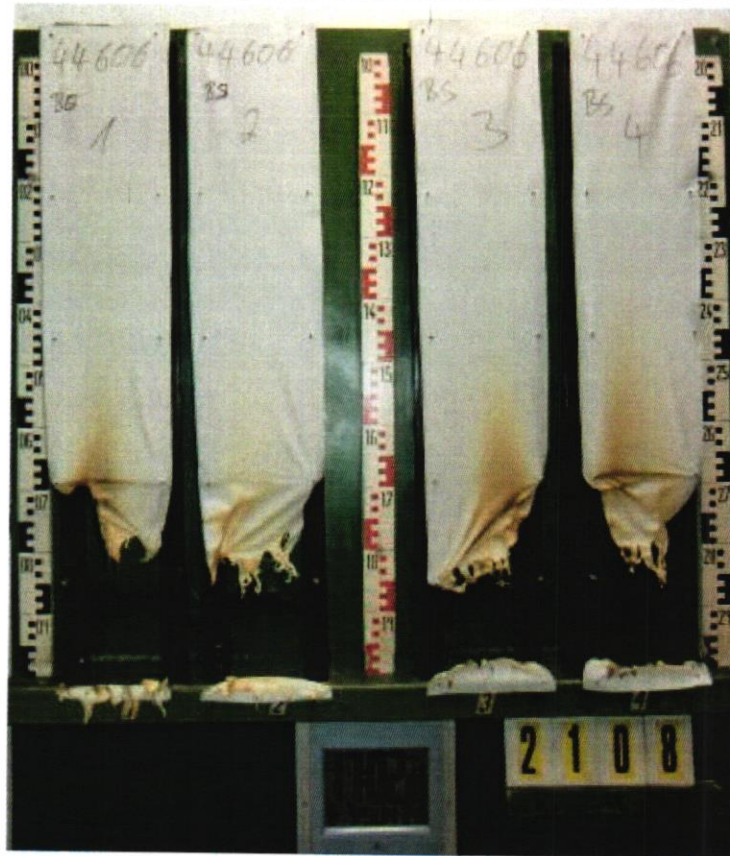
#2107, PN44606: A+K

Max. flue temperature: 109°C, Smoke density integral: 1%/min

Residual length: 57 cm



Fire shaft test #2108

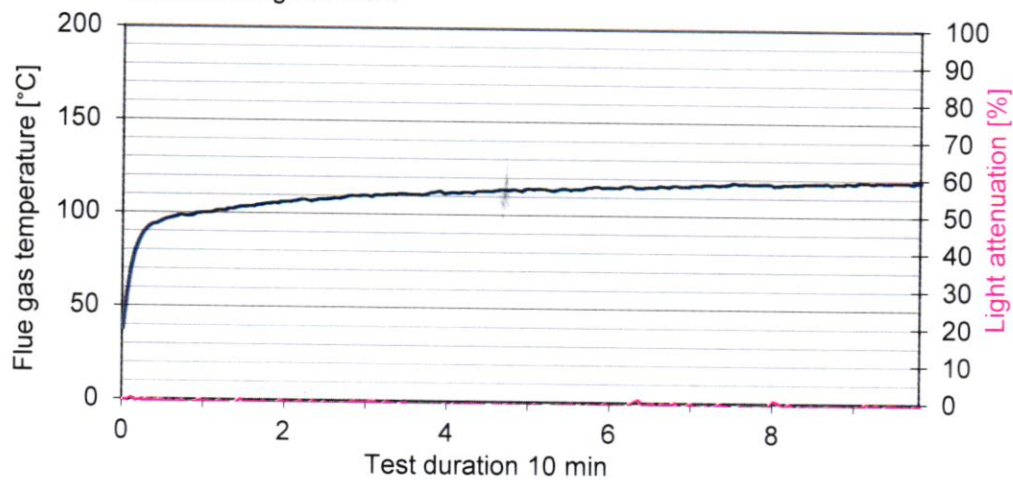


measurement

#2108, PN44606: B+S

Max. flue temperature: 119°C, Smoke density integral: 1%/min

Residual length: 66 cm



**Test for normal flammability
classifying B2 according to DIN 4102**

1. Description of test material in condition as delivered cf. page 2
2. Preparation of samples
Samples for the ignitability apparatus were cut from the sample.
The samples were kept in a climate 23/50 until they reached constant weight.
3. Arrangement of samples freely suspended
Flaming side A and side B in warp and in weft direction
4. Date of test CW 31 in 2026
5. Results

PN 44606: flaming side B in weft direction	surface-test						edge-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition ¹⁾	2	2	2	2	2	--	1	--	--	--	--	--	s
reaching the mark of measurement ¹⁾²⁾	./.	./.	./.	./.	./.	--	./.	--	--	--	--	--	s
max. flame height	8	8	5	6	5	--	5	--	--	--	--	--	cm
time	8	8	5	6	5	--	6	--	--	--	--	--	s
self cessation of the flames end of afterflame ¹⁾	9	9	6	7	6	--	7	--	--	--	--	--	s
end of glowing ¹⁾	./.	./.	./.	./.	./.	--	./.	--	--	--	--	--	s
flames were extinguished after ¹⁾	./.	./.	./.	./.	./.	--	./.	--	--	--	--	--	s
smoke development (visual)	moderate						moderate						
dropping of burning material during 20 s ¹⁾	./.	./.	./.	./.	./.	--	./.	--	--	--	--	--	s
Appearance after test: burned out till max. height 7 cm x width 3 cm													

PN 44606: additional tests	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
flamed side / direction	A/K	B/K	A/S				A/K	B/K	A/S				
ignition ¹⁾	1	1	1	--	--	--	2	2	2	--	--	--	s
reaching the mark of measurement ¹⁾²⁾	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
max. flame height	4	4	6	--	--	--	7	7	4	--	--	--	cm
time	3	4	3	--	--	--	5	8	4	--	--	--	s
self cessation of the flames end of afterflame ¹⁾	4	4	4	--	--	--	6	9	5	--	--	--	s
end of glowing ¹⁾	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
flames were extinguished after ¹⁾	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
smoke development (visual)	moderate						moderate						
dropping of burning material during 20 s ¹⁾	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
Appearance after test: burned out till max. height 7 cm x width 3 cm													

¹⁾ time denoted relative to beginning of test ²⁾ during 20 Sec -/- no occurrence -- no information

6. Remarks and explanations to the testing procedure - none -

7. Opinion concerning the dropping of burning material

The test for normal flammability shows no dropping burning material.

-----End of enclosures-----