

Test laboratory for the fire behavior of building materials, Dipl.-Ing. (FH) Andreas Hoch
Testing, supervising and certifying body, authorized by the building supervision authority

TEST REPORT

PZ-Hoch-220953

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	Antalis GmbH Europaallee 19 D-50226 Frechen
description of samples	white fabric consisting of 100% Polyester
name of the material	„COALA CANVAS PET“
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	30.09.2027
result	The examined product meets glued with wallpaper paste “Methylan Vlies” on • massive mineral substrates with a density of $\geq 1.500 \text{ kg/m}^3$ and thickness of $\geq 0,6\text{mm}$ • massive mineral substrates with a density of $\geq 650 \text{ kg/m}^3$ and thickness of $\geq 11\text{mm}$ • non-combustible building boards the requirements of class B1 for “schwerentflammbare” (hardly flammable) building materials according to DIN 4102, part 1 (May 1998). The examined compound shows burning droplets.

This test report includes 4 pages and 5 enclosures.

Remark: If the above mentioned building material is not used as product according to MBO § 2, Abs. 9, Ziffer 1, there is no need for a general building supervisory test report.

This test report is not valid if the examined building material is used as product in the meaning of state building prescriptions (MBO § 17, Abs. 3).

This test report does not replace an eventually necessary proof of applicability concerning building supervisory or building laws in the meaning of state building prescriptions. This has to be verified 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 non-regular building products for the needed proofs of applicability.

This test report must not be published and copied without preceding agreement of the test laboratory and if agreed, only during validity and unchanged concerning appearance and contents.

1. Description of test material in condition as delivered

PN 35711: „COALA CANVAS PET“

-fabric consisting of 100% Polyester-

side B: matt surface (front)

side A: backside

characteristic values determined by the test laboratory:

area weight: about 295 g/m² thickness: about 0,43mm

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

2. Preparation of samples

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

- The fabric was glued with wallpaper paste "Methylan Vlies" (applied quantity about 170g/m²) on gypsum plaster boards according to DIN EN 520: thickness 12,5±0,5mm, density 700±100 kg/m³, class A2-s1,d0 nach EN 13501-1, according to DIN 4102-16: 2015-09, Punkt 4.4, c.

3. Arrangement of samples

#5734:	„COALA CANVAS PET“	machine direction
#5739:	„COALA CANVAS PET“	transverse direction
#5792:	„COALA CANVAS PET“	machine direction
#5793:	„COALA CANVAS PET“	machine direction

4. Date of test CW 39 and CW 42 in 2022

5. Results The test has been examined according to DIN 4102 (Mai 1998)

line no.	Measurement	Result with the tested specimen						dim.
	Test number	#5734	#5739	#5792	#5793	---	---	
	<u>flamed direction</u>	machine dir.	transv. dir.	machine dir.	machine dir.	---	---	
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	7	7	7	7	---	---	
2	Maximum flame height above bottom edge of the specimen	80	80	90	90	---	---	cm
3	Time ¹⁾	1:45	1:20	0:40	1:20	---	---	min:s
4	Burn through / melting Time ¹⁾	./.	./.	./.	./.	./.	./.	min:s
	<u>Observations on the back side of the specimen</u>							
5	Flames / Glowing Time ¹⁾	---	---	---	---	---	---	min:s
6	Change of colour Time ¹⁾	./.	./.	./.	./.	./.	./.	min:s
7	Falling of burning droplets Start ¹⁾	X 0:39	./. 	X 0:53/3:55	./. 	./. 	./. 	min:s
8	Extent sporadic falling of burning droplets ²⁾	X	---	X	---	---	---	
9	continuous falling of burning droplets ²⁾	---	---	---	---	./. 	./. 	min:s

line no.	Measurement	Result with the tested specimen						dim.
	Test number	#5734	#5739	#5792	#5793	---	---	
10	<u>Falling of burning droplets</u>	./.	./.	./.	./.	./.	./.	min:s
	Start ¹⁾	./.	./.	./.	./.	./.	./.	
	Extent	./.	./.	./.	./.	./.	./.	
11	sporadic falling of burning droplets ²⁾	./.	./.	./.	./.	./.	./.	
12	continuous falling of burning droplets ²⁾	./.	./.	./.	./.	./.	./.	
13	<u>After flame time at the bottom of the sieve (max.)</u>	0:28	./.	0:09/0:23	./.	./.	./.	min:s
14	<u>Impairment of the burner by dropping or falling material:</u>							
	Time ¹⁾	./.	./.	./.	./.	./.	./.	min:s
15	<u>Premature end of test</u>							
	Final occurrence of burning at the specimen ¹⁾	6:47	10:00	10:00	10:00	---	---	min:s
16	Time of eventually end of test ¹⁾	./.	./.	./.	./.	./.	./.	min:s
17	<u>After flame after end of test</u>							
	Time ¹⁾	./.	./.	./.	./.	./.	./.	min:s
18	Number of specimen	./.	./.	./.	./.	./.	./.	
19	Front side of specimen ²⁾	./.	./.	./.	./.	./.	./.	
20	Back side of specimen ²⁾	./.	./.	./.	./.	./.	./.	
21	flame length	./.	./.	./.	./.	./.	./.	cm
22	<u>Afterglow after end of test</u>	./.	./.	./.	./.	./.	./.	min:s
	Time ¹⁾	./.	./.	./.	./.	./.	./.	
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	Back side of specimen ²⁾	./.	./.	./.	./.	./.	./.	
28	<u>Density of smoke</u>							
	≤ 400 % * min	26	20	25	22	---	---	% * min
29	> 400 % * min ⁴⁾	./.	./.	./.	./.	./.	./.	% * min
30	Diagram: encl. no.	1	2	3	4	---	---	
31	<u>Residual lengths: individual value ³⁾</u>							
	Specimen 1	32	35	33	34	---	---	cm
	Specimen 2	34	29	31	30	---	---	cm
	Specimen 3	33	31	31	32	---	---	cm
	Specimen 4	33	33	30	36	---	---	cm
32	<u>Average value, individual test ³⁾</u>	33	32	31	33	---	---	
33	<u>Photo of specimen in enclosure no.</u>	1	2	3	4	---	---	
34	<u>Flue gas temperature</u>	124	133	134	133	---	---	°C
35	Maximum of average value							
	Time ¹⁾	01:44	01:35	01:08	01:23	---	---	min:s
36	Diagram: encl. no.	1	2	3	4	---	---	

¹⁾ indication of times: from the begin of testing procedure

²⁾ checked off if applicable

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

⁴⁾ very strong development of smoke

6. Explanations concerning the testing procedure

-none-

7. Summary of results and additional establishments to Fire Behaviour

line	measurement	Result with the tested specimen						dim.
	test-no.	#5734	#5739	#5792	#5793	---	---	
	<u>flamed direction</u>	machine dir.	transv. dir.	machine dir.	machine dir.	---	---	
1	residual length	33	32	31	33	---	---	cm
2	max. smoke temperature	124	133	134	133	---	---	°C
3	density of smoke - integral	26	20	25	22	---	---	%min
4	remarks: During the "Brandschacht"-tests #5734 and #5792 the material showed burning droplets for >20 seconds.							

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

Pursuant to additional tests in the ignitability apparatus this can be determined (appendix 5).

8. Special remarks

- This report is only valid for the material as described under paragraph 1. In combination with other materials or with additional coatings or grounds etc. the burning behaviour may differ.
- This test report is not valid for the exposure to outdoor climate conditions.
- This test report is not valid, as soon as the fabric is used as a building product in the sense of the "Landesbauordnungen" (state building requirements, MBO § 17, par. 3).
- 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.
- In General Building Inspectorates procedures this test report can be based 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 mentioned date on page 1. The test report becomes invalid in case the standards on which the tests are based are changed.

Fladungen, 24.10.2022

clerk in charge:



(Dipl.-Ing.(FH) Jürgen Hammer)

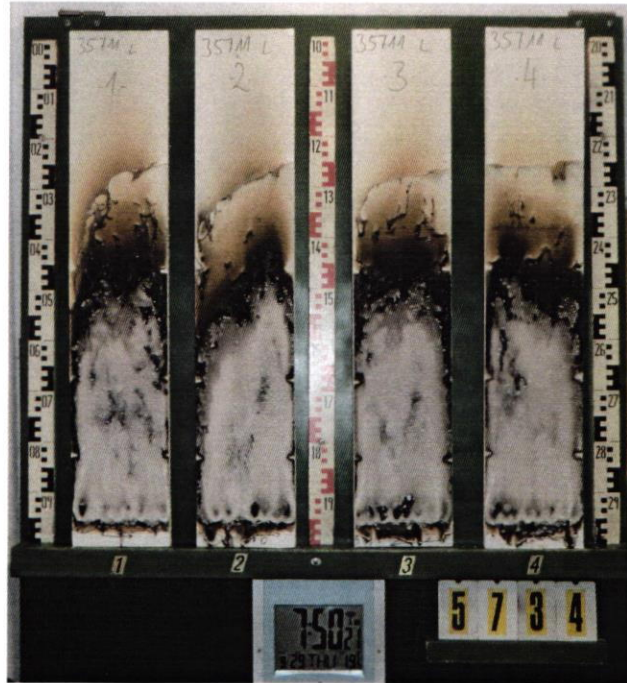


Head of the test laboratory:



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

„Brandschacht“-test #5734

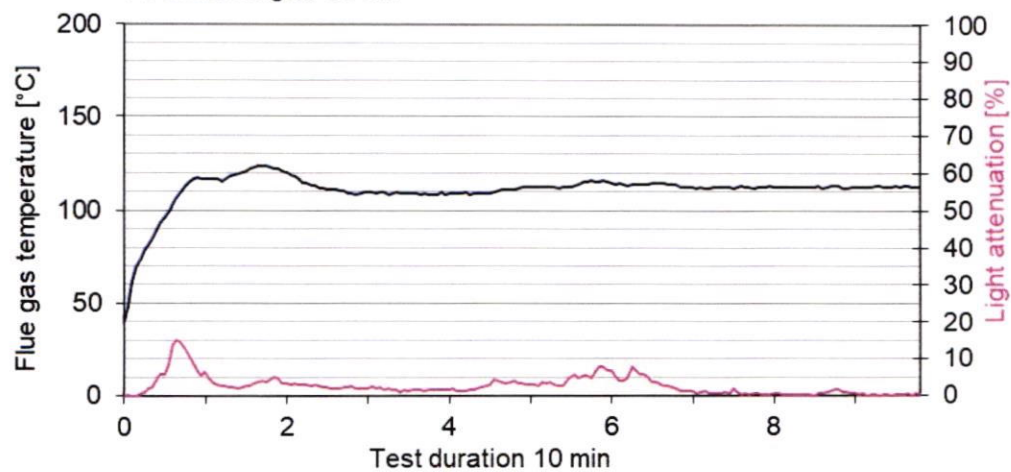


measurement

#5734, PN35711: ANTALIS, "COALA CANVAS PET", längs

Max. flue temperature: 124°C, Smoke density integral: 26%min

Residual length: 33 cm

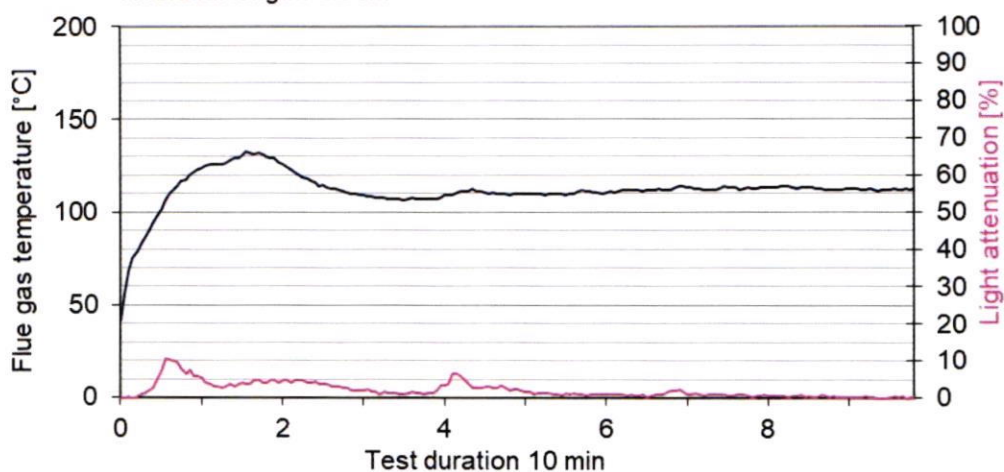


„Brandschacht“-test #5739



measurement

#5739, PN35711: ANTALIS, "COALA CANVAS PET", quer
Max. flue temperature: 133°C, Smoke density integral: 20%/min
Residual length: 32 cm



„Brandschacht“-test #5792

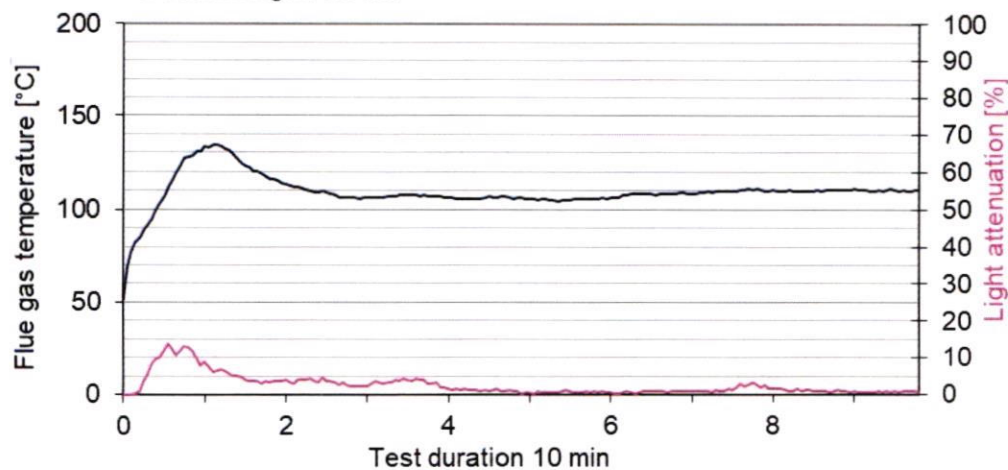


measurement

#5792, PN35711: ANTALIS, "COALA CANVAS PET", längs

Max. flue temperature: 134°C, Smoke density integral: 25%min

Residual length: 31 cm



„Brandschacht“-test #5793

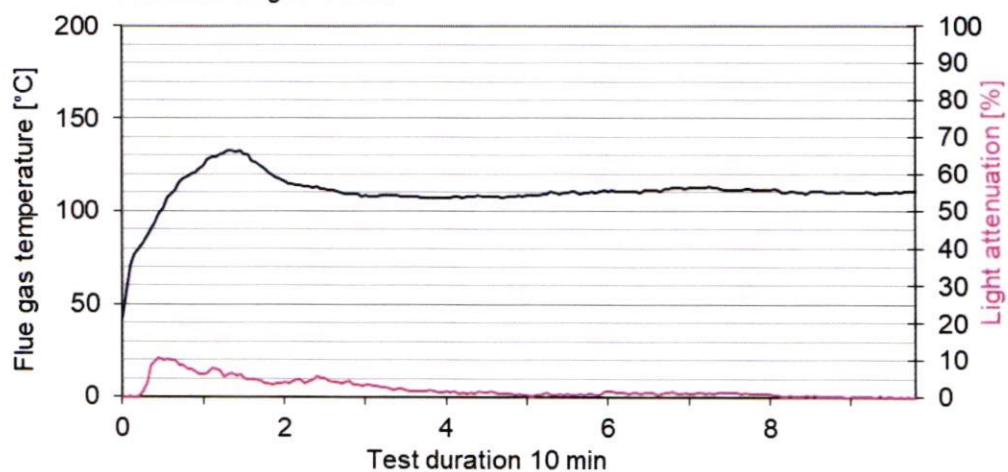


measurement

#5793, PN35711: ANTALIS, "COALA CANVAS PET", längs

Max. flue temperature: 133°C, Smoke density integral: 22%min

Residual length: 33 cm



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

1. Description of test material in condition as delivered look at page 2

2. Preparation of samples

Out of the material there have been cut samples for the ignitability apparatus.

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

3. Arrangement of samples

-glued with "Methylan Vlies" (applied quantity: about 170g/m²) on gypsum plaster boards-

-flaming the edge and the surface

4. Date of test CW 39 in 2022

5. Results

PN 35711: -glued on gypsum plaster boards-	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition ¹⁾	1	1	1	1	1	1	4	4	--	--	--	--	s
reaching the mark of measurement ¹⁾²⁾	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	--	--	s
max. flame height	3	3	3	3	3	3	3	3	--	--	--	--	cm
Time	15	15	15	15	15	15	15	15	--	--	--	--	
self-cessation of the flames end of afterflame ¹⁾	15	15	15	15	15	15	32	23	--	--	--	--	s
end of glowing ¹⁾	15	15	15	15	15	15	-/-	-/-	--	--	--	--	s
flames were extinguished after ¹⁾	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	--	--	--	--	
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 2,5 cm													

¹⁾ time mentioned from the beginning of the test ²⁾ during 20 Sec -/- no appearance -- 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 burning dripping material.