

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-210637-6

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	englisch dekor HandelsgmbH & Co KG Scheydgasse 29 A-1210 Wien
description of samples	fabric consisting of polyester
name of the material	„V7114-V7141“
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	31.05.2026
result	The examined product meets • in any colour and • in an area weight from 33 g/m² to 241 g/m² in the requirements of class B1 for “schwerentflammbare” (hardly flammable) building materials according to DIN 4102, part 1 (May 1998), suspended freely or with distance of >40 mm to same or other plain materials.

This test report includes 7 pages and 10 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This test report must not be published and copied without preceding agreement of the test laboratory and if agreed, only during validity and unchanged concerning appearance and contents.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 33304 "sample 1" colour: red low area weight**
fabric consisting of 100% polyester
no difference between side A and B
characteristic values determined by the test laboratory:
area weight: about 39 g/m² thickness: about 0,21 mm
- PN 33307 "sample 2" colour: black high area weight**
fabric consisting of 100% polyester
no difference between side A and B
characteristic values determined by the test laboratory:
area weight: about 216 g/m² thickness: about 0,53 mm
- PN 33308 "sample 3" colour: red high area weight**
fabric consisting of 100% polyester
no difference between side A and B
characteristic values determined by the test laboratory:
area weight: about 225 g/m² thickness: about 0,54 mm
- PN 33309 "sample 4" colour: white high area weight**
fabric consisting of 100% polyester
no difference between side A and B
characteristic values determined by the test laboratory:
area weight: about 221 g/m² thickness: about 0,55 mm

From test report PZ-Hoch-160836:

- PN 23692 "sample 5" colour: crème lowest area weight**
fabric consisting of 100% polyester
no difference between side A and B
characteristic values determined by the test laboratory:
area weight: about 33 g/m² thickness: about 0,10 mm
- PN 23696 "sample 6" colour: black highest area weight**
fabric consisting of 100% polyester
no difference between side A and B
characteristic values determined by the test laboratory:
area weight: about 241 g/m² thickness: about 0,60 mm

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.

3. Arrangement of samples mounting: freely suspended

#4508:	flaming side A in warp direction	red	high area weight
#4509:	flaming side B in weft direction	red	high area weight
#4510:	flaming side A in warp direction	black	high area weight
#4511:	flaming side A in warp direction	white	high area weight
#4512:	flaming side A in warp direction	red	low area weight
#8194:	flaming side A in warp direction	black	highest area weight
#8197:	flaming side A in warp direction	crème	lowest area weight

4. Date of test CW 33 in 2016 and CW 19 and CW 20 in 2021

5.1 Results (part 1) The test has been examined according to DIN 4102 (Mai 1998)

line no.	Measurement	Result with the tested specimen					Dim.
	Test number	#4508	#4509	#4510	#4511	#4512	
	flaming direction / side	warp / A	weft / B	warp / A	warp / A	warp / A	
	colour	red	red	black	white	red	
	high / low area weight	high	high	high	high	low	
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	1	1	1	1	1	
2	Maximum flame height above bottom edge of the specimen	30	30	30	30	30	cm
3	Time ¹⁾	0:02	0:02	0:02	0:02	0:02	min:s
4	Burn through / melting Time ¹⁾	0:04	0:04	0:04	0:04	0:02	min:s
	Observations on the back side of the 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⁾	./.	./.	./.	./.	./.	
11	Falling of burning droplets Start ¹⁾	./.	./.	./.	./.	./.	min:s
12	Extent	./.	./.	./.	./.	./.	
13	sporadic falling of burning droplets ²⁾	./.	./.	./.	./.	./.	min:s
14	continuous falling of burning droplets ²⁾	./.	./.	./.	./.	./.	
	After flame time at the bottom of the sieve (max.)	./.	./.	./.	./.	./.	min:s
	Impairment of the burner by dropping or falling material: Time ¹⁾	./.	./.	./.	./.	./.	min:s

line no.	Measurement	Result with the tested specimen					Dim.
	Test number	#4508	#4509	#4510	#4511	#4512	
	flaming direction / side	warp / A	weft / B	warp / A	warp / A	warp / A	
15	<u>Premature end of test</u> Final occurrence of burning at the specimen ¹⁾	. / .	. / .	. / .	. / .	. / .	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> Time ¹⁾	. / .	. / .	. / .	. / .	. / .	min:s
23	Number of specimen	. / .	. / .	. / .	. / .	. / .	
24	<u>Place of appearance</u> 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	1	1	1	1	1	% * min
29	> 400 % * min ⁴⁾	. / .	. / .	. / .	. / .	. / .	% * min
30	Diagram: encl. no.	1	2	3	4	5	
31	<u>Residual lengths:</u> individual value ³⁾ Specimen 1 Specimen 2 Specimen 3 Specimen 4	63 65 62 64	68 64 68 63	70 65 69 68	66 70 67 64	59 61 59 62	cm cm cm cm
32	<u>Average value, individual test</u> ³⁾	64	66	68	67	60	
33	<u>Photo of specimen in enclosure no.</u>	1	2	3	4	5	
34	<u>Flue gas temperature</u> Maximum of average value	119	118	118	115	114	°C
35	Time ¹⁾	09:30	09:57	09:54	10:00	09:24	min:s
36	Diagram: encl. no.	1	2	3	4	5	
37	Remarks: - none -						

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

5.2 Results (part 2)

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

line no.	Measurement	Result with the tested specimen					Dim.
	Test number	#8194	#8197	---	---	---	
	flaming direction / side	warp / A	warp / A	---	---	---	
	colour	black	creme				
	high / low area weight	highest	lowest	---	---	---	
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	1	1	---	---	---	
2	Maximum flame height above bottom edge of the specimen	40	40	---	---	---	cm
3	Time ¹⁾	0:06	0:03	---	---	---	min:s
4	Burn through / melting Time ¹⁾	0:07	0:02	---	---	---	min:s
	Observations on the back side of the 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
11	Falling of burning droplets Start ¹⁾	./. .	./. .	./. .	./. .	./. .	min:s
12	Extent	./. .	./. .	./. .	./. .	./. .	min:s
13	sporadic falling of burning droplets ²⁾	./. .	./. .	./. .	./. .	./. .	min:s
14	continuous falling of burning droplets ²⁾	./. .	./. .	./. .	./. .	./. .	min:s
15	After flame time at the bottom of the sieve (max.)	./. .	./. .	./. .	./. .	./. .	min:s
16	Impairment of the burner by dropping or falling material:						
17	Time ¹⁾	./. .	./. .	./. .	./. .	./. .	min:s
18	Premature end of test						
19	Final occurrence of burning at the specimen ¹⁾	./. .	./. .	./. .	./. .	./. .	min:s
20	Time of eventually end of test ¹⁾	./. .	./. .	./. .	./. .	./. .	min:s
21	After flame after end of test						
22	Time ¹⁾	./. .	./. .	./. .	./. .	./. .	min:s
23	Number of specimen	./. .	./. .	./. .	./. .	./. .	
24	Front side of specimen ²⁾	./. .	./. .	./. .	./. .	./. .	
25	Back side of specimen ²⁾	./. .	./. .	./. .	./. .	./. .	
26	flame length	./. .	./. .	./. .	./. .	./. .	cm

line no.	Measurement	Result with the tested specimen					Dim.
	Test number	#8194	#8197	---	---	---	
	flaming direction / side	warp / A	warp / A	---	---	---	
	<u>Afterglow after end of test</u>	./.	./.	./.	./.	./.	min:s
22	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⁾	./.	./.	./.	./.	./.	
	<u>Density of smoke</u>						
28	≤ 400 % * min	1	1	---	---	---	% * min
29	> 400 % * min ⁴⁾	./.	./.	./.	./.	./.	% * min
30	Diagram: encl. no.	6	7	---	---	---	
	<u>Residual lengths: individual value ³⁾</u>						
31	Specimen 1	64	58	---	---	---	cm
	Specimen 2	64	56	---	---	---	cm
	Specimen 3	67	63	---	---	---	cm
	Specimen 4	63	58	---	---	---	cm
32	<u>Average value, individual test ³⁾</u>	65	59	---	---	---	
33	<u>Photo of specimen in enclosure no.</u>	6	7	---	---	---	
34	<u>Flue gas temperature</u>	121	120	---	---	---	°C
35	Maximum of average value Time ¹⁾	09:30	09:24	---	---	---	min:s
36	Diagram: encl. no.	6	7	---	---	---	
37	Remarks: - none -						

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

There were no additional tests proceeded because of the residual length of more than 45 cm.

7. Summary of results and additional establishments to Fire Behaviour

lineno.	measurement	Result with the tested specimen					dimension
	test-no.	#4508 warp / A	#4509 weft / B	#4510 warp / A	#4511 warp / A	#4512 warp / A	
	colour high / low area weight	red high	red high	black high	white high	red low	
1	residual length	64	66	68	67	60	cm
2	max. smoke temperature	119	118	118	115	114	°C
3	density of smoke - integral	1	1	1	1	1	%min

lineno.	measurement	Result with the tested specimen					dimension
	test-no.	#8194 warp / A	#8197 warp / A	—	—	—	
	colour high / low area weight	black highest	creme lowest	—	—	—	
1	residual length	65	59	—	—	—	cm
2	max. smoke temperature	121	120	—	—	—	°C
3	density of smoke - integral	1	1	—	—	—	%min

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 8 - 10).

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, washing or cleaning with chemicals.
- 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

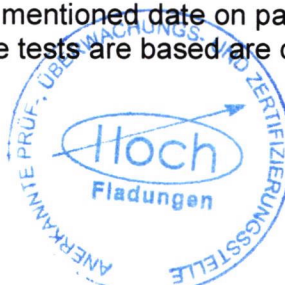
9. Validity

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, 18.06.2021

clerk in charge:

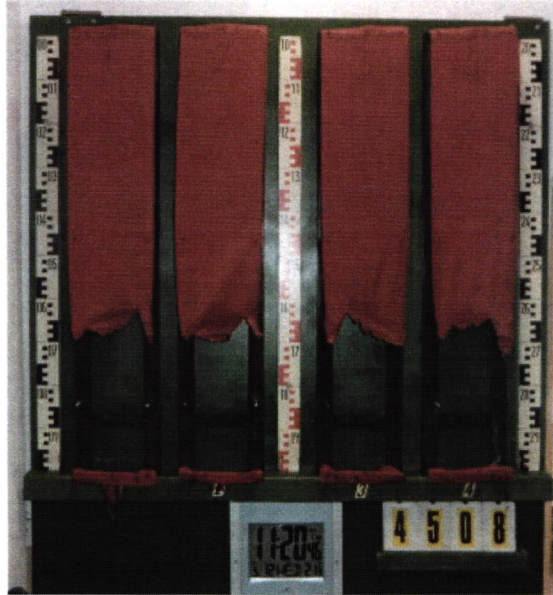

(Silke Biendara)



Head of the test laboratory:


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

„Brandschacht“-test #4508

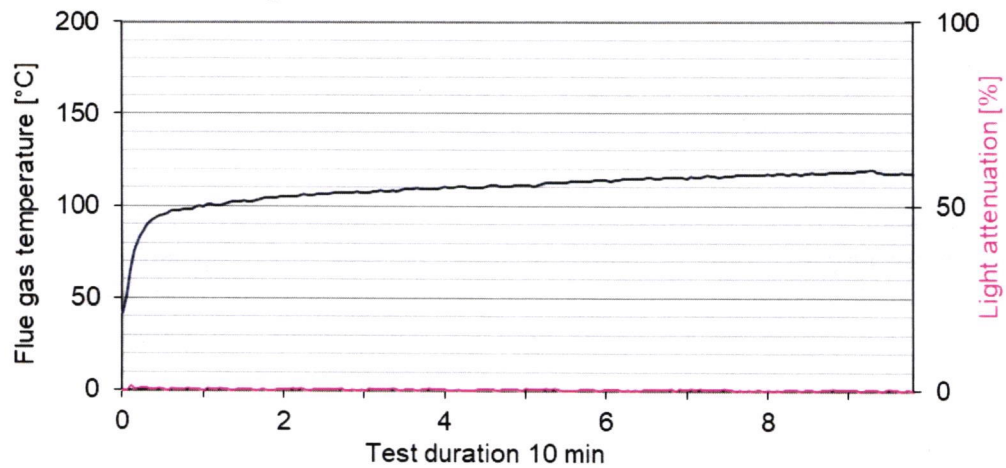


measurement

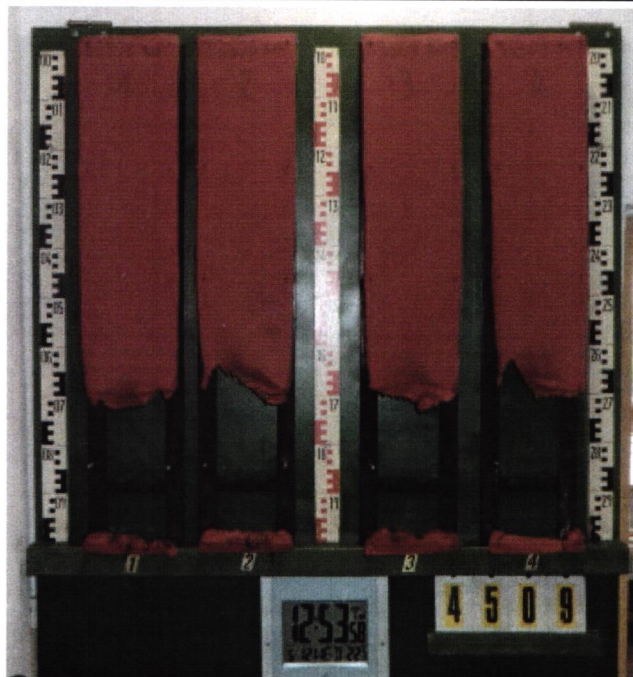
#4508, PN33308: Englisch Dekor, "sample 3", A+K

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

Residual length: 64 cm



„Brandschacht“-test #4509

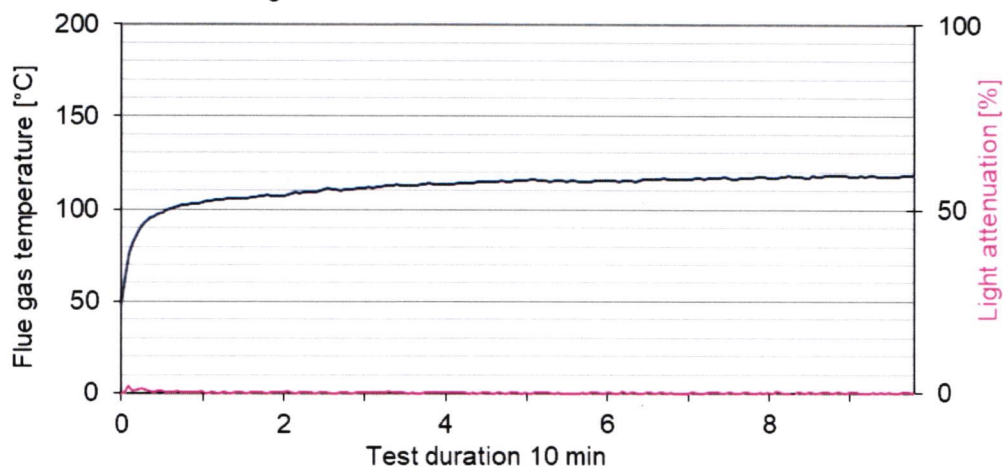


measurement

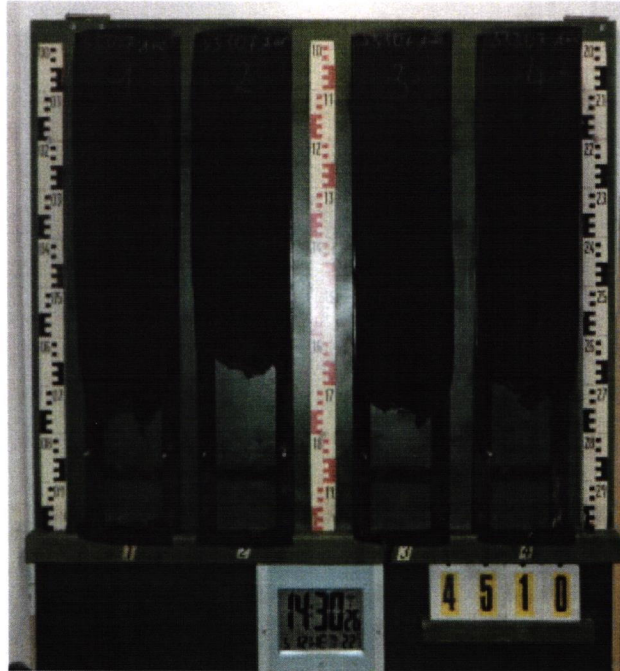
#4509, PN33308: Englisch Dekor "sample 3", B+S

Max. flue temperature: 118°C, Smoke density integral: 1%/min

Residual length: 66 cm



„Brandschacht“-test #4510

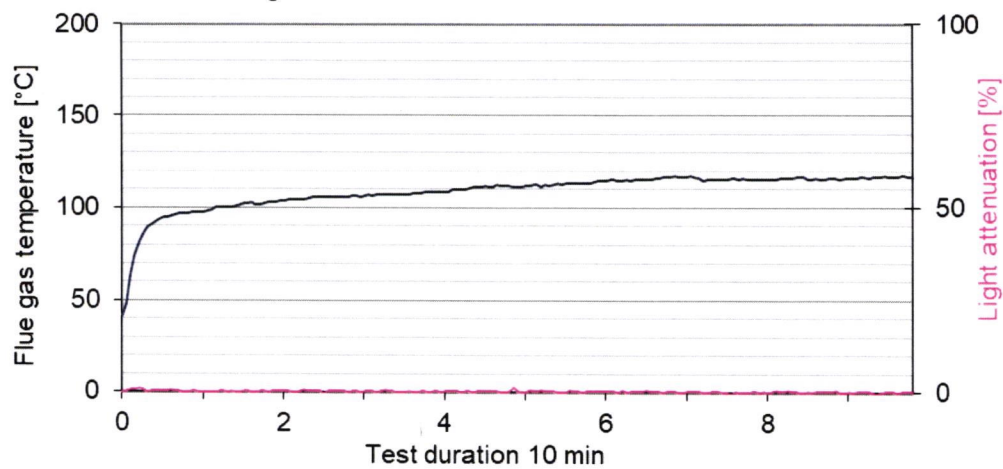


measurement

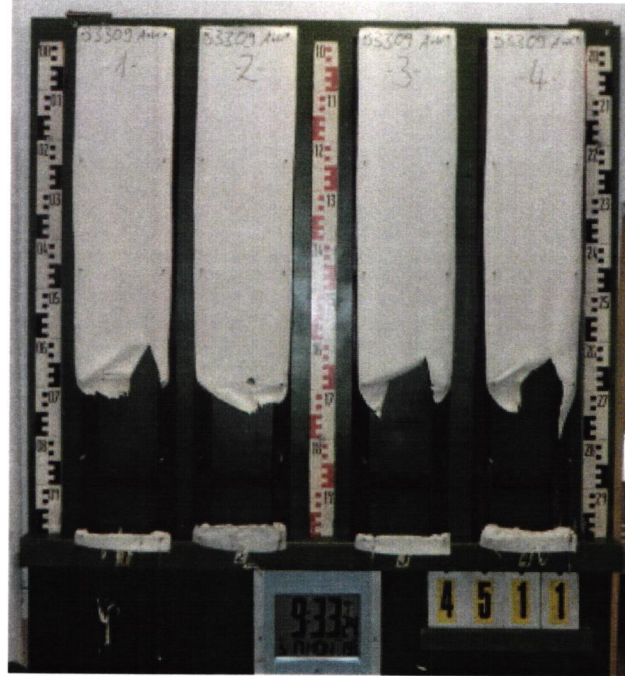
#4510, PN33307: Englisch Dekor, "sample 2", A+K

Max. flue temperature: 118°C, Smoke density integral: 1%min

Residual length: 68 cm



„Brandschacht“-test #4511

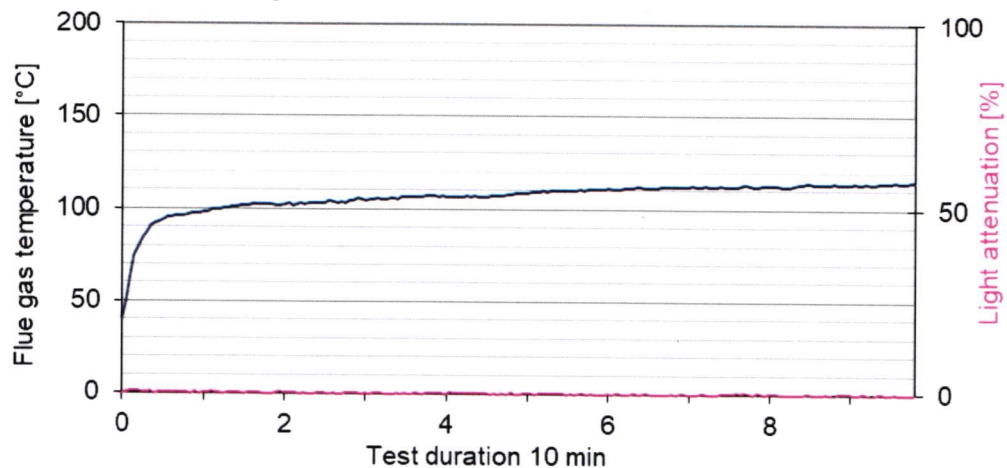


measurement

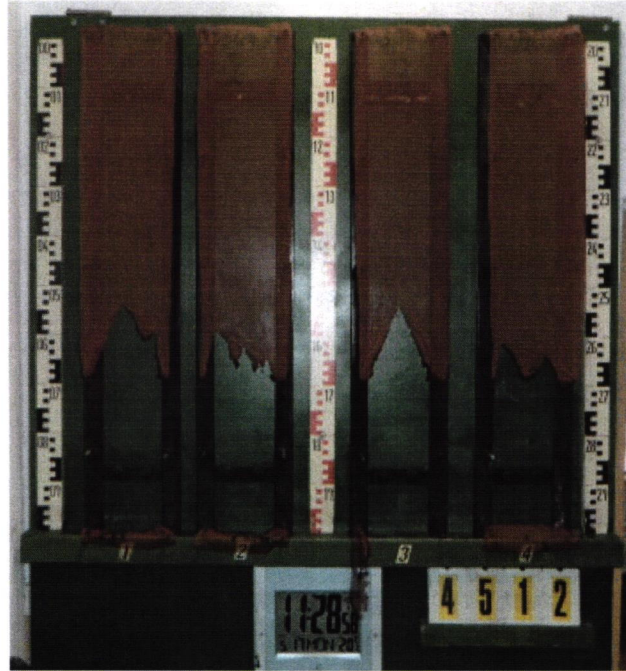
#4511, PN33309: Englisch Dekor, "sample 4", A+K

Max. flue temperature: 115°C, Smoke density integral: 1%min

Residual length: 67 cm



„Brandschacht“-test #4512

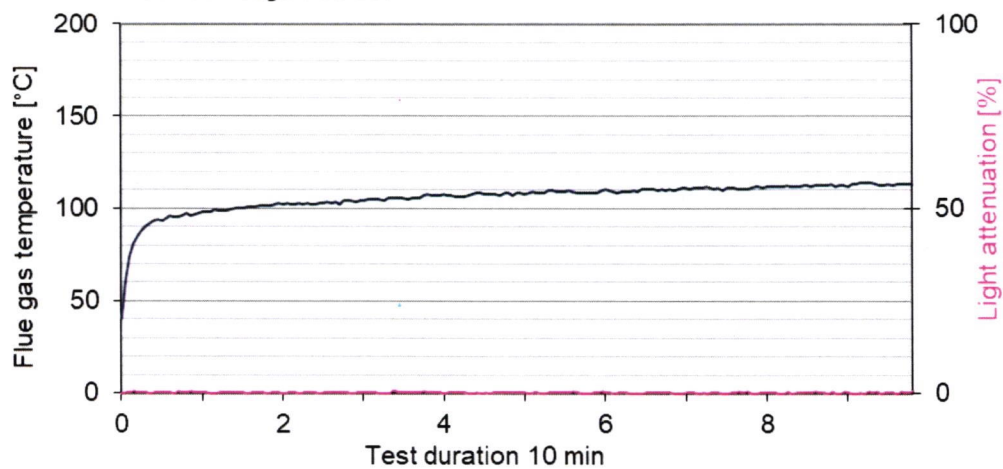


measurement

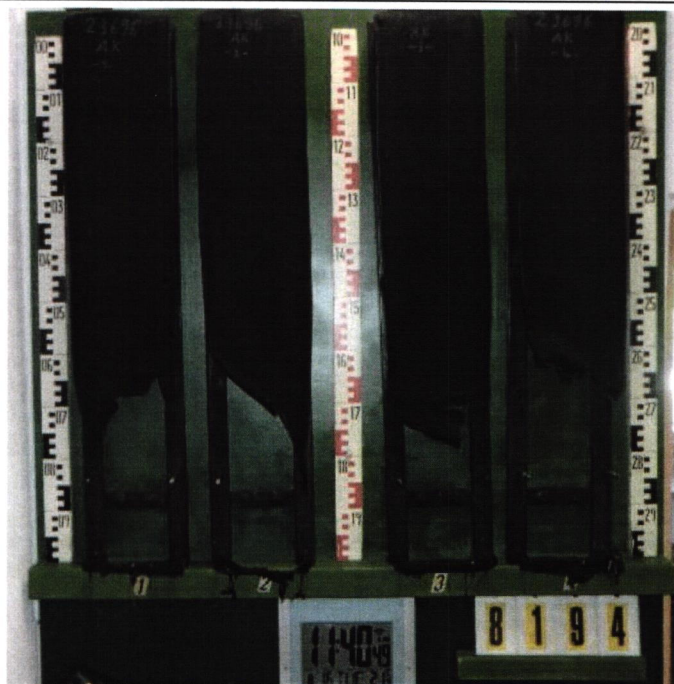
#4512, PN33304: Englisch Dekor, "sample 1", A+K

Max. flue temperature: 114°C, Smoke density integral: 1%min

Residual length: 60 cm

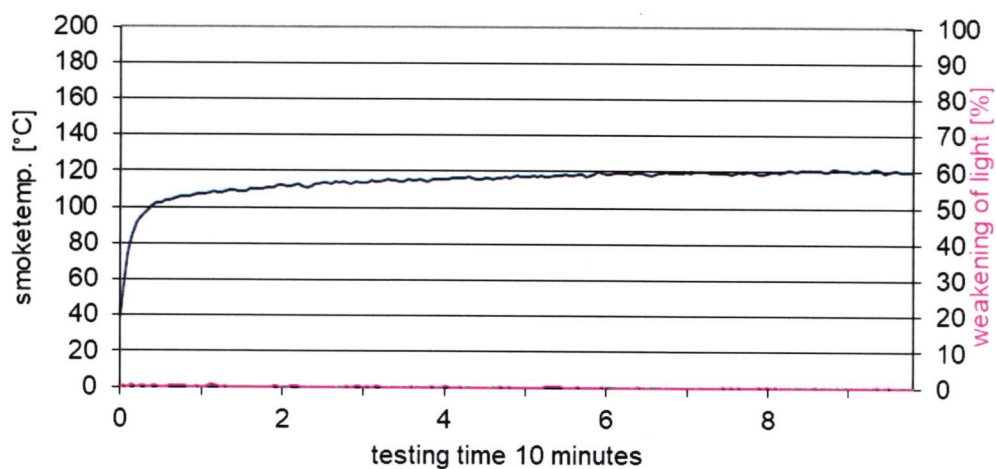


„Brandschacht“-test #8194



measurement

#8194, Englisch Dekor, "sample 6", A+K, PN 23696
residual length: 65cm, max. smoketemp.: 121°C, smoke-Int.: 1%/min



„Brandschacht“-test #8197



measurement

#8197, Englisch Dekor, "sample 5", A+K, PN 23692
residual length: 59cm, max. smoketemp.: 120°C, smoke-Int.: 1%/min

