

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-180006-4

**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**  
original test and aging test after 2-years and 5-years weathering

<b>company</b>	<b>Rovero</b> Krabbescheer 6 NL-4941 VW Raamsdonksveer
<b>description of samples</b>	grid reinforced transparent PE-foil
<b>name of the material</b>	„Gewächshausfolie Roll Air“
<b>sampling</b>	by the company itself
<b>content of request</b>	Proof of flammability to classify building materials to class B1 “schwerentflammbar” according to DIN 4102, part 1
<b>validity of test report</b>	31.10.2023
<b>result</b>	<b>The examined product meets also after 5-years weathering 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 &gt;40 mm to same or other plain materials.</b> <b>The examined product shows burning droplets after 2-years weathering.</b>

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This test report must not be published and copied without preceding agreement of the test laboratory and if agreed, only during validity and unchanged concerning appearance and contents.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 26539: "Gewächshausfolie Roll Air"  
-grid reinforced transparent PE-foil- / **side A: flat**  
characteristic values determined by the test laboratory:  
area weight: about 283 g/m<sup>2</sup>      thickness: about 0,70 mm

### Reference test for aging tests after weathering:

PN 26539: "Gewächshausfolie Roll Air"  
-grid reinforced transparent PE-foil- / **side A: flat**  
characteristic values determined by the test laboratory:  
area weight: about 266 g/m<sup>2</sup>      thickness: about 0,58 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

#9791      flaming side A in machine direction  
#9844      flaming side B in machine direction  
#9845      flaming side B in transverse direction

### Reference test for aging tests after weathering:

#1638      flaming side B in machine direction      PN 28001

### Aging tests after weathering:

#3790      flaming the unweathered side in machine direction      1<sup>st</sup> aging test  
#6878      flaming the unweathered side in machine direction      2<sup>nd</sup> aging test  
#6879      flaming the unweathered side in transverse direction      2<sup>nd</sup> aging test

## 4. Date of test      CW 02, CW 04 and CW 37 in 2018 and CW 34 in 2020 and CW 38 in 2023

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.
		#9791	#9844	#9845	#1638	#3790 1 <sup>st</sup> aging	
	Test number						
	flamed direction	warp A	warp B	weft B	warp B	unweath. warp	
	flamed side						
1	<u>Number of specimen arrangement</u> acc. to. DIN 4102/T15, schedule 1	1	1	1	1	1	
2	<u>Maximum flame height above bottom edge of the specimen</u>	30	30	30	50	50	cm
3	<u>Time</u> <sup>1)</sup>	0:02	0:02	0:02	2:10	0:25	min:s
4	<u>Burn through / melting</u> <u>Time</u> <sup>1)</sup>	0:05	0:04	0:05	0:05	0:05	min:s
5	<u>Observations on the back side of the specimen</u> <u>Flames / Glowing</u> <u>Time</u> <sup>1)</sup>	---	---	---	---	./.	min:s
6	<u>Change of colour</u> <u>Time</u> <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
7	<u>Falling of burning droplets</u> <u>Start</u> <sup>1)</sup>	X 2:09	X 0:12	X 0:24/1:3 4	./. ./.	./. ./.	min:s
8	<u>Extent</u> sporadic falling of burning droplets <sup>2)</sup>	X	X	X	./.	./.	min:s
9	continuous falling of burning droplets <sup>2)</sup>	---	---	---	./.	./.	
10	<u>Falling of burning droplets</u> <u>Start</u> <sup>1)</sup>	./.	./.	./.	./.	X 0:25/1:00	min:s
11	<u>Extent</u> sporadic falling of burning droplets <sup>2)</sup>	./.	./.	./.	./.	./.	
12	continuous falling of burning droplets <sup>2)</sup>	./.	./.	./.	./.	---	
13	<u>After flame time at the bottom of the sieve (max.)</u>	0:06	0:09	0:09/0:10	./.	1:11 / 0:40	min:s
14	<u>Impairment of the burner by dropping or falling material:</u> <u>Time</u> <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
15	<u>Premature end of test</u> Final occurrence of burning at the specimen <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
16	<u>Time of eventually end of test</u> <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
17	<u>After flame after end of test</u> <u>Time</u> <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
18	Number of specimen	./.	./.	./.	./.	./.	
19	Front side of specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
20	Back side of specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
21	flame length	./.	./.	./.	./.	./.	

line no.	Measurement	Result with the tested specimen					Dim.
		#9791	#9844	#9845	#1638	#3790 1 <sup>st</sup> aging	
	Test number	#9791	#9844	#9845	#1638	#3790 1 <sup>st</sup> aging	
	flamed direction	warp	warp	weft	warp	unweath.	
	flamed side	A	B	B	B	warp	
22	<u>Afterglow after end of test</u>	./.	./.	./.	./.	./.	min:s
	Time <sup>1)</sup>	./.	./.	./.	./.	./.	
23	Number of specimen	./.	./.	./.	./.	./.	
	<u>Place of appearance</u>	./.	./.	./.	./.	./.	
24	Lower half of the specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
25	Upper half of the specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
26	Front side of specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
27	Back side of specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
28	<u>Density of smoke</u>						% * min
	≤ 400 % * min	1	3	1	1	1	
29	> 400 % * min <sup>4)</sup>	./.	./.	./.	./.	./.	
30	Diagram: encl. no.	1	2	3	4	5	% * min
31	<u>Residual lengths:</u> individual value <sup>3)</sup>						
	Specimen 1	66	50	51	52	50	cm
	Specimen 2	56	51	62	50	43	cm
	Specimen 3	53	50	60	55	40	cm
	Specimen 4	62	57	51	53	62	cm
32	<u>Average value, individual test</u> <sup>3)</sup>	<b>59</b>	<b>52</b>	<b>56</b>	<b>53</b>	<b>49</b>	
33	<u>Photo of specimen in enclosure no.</u>	1	2	3	4	5	
34	<u>Flue gas temperature</u>	124	116	117	123	112	°C
35	Maximum of average value						
	Time <sup>1)</sup>	09:51	09:36	09:42	09:05	7:43	min:s
36	Diagram: encl. no.	1	2	3	4	5	
37	Remarks: - none -						

<sup>1)</sup> indication of times: from the begin of testing procedure

<sup>2)</sup> checked off if applicable

<sup>3)</sup> indication of carrier/foam layer separated in case of fire-proofing agents <sup>4)</sup> 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.
		#6878 2 <sup>nd</sup> aging	#6879 2 <sup>nd</sup> aging	---	---	---	
	Test number			---	---	---	
	flamed direction flamed side	unweath. machine	unweath. transv.	---	---	---	
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	1	1	---	---	---	
2	Maximum flame height above bottom edge of the specimen	50	40	---	---	---	cm
3	Time <sup>1)</sup>	0:12	0:08	---	---	---	min:s
4	Burn through / melting Time <sup>1)</sup>	0:04	0:04	---	---	---	min:s
5	Observations on the back side of the specimen Flames / Glowing Time <sup>1)</sup>	---	---	./.	./.	./.	min:s
6	Change of colour Time <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
7	Falling of burning droplets Start <sup>1)</sup>	./.	X	./.	./.	./.	min:s
8	Extent sporadic falling of burning droplets <sup>2)</sup>	---	X	./.	./.	./.	min:s
9	continuous falling of burning droplets <sup>2)</sup>	---	---	./.	./.	./.	min:s
10	Falling of burning droplets Start <sup>1)</sup>	---	./.	---	---	---	min:s
11	Extent sporadic falling of burning droplets <sup>2)</sup>	---	---	---	---	---	min:s
12	continuous falling of burning droplets <sup>2)</sup>	---	---	---	---	---	min:s
13	After flame time at the bottom of the sieve (max.)	---	1:45	---	---	---	min:s
14	Impairment of the burner by dropping or falling material: Time <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
15	Premature end of test Final occurrence of burning at the specimen <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
16	Time of eventually end of test <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
17	After flame after end of test Time <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
18	Number of specimen	./.	./.	./.	./.	./.	
19	Front side of specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
20	Back side of specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
21	flame length	./.	./.	./.	./.	./.	cm

line no.	Measurement	Result with the tested specimen					Dim.
		#6878 2 <sup>nd</sup> aging	#6879 2 <sup>nd</sup> aging	---	---	---	
	Test number	#6878 2 <sup>nd</sup> aging	#6879 2 <sup>nd</sup> aging	---	---	---	
	flamed direction	unweath. machine	unweath. transv.	---	---	---	
	flamed side			---	---	---	
	<u>Afterglow after end of test</u>	./.	./.	./.	./.	./.	
22	Time <sup>1)</sup>	./.	./.	./.	./.	./.	min:s
23	Number of specimen	./.	./.	./.	./.	./.	
	<u>Place of appearance</u>	./.	./.	./.	./.	./.	
24	Lower half of the specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
25	Upper half of the specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
26	Front side of specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
27	Back side of specimen <sup>2)</sup>	./.	./.	./.	./.	./.	
	<u>Density of smoke</u>						
28	≤ 400 % * min	1	2	---	---	---	% * min
29	> 400 % * min <sup>4)</sup>	./.	./.	./.	./.	./.	% * min
30	Diagram: encl. no.	6	7	---	---	---	
	<u>Residual lengths: individual value<sup>3)</sup></u>						
31	Specimen 1	61	59	---	---	---	cm
	Specimen 2	55	57	---	---	---	cm
	Specimen 3	52	59	---	---	---	cm
	Specimen 4	62	60	---	---	---	cm
32	<u>Average value, individual test <sup>3)</sup></u>	<b>58</b>	<b>59</b>	---	---	---	
33	<u>Photo of specimen in enclosure no.</u>	6	7	---	---	---	
34	<u>Flue gas temperature</u>	115	117	---	---	---	°C
35	Maximum of average value Time <sup>1)</sup>	09:33	09:51	---	---	---	min:s
36	Diagram: encl. no.	6	7	---	---	---	
37	Remarks: - none -						

<sup>1)</sup> indication of times: from the begin of testing procedure

<sup>2)</sup> checked off if applicable

<sup>3)</sup> indication of carrier/foam layer separated in case of fire-proofing agents <sup>4)</sup> very strong development of smoke

## 6. Explanations concerning the testing procedure

There were no additional tests proceeded because of the residual length of  $\geq$  than 45 cm.

## 7. Summary of results and additional establishments to Fire Behaviour

lineno	measurement	Result with the tested specimen					dimension
	test-no.	#9791	#9844	#9845	#1638	#3790 1 <sup>st</sup> aging	
	flamed direction flamed side	warp A	warp B	weft B	warp B	unweath. warp	
1	residual length	59	52	56	53	49	cm
2	max. smoke temperature	124	116	117	123	112	°C
3	density of smoke - integral	1	3	1	1	1	%min
4	remarks: During the "Brandschacht"-test #3790 the material showed burning droplets for >20 seconds.						

lineno	measurement	Result with the tested specimen					dimension
	test-no.	#6878 2 <sup>nd</sup> aging	#6879 2 <sup>nd</sup> aging	---	---	---	
	flamed direction flamed side	unweath. machine	unweath. transv.	---	---	---	
1	residual length	58	59	---	---	---	cm
2	max. smoke temperature	115	117	---	---	---	°C
3	density of smoke - integral	1	2	---	---	---	%min
4	remarks: During the "Brandschacht"-test #6879 the material showed burning droplets for >20 seconds.						

According to DIN 4102, part 1, "schwerentflammbar" (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 until 10).

## 8. Special remarks

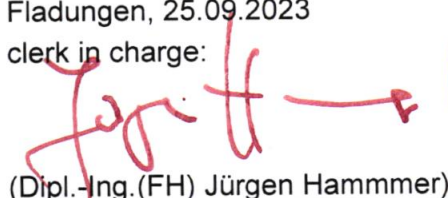
- This report is only valid for the material as described under paragraph 1. In combination with other materials or with additional coatings or grounds etc. the burning behaviour may differ.
- This test report is valid for the exposure to outdoor climate conditions.
- This test report is not valid, as 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

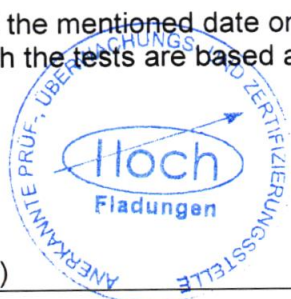
This test report is valid until the mentioned date on page 1. The test report becomes invalid in case the standards on which the tests are based are changed.

Fladungen, 25.09.2023

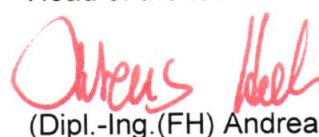
clerk in charge:



(Dipl.-Ing.(FH) Jürgen Hamammer)



Head of the test laboratory:



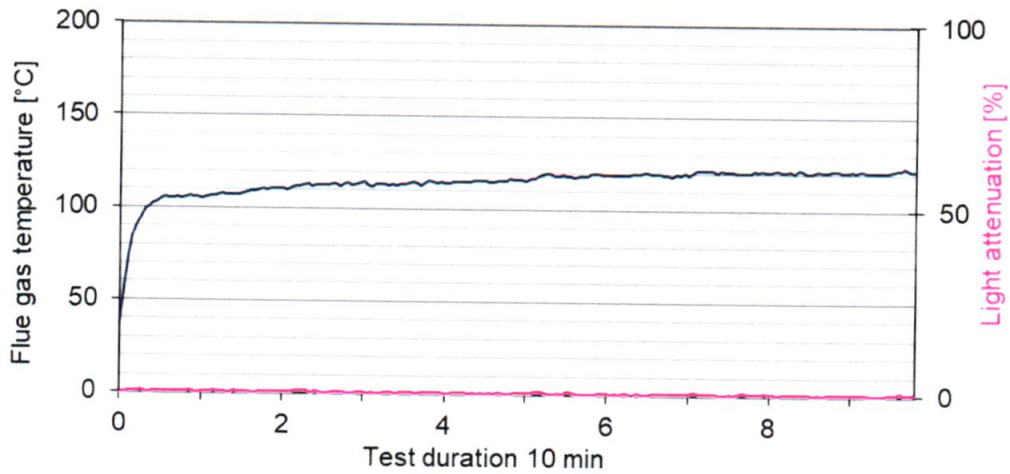
(Dipl.-Ing.(FH) Andreas Hoch)

**„Brandschacht“-test #9791**



**measurement**

**#9791, PN26539: ROVERO, "Gewächshausfolie Roll Air", A+längs**  
Max. flue temperature: 124°C, Smoke density integral: 1%/min  
Residual length: 59 cm



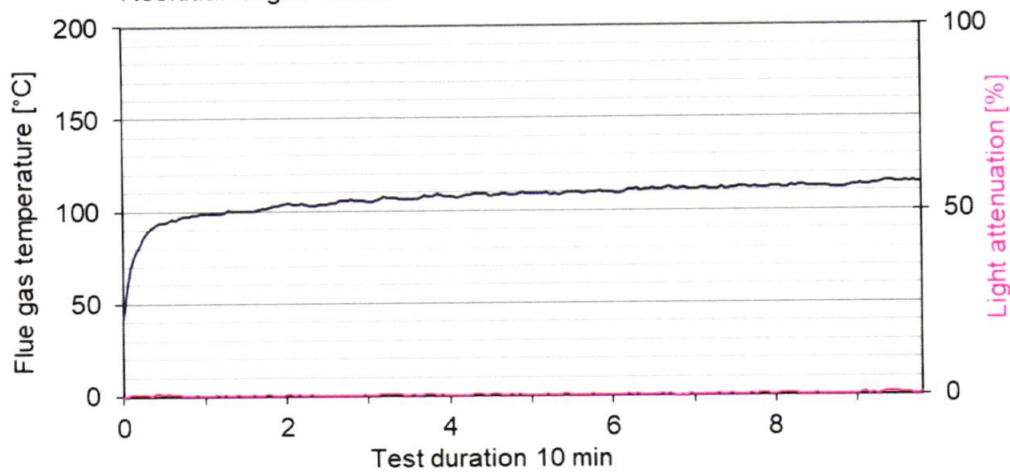


**„Brandschacht“-test #9844**

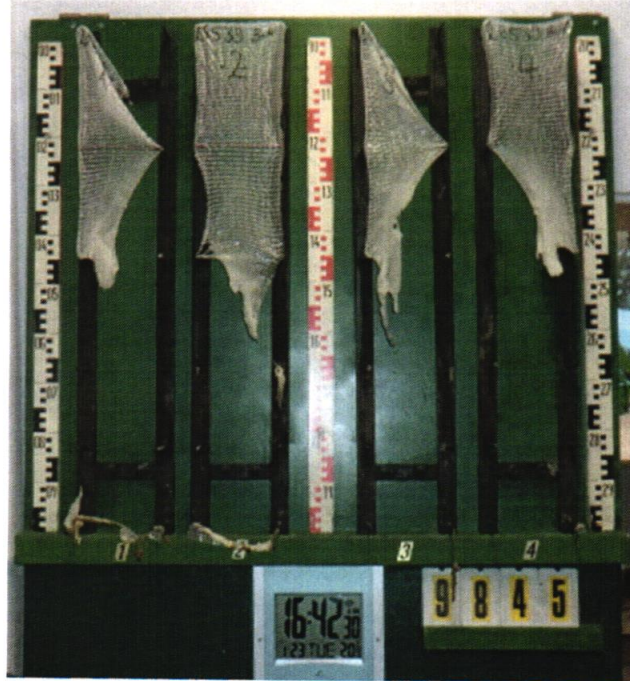


**measurement**

**#9844, PN26539: ROVERO, "Gewächshausfolie Roll Air", B+längs**  
Max. flue temperature: 116°C, Smoke density integral: 3%/min  
Residual length: 52 cm

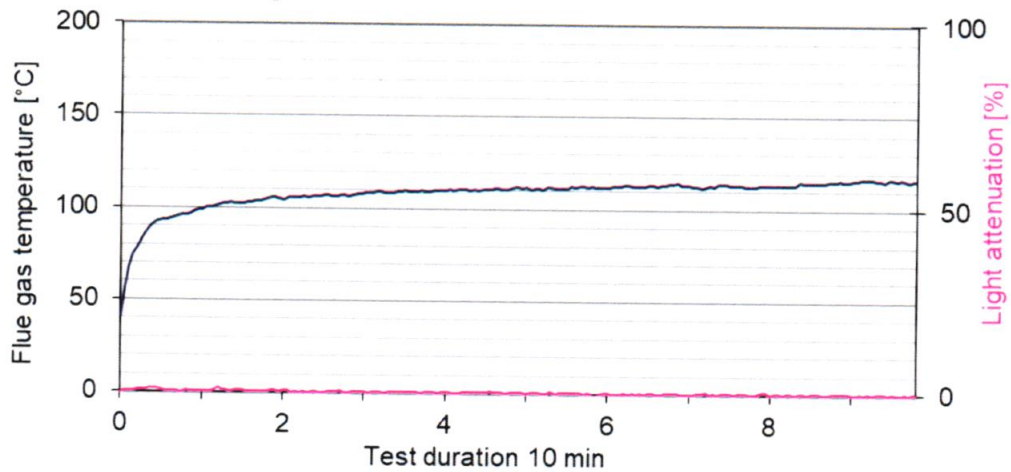


**„Brandschacht“-test #9845**

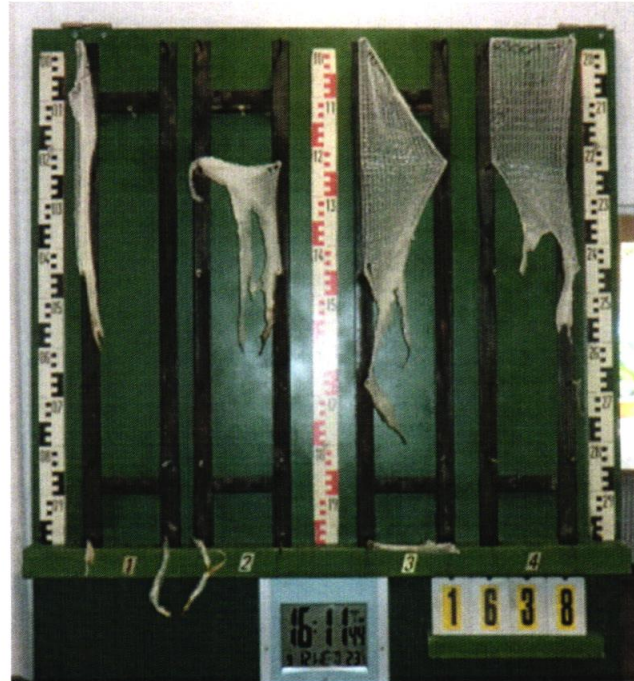


**measurement**

**#9845, PN26539: ROVERO, "Gewächshausfolie Roll Air", B+quer**  
Max. flue temperature: 117°C, Smoke density integral: 1%/min  
Residual length: 56 cm

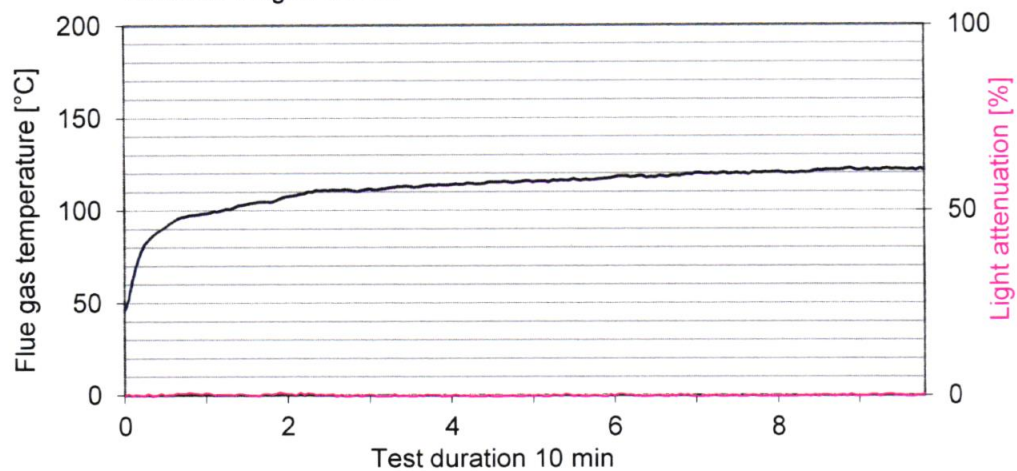


**„Brandschacht“-test #1638**

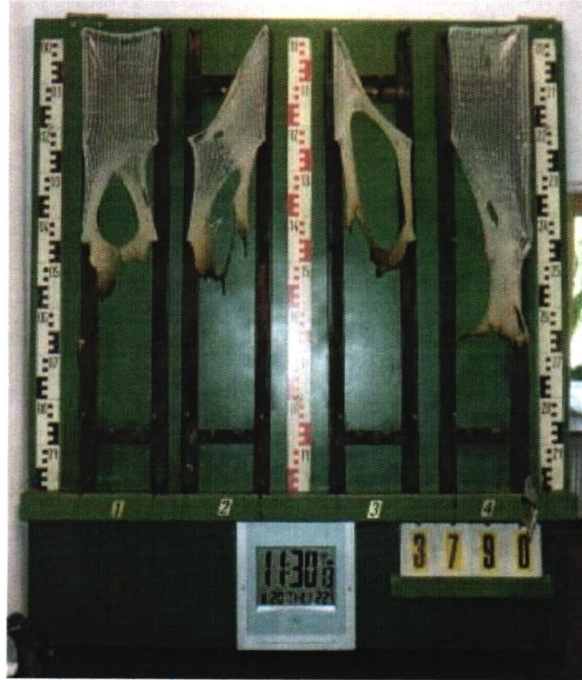


**measurement**

**#1638, PN28001: ROVERO, "Gewächshausfolie Roll Air", B+längs**  
Max. flue temperature: 123°C, Smoke density integral: 1%/min  
Residual length: 53 cm

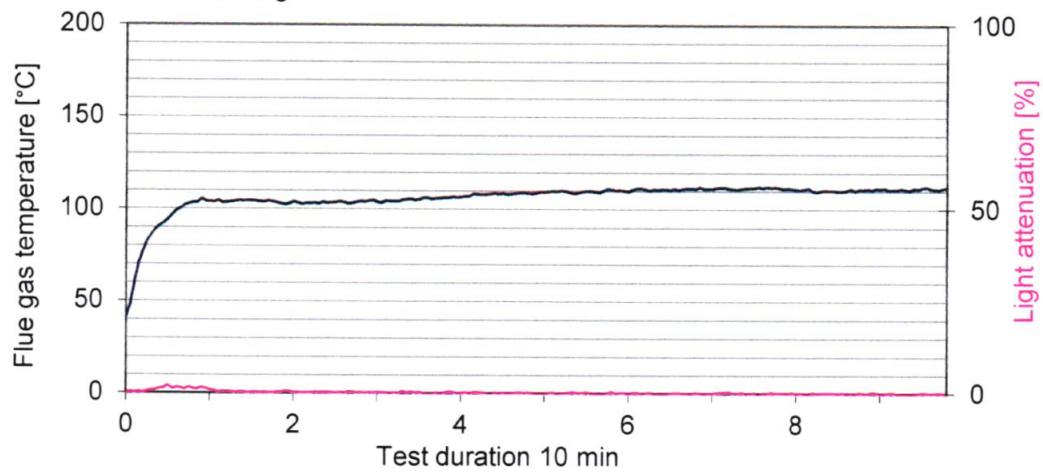


**„Brandschacht“-test #3790**

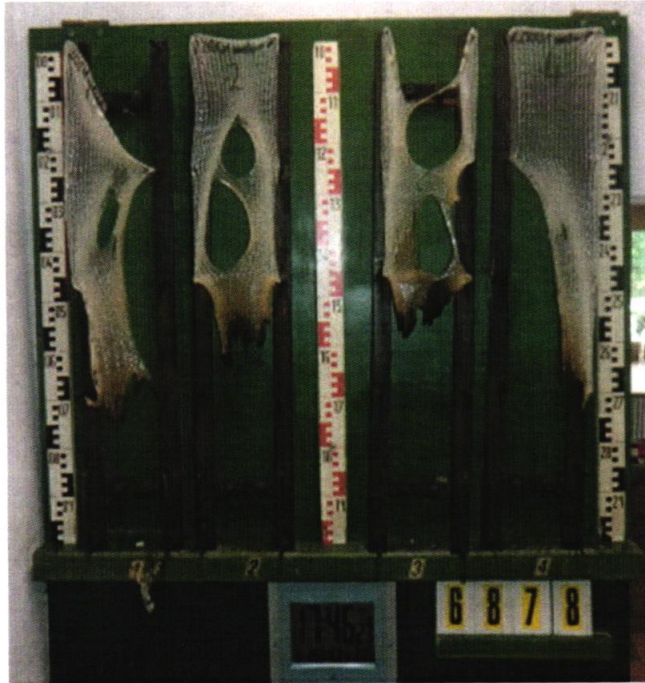


**measurement**

**#3790, PN28001: ROVERO, "Gewächshausfolie Roll Air", unbew. in**  
Max. flue temperature: 112°C, Smoke density integral: 1%/min  
Residual length: 49 cm

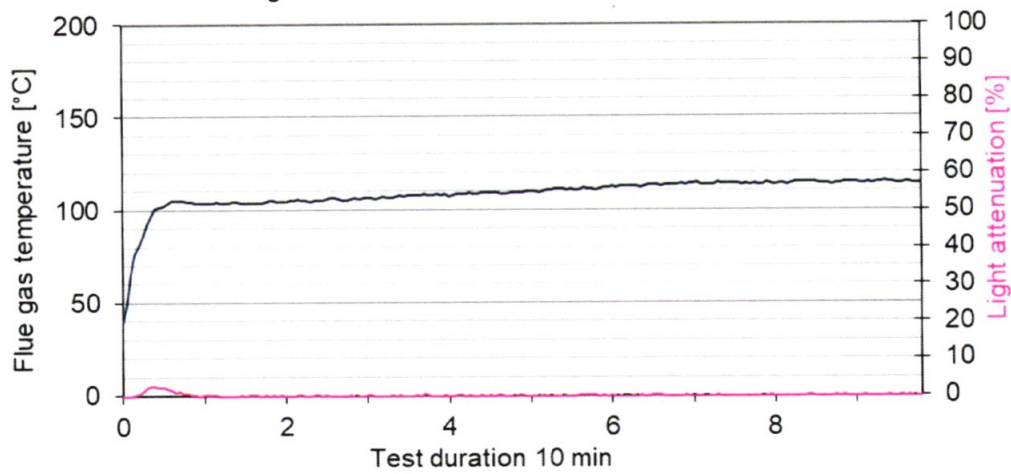


**„Brandschacht“-test #6878**



**measurement**

**#6878, PN28001: ROVERO, "Gewächshausfolie Roll Air", L**  
Max. flue temperature: 115°C, Smoke density integral: 1%min  
Residual length: 58 cm

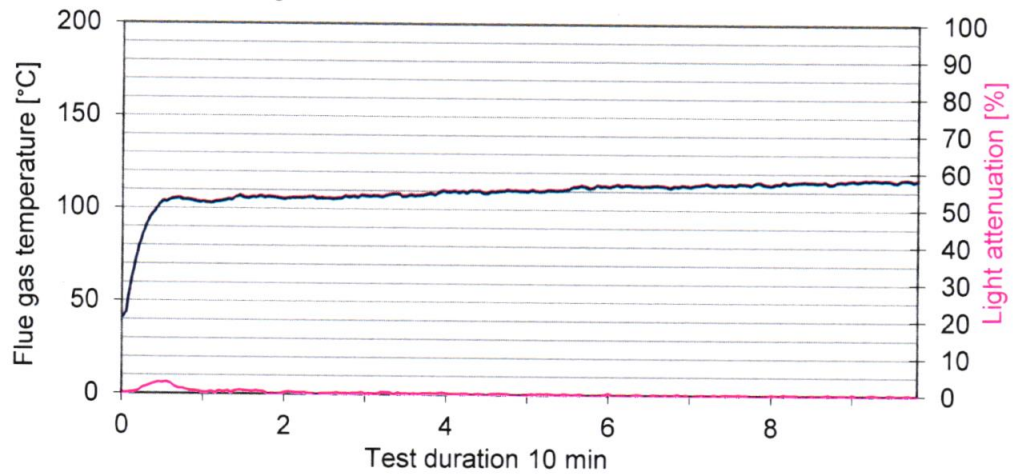


**„Brandschacht“-test #6879**



**measurement**

**#6879, PN28001: ROVERO, "Gewächshausfolie Roll Air", S**  
Max. flue temperature: 117°C, Smoke density integral: 2%/min  
Residual length: 59 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 -freely suspended-  
Flaming in warp and in weft direction / side A and side B
4. Date of test CW 50 in 2017 and CW 03 and CW 36 in 2018 and CW 35 in 2020 and CW 38 in 2023
5. Results

PN 26539: flaming side A in machine direction	edge-test						surface-test						Dim
	1	2	3	4	5	6	1	2	3	4	5	6	
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition <sup>1)</sup>	1	1	1	1	1	1	2	--	--	--	--	--	s
reaching the mark of measurement <sup>1)2)</sup>	./.	./.	./.	./.	./.	./.	./.	--	--	--	--	--	s
max. flame height	11	8	8	9	10	9	9	--	--	--	--	--	cm
time	12	10	11	13	10	10	15	--	--	--	--	--	
self-cessation of the flames end of afterflame <sup>1)</sup>	18	15	12	14	26	10	15	--	--	--	--	--	s
end of glowing <sup>1)</sup>	./.	./.	./.	./.	./.	./.	./.	--	--	--	--	--	s
flames were extinguished after <sup>1)</sup>	./.	./.	./.	./.	./.	./.	./.	--	--	--	--	--	
smoke development (visual)	moderate						moderate						./.
dropping of burning material during 20 s <sup>1)</sup>	./.	./.	./.	./.	./.	./.	-/-	--	--	--	--	--	s
Appearance after test: burned out till max. height 6 cm x width 13 cm													

PN 26539: additional tests	edge-test						surface-test						Dim
	1	2	3	4	5	6	1	2	3	4	5	6	
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition <sup>1)</sup>	1	1	1	--	--	--	2	2	2	--	--	--	s
reaching the mark of measurement <sup>1)2)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
max. flame height	10	7	9	--	--	--	9	9	11	--	--	--	cm
time	10	8	10	--	--	--	15	15	15	--	--	--	
self-cessation of the flames end of afterflame <sup>1)</sup>	10	8	10	--	--	--	18	15	15	--	--	--	s
end of glowing <sup>1)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
flames were extinguished after <sup>1)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
smoke development (visual)	moderate						moderate						
dropping of burning material during 20 s <sup>1)</sup>	./.	-/-	-/-	--	--	--	-/-	-/-	-/-	--	--	--	s
Appearance after test: burned out till max. height 4 cm x width 12 cm													

<sup>1)</sup> time mentioned from the beginning of the test <sup>2)</sup> during 20 Sec -/- no appearance -- no information

PN 28001: additional tests	edge-test						surface-test						Dim
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition <sup>1)</sup>	1	1	1	1	--	--	3	3	3	3	--	--	s
reaching the mark of measurement <sup>1)2)</sup>	./.	./.	./.	./.	--	--	./.	./.	./.	./.	--	--	s
max. flame height	<b>8</b>	<b>6</b>	<b>5</b>	<b>6</b>	--	--	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	--	--	cm
time	7	4	5	7	--	--	10	11	10	10	--	--	
self-cessation of the flames end of afterflame <sup>1)</sup>	9	5	5	8	--	--	14	15	13	13	--	--	s
end of glowing <sup>1)</sup>	./.	./.	./.	./.	--	--	./.	./.	./.	./.	--	--	s
flames were extinguished after <sup>1)</sup>	./.	./.	./.	./.	--	--	./.	./.	./.	./.	--	--	s
smoke development (visual)	little						moderate						
dropping of burning material during 20 s <sup>1)</sup>	./.	./.	./.	./.	--	--	./.	./.	./.	./.	--	--	s
Appearance after test: burned out till max. height 5 cm x width 14 cm													

PN 28001: 1 <sup>st</sup> aging test	edge-test						surface-test						Dim
weathered side in machine direction	1	2	3	4	5	6	1	2	3	4	5	6	
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition <sup>1)</sup>	1	1	1	1	1	--	2	--	--	--	--	--	s
reaching the mark of measurement <sup>1)2)</sup>	./.	./.	./.	./.	./.	--	./.	--	--	--	--	--	s
max. flame height	<b>13</b>	<b>7</b>	<b>7</b>	<b>12</b>	<b>6</b>	--	<b>7</b>	--	--	--	--	--	cm
time	14	14	12	17	9	--	14	--	--	--	--	--	
self-cessation of the flames end of afterflame <sup>1)</sup>	15	15	16	./.	15	--	16	--	--	--	--	--	s
end of glowing <sup>1)</sup>	./.	./.	./.	./.	./.	--	./.	--	--	--	--	--	s
flames were extinguished after <sup>1)</sup>	./.	./.	./.	30	./.	--	./.	--	--	--	--	--	
smoke development (visual)	moderate						moderate						./.
dropping of burning material during 20 s <sup>1)</sup>	./.	./.	./.	./.	./.	--	-/-	--	--	--	--	--	s
Appearance after test: burned out till max. height 5,5 cm x width 12,5 cm													

PN 28001: 1 <sup>st</sup> aging test	edge-test						surface-test						Dim
additional tests	1	2	3	4	5	6	1	2	3	4	5	6	
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition <sup>1)</sup>	1	1	1	--	--	--	2	2	2	--	--	--	s
reaching the mark of measurement <sup>1)2)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
max. flame height	<b>5</b>	<b>5</b>	<b>8</b>	--	--	--	<b>10</b>	<b>10</b>	<b>7</b>	--	--	--	cm
time	4	6	12	--	--	--	14	10	14	--	--	--	
self-cessation of the flames end of afterflame <sup>1)</sup>	5	8	13	--	--	--	15	13	17	--	--	--	s
end of glowing <sup>1)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
flames were extinguished after <sup>1)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
smoke development (visual)	little						moderate						
dropping of burning material during 20 s <sup>1)</sup>	./.	./.	./.	./.	--	--	./.	./.	./.	./.	--	--	s
Appearance after test: burned out till max. height 4 cm x width 11,5 cm													

time mentioned from the beginning of the test <sup>2)</sup> during 20 Sec

-/- no appearance      -- no information



PN 28001: <b>2<sup>nd</sup> aging test</b> flaming the weathered side in machine direction	edge-test						surface-test						Dim
	1	2	3	4	5	6	1	2	3	4	5	6	
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition <sup>1)</sup>	1	1	1	1	1	--	2	--	--	--	--	--	s
reaching the mark of measurement <sup>1)2)</sup>	./.	./.	./.	./.	./.	--	./.	--	--	--	--	--	s
max. flame height	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>9</b>	--	<b>7</b>	--	--	--	--	--	cm
time	10	12	10	8	10	--	10	--	--	--	--	--	
self-cessation of the flames end of afterflame <sup>1)</sup>	15	14	13	11	11	--	./.	--	--	--	--	--	s
end of glowing <sup>1)</sup>	./.	./.	./.	./.	./.	--	./.	--	--	--	--	--	s
flames were extinguished after <sup>1)</sup>	./.	./.		./.	./.	--	28	--	--	--	--	--	
smoke development (visual)	moderate						moderate						./.
dropping of burning material during 20 s <sup>1)</sup>	./.	./.	./.	./.	./.	--	-/-	--	--	--	--	--	s
Appearance after test: burned out till max. height 11 cm x width 6 cm													

PN 28001: <b>2<sup>nd</sup> aging test</b> additional tests	edge-test						surface-test						Dim
	1	2	3	4	5	6	1	2	3	4	5	6	
samples no.	1	2	3	4	5	6	1	2	3	4	5	6	
ignition <sup>1)</sup>	1	1	1	--	--	--	2	2	2	--	--	--	s
reaching the mark of measurement <sup>1)2)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
max. flame height	<b>6</b>	<b>6</b>	<b>5</b>	--	--	--	<b>7</b>	<b>5</b>	<b>6</b>	--	--	--	cm
time	6	8	7	--	--	--	10	10	10	--	--	--	
self-cessation of the flames end of afterflame <sup>1)</sup>	7	11	8	--	--	--	./.	11	13	--	--	--	s
end of glowing <sup>1)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
flames were extinguished after <sup>1)</sup>	./.	./.	./.	--	--	--	./.	./.	./.	--	--	--	s
smoke development (visual)	moderate						moderate						
dropping of burning material during 20 s <sup>1)</sup>	./.	./.	./.	./.	--	--	./.	./.	./.	./.	--	--	s
Appearance after test: burned out till max. height 10 cm x width 6 cm													

time mentioned from the beginning of the test <sup>2)</sup> 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.