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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 FLT 3784122-2

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

ADO Goldkante GmbH & Co KG

Zimmersmühlenweg 14-18

D-61440 Oberursel

description of samples

white polyester fabric, coated on one side with silicon

name of the material

..1309"

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

31.07.2027

result

The examined product meets suspended freely or with distance of >40 mm to same or other plain materials the requirements of class B1 for hardly flammable ("schwerentflammbare") building

materials according to DIN 4102, pt. 1 (May 1998).

This test report includes 4 pages and 5 enclosures.

Remark: If the building material mentioned above is not used as a product according to MBO § 2, Abs. 9, Ziffer1, 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 as defined by 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 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

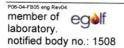
"Zustimmung im Einzelfall" (Exceptional Approval)

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

"1309"

white polyester fabric, coated on one side with silicon

side A: coated side B: uncoated

characteristic values determined by the test laboratory:

thickness:

about 0,72 mm

area weight:

about 433 g/m²

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

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

#784122-001	flaming side A in warp direction
#784122-002	flaming side B in warp direction
#784122-003	flaming side A in weft direction
#784122-004	flaming side B in weft direction



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

	Measurement	I					
line no.	E Test number		#002	th the tested #003	#004		c:
ine	flaming direction	#001 warp	warp	weft	weft		Dim.
-	side	A	В	A	В		_
	Number of specimen arrangement						
1	acc. to. DIN 4102/T15, schedule 1	1	1	1	1	1 1	
2	Maximum flame height	30	30	30	30		cm
3	Time 1)	1:00	1:00	1:00	1:00		min:s
4	Burn-through / melting 1)	1:00	1:00	1:00	1:00		min:s
	Observations on the back side						
5	Flames / Glowing 1)	-/-	./.	./.	./.		min:s
6	Change of colour 1)	-/-	./.	./.	./.		min:s
7	Falling of burning droplets 1)	-/-	./.	./.	./.		
8	sporadic falling of burning droplets 2)						min:s
9	continuous falling of burning droplets 2)						min:s
10	Falling of burning parts 1)	-/-	./.	./.	./.		min:s
11	sporadic falling of burning parts2)						
12	continuous falling of burning parts ²⁾						
13	Burning duration at sieve plate (max.)	-/-	./.	./.	./.		min:s
14	Impairment of burner by material 1)	-/-	./.	./.	./.		min:s
15	End of burning at the specimen 1)	2:00	2:00	2:00	2:00		min:s
16	Time of eventually end of test 1)	-/-	-/-	-/-	-/-		min:s
17	Afterburning after end of test 1)	-/-	-/-	-/-	-/-		min:s
18	Number of specimen						111111.5
19	Front side / Rear side of specimen 2)						
20	flame length						cm
21	Afterglow after end of test 1)	-/-	-/-	-/-	-/-		min:s
22	Number of specimen						
23	Lower / Upper half of the specimen 2)						
24	Front side / Rear side of specimen ²⁾						
25	<u>Density of smoke ≤ 400 % * min</u>	9,2	24,1	6,8	22,5		%min
26	> 400 % * min ⁴⁾		-	-	-		%min
27	Residual lengths: Specimen 1	68	67	71	61		cm
	individual values ³⁾ Specimen 2	72	59	70	63		cm
	Specimen 3	73	60	60	56		cm
	Specimen 4	74	60	70	61		cm
28	Average residual length ³⁾	71	61	67	60		cm
29	Maximum smoke temperature	118	118	114	115		°C
30	Time 1)	09:46	09:44	09:42	09:54		min:s
31	Diagram and Photo of specimen in enclosure no.	1	2	3	4		
32	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



6. Explanations concerning the testing procedure

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

7. Summary of results and additional establishments to Fire Behaviour

lineno	Measurement		Result with the tested specimen					
line	test-no.	#001	#002	#003	#004		oisu	
fla	Side	Α	В	Α	В		dimension	
min g	Direction	warp	warp	weft	weft		Θ̈	
1	residual length	71	61	67	60		cm	
2	max. smoke temperature	118	11	114	115		°C	
3	integral of smoke density	9,2	24,1	6,8	22,5		%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. 5).

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 not valid if the material is used as a building product in the sense of the State Building Regulations ("Landesbauordnungen", 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 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.

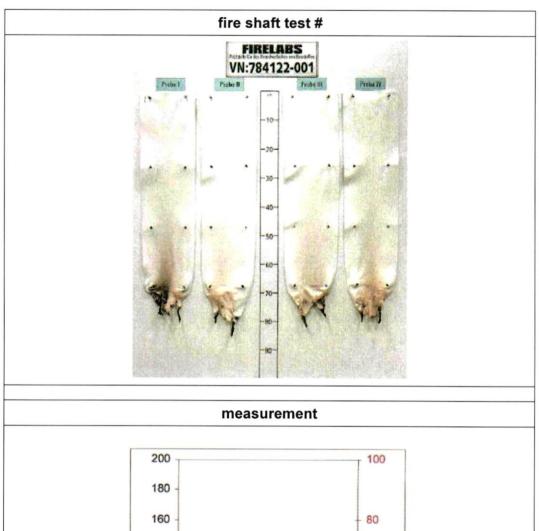
Fladungen, 30.05.2023

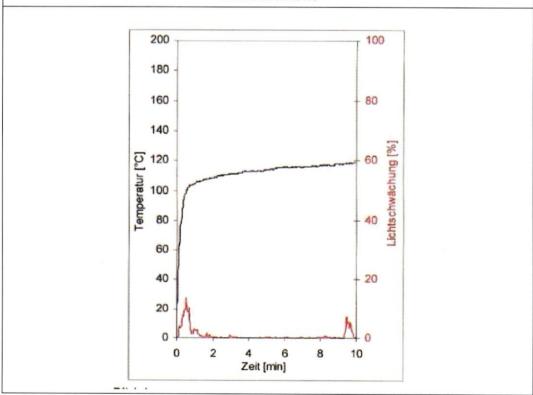
Clerk in charge:

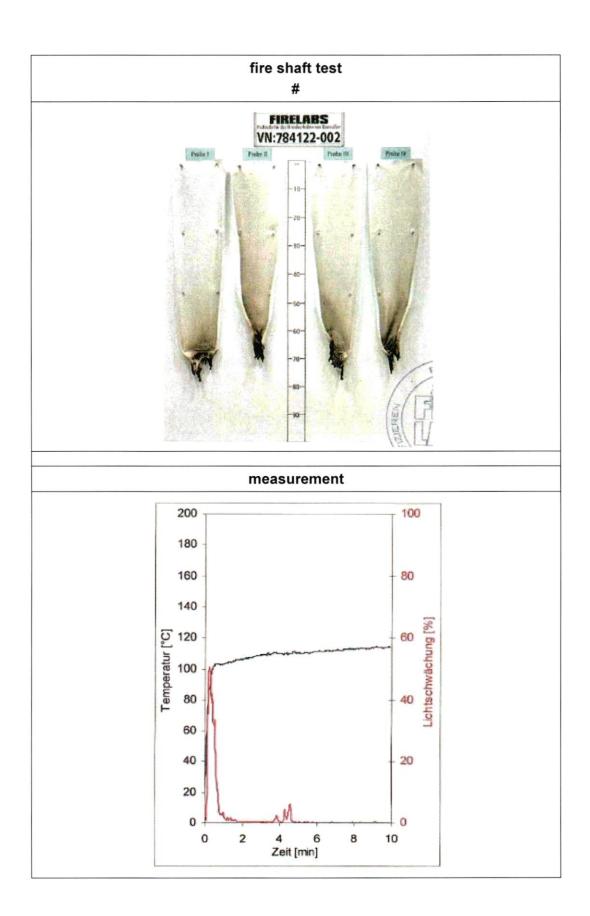
(Silke Biendara)

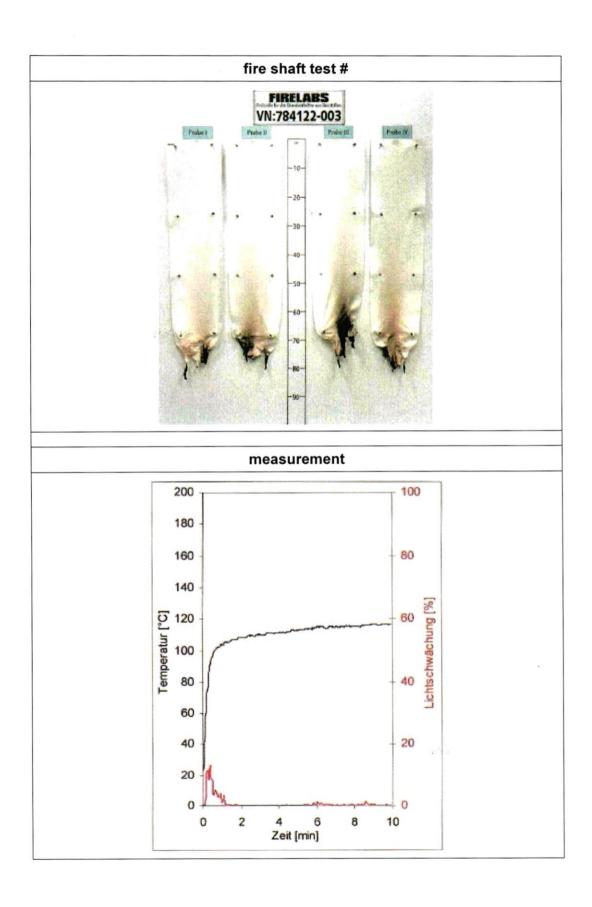
Head of test laboratory:

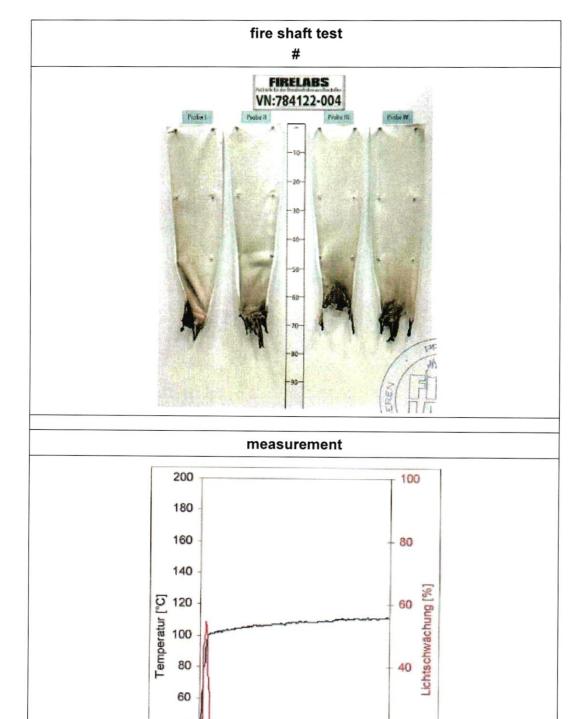
(Dipl.-Ing. (FH) Andreas Hoch)











20

0

10

8

40

20

0

0

2

Zeit [min]

Test for normal flammability classifying B2 according to DIN 4102

1. <u>Description of test material in condition as delivered</u> 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 weft direction

4. Results

"1309"	edge-test					surface-test			Eig
samples no.	1	2	3	4	5	6	7	8	Ö
direction	L	L	L	L	L	L	L		
ignition ¹⁾	1	1	1	1	1	8	4	-	s
measurement mark reached ¹⁾²⁾	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-	s
maximum flame height	6	8	7	7	6	4	7	-	cm
time of max. flame height	5	9	8	7	6	9	11	-	s
self-cessation of flames ¹⁾	6	10	10	9	8	13	16	-	s
flames were extinguished 1)	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-	s
smoke development (visually)	moderate								
dropping of burning material ¹⁾²⁾	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-	s
appearance after test: burned out till max. width 2 cm x height 5 cm									

"1309"	edge-test				surface-test			Dim	
samples no.	1	2	3	4	5	6	7	8	ā
direction	Q	Q	Q	Q	Q	Q	Q		
ignition ¹⁾	1	1	1	1	1	5	6	-	s
measurement mark reached ¹⁾²⁾	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-	S
maximum flame height	5	7	6	8	7	7	7	-	cm
time of max. flame height	9	8	9	8	8	9	13	-	s
self-cessation of flames ¹⁾	10	8	9	8	8	11	15	-	s
flames were extinguished 1)	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-	s
smoke development (visually)	moderate								
dropping of burning material ¹⁾²⁾	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-	S
appearance after test: burned out till max. width 2 cm x height 5 cm									

¹⁾ time denoted relative to beginning of test

6. Opinion concerning the dropping of burning material

The test for normal flammability shows no dropping burning material.

^{-/-} no occurrence

L /Q lengthwise / crosswise direction

²⁾ during 20 Sec

⁻⁻ no information

K / S warp / weft direction

^{5.} Remarks and explanations to the testing procedure - none -