



ALUMINIUM TAPE

100100 is a conformable aluminium tape based on a 30 micron aluminium foil, a transparent solvent acrylic adhesive and a white, single sided siliconised paper liner. The tape is suitable for interior and exterior use and can be used at high and low temperatures.

Construction

Adhesive	Solvent acrylic
Carrier	Aluminium foil 30 µm
Liner	Siliconized paper White

Applications

- Repairing and bonding of metal.
- Joining insulation panels in the building industry
- Joining aluminium pipes in the air conditioning and ventilation sector
- General purpose applications such as holding, patching, sealing and masking.
- To make substrates electrically and thermally conductive
- Temporary and permanent bonding under extreme circumstances.
- Low moisture vapor transmission rate offers excellent sealing and patching performance.

Technical details

Thickness	0,07 mm
Adhesive strength	20 N/25 mm
Tensile strength	45 N/25 mm
Service temperature range	-30°C to +120°C
Ageing resistance	Good
Elongation	3%
Fire classification	B1

Recommendations for use

Temperature: between +10°C and +40°C. Surface must be clean and free from dust and grease.

Storage and shelf life

Clean and dry in a well ventilated area, protected from dust and direct sunlight, preferably at +21°C and 50% relative humidity. Stored under these conditions shelf life will be a minimum of 12 months. Rolls should be stored flat on their cut edges in the original packaging and out of direct sunlight.

The above information is given in good faith, but the user should assure himself that the performance of the product is sufficient for his application. The quoted values are average and should not be taken as maximum or minimum values for specific purposes. Option TapeSpecialties cannot be held responsible for product failure unless full testing has been carried out. The client has to decide on the tapes suitability for their own applications.



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Last version 08/05/2020

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-240050

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	Option Tape Specialties nv/sa Frankrijkstraat 8 B-9140 Temse
description of samples	aluminium self-adhesive tape with protection film, in 2 different thicknesses
name of the material	„100100“ / „100500“
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	31.12.2028
result	The examined products meet the requirements of class B1 for “schwerentflammbare” (hardly flammable) building materials according to DIN 4102, part 1 (May 1998) , if glued on metallic substrates with a density of $\geq 2.025 \text{ kg/m}^3$, a melting point of $\geq 500^\circ\text{C}$ and a thickness of $\geq 0,8\text{mm}$.

This test report includes 4 pages and 3 enclosures.

Remark: If the above mentioned building material is not used as 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 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 38230: „100100” **nominal thickness** (without protection film): **0,07mm**
 -aluminium self-adhesive tape with acrylic glue, with protection film-
characteristic values determined by the test laboratory:
 area weight with protection film: about 186g/m²
 thickness with protection film: about 0,16 mm
 area weight without protection film: about 116g/m²
 thickness without protection film: about 0,08 mm

PN 38422: „100500” **nominal thickness** (without protection film): **0,09mm**
 -aluminium self-adhesive tape with acrylic glue, with protection film-
characteristic values determined by the test laboratory:
 area weight with protection film: about 238g/m²
 thickness with protection film: about 0,18 mm
 area weight without protection film: about 171g/m²
 thickness without protection film: about 0,10 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 tape was glued on aluminium panels, according to DIN 4102-16:2020-11, 5.4 d) ii.
 The samples were kept in climate chamber 23/50 until they reached constant weight.

3. Arrangement of samples mounting: glued on aluminium panels

#7227 „100100”
 #7228 „100500”

4. Date of test CW 03 in 2024

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

line no.	Measurement	Result with the tested specimen					Dim.
		#7227	#7228	---	---	---	
	Test number	#7227	#7228	---	---	---	
	material	„100100”	„100500”	---	---	---	
1	Number of specimen arrangement acc. to. DIN 4102/T15, schedule 1	1	1	---	---	---	
2	Maximum flame height above bottom edge of the specimen	60	60				cm
3	Time ¹⁾	1:25	1:06	---	---	---	min:s
4	Burn through / melting Time ¹⁾	./.	./.	---	---	---	min:s
5	Observations on the back side of the specimen Flames / Glowing Time ¹⁾	---	---	./.	./.	./.	min:s
6	Change of color Time ¹⁾	---	---	./.	./.	./.	min:s
7	Falling of burning droplets Start ¹⁾	./.	./.	./.	./.	./.	min:s
8	Extent sporadic falling of burning droplets ²⁾	---	---	./.	./.	./.	
9	continuous falling of burning droplets ²⁾	---	---	./.	./.	./.	min:s

line no	Measurement	Result with the tested specimen					Dim.
		#7227	#7228	---	---	---	
	Test number	#7227	#7228	---	---	---	
	material	„100100“	„100500“	---	---	---	
10	Falling of burning droplets Start ¹⁾	./.	./.	./.	./.	./.	min:s
11	Extent			./.	./.	./.	
12	sporadic falling of burning droplets ²⁾ continuous falling of burning droplets ²⁾	---	---	./.	./.	./.	
13	Afterflame time at the bottom of the sieve (max.)	./.	./.	./.	./.	./.	min:s
14	Impairment of the burner by dropping or falling material: Time ¹⁾	./.	./.	./.	./.	./.	min:s
15	Final occurrence of burning at the specimen ¹⁾	2:35	2:20	./.	./.	./.	min:s
16	Time of eventually end of test ¹⁾	./.	./.	./.	./.	./.	min:s
17	Afterflame after end of test Time ¹⁾	./.	./.	./.	./.	./.	min:s
18	Number of specimen	./.	./.	./.	./.	./.	
19	Front side of specimen ²⁾	./.	./.	./.	./.	./.	
20	Back side of specimen ²⁾	./.	./.	./.	./.	./.	
21	flame length	./.	./.	./.	./.	./.	
22	Afterglow after end of test Time ¹⁾	./.	./.	./.	./.	./.	min:s
23	Number of specimen	./.	./.	./.	./.	./.	
24	Place of appearance 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	Density of smoke ≤ 400 % * min	2	1	---	---	---	% * min
29	> 400 % * min ⁴⁾	./.	./.	./.	./.	./.	% * min
30	Diagram: encl. no.	1	2	---	---	---	
31	Residual lengths: individual value ³⁾ Specimen 1 Specimen 2 Specimen 3 Specimen 4	55 54 55 55	55 56 57 57	---	---	---	cm cm cm cm
32	Average value, individual test ³⁾	55	56	---	---	---	
33	Photo of specimen in enclosure no.	1	2	---	---	---	
34	Flue gas temperature	115	115	---	---	---	°C
35	Maximum of average value Time ¹⁾	09:05	10:00	---	---	---	min:s
36	Diagram: encl. no.	1	2	---	---	---	
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 \geq than 45 cm.

7. Summary of results and additional establishments to Fire Behaviour

line	measurement	Result with the tested specimen					dimension
	test-no.	#7227	#7228	---	---	---	
	material	„100100“	„100500“	---	---	---	
1	residual length	55	56	---	---	---	cm
2	max. smoke temperature	115	115	---	---	---	°C
3	density of smoke - integral	2	1	--	--	--	%min
4	remarks: none						

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 3).

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, im 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, 16.01.2024

clerk in charge:

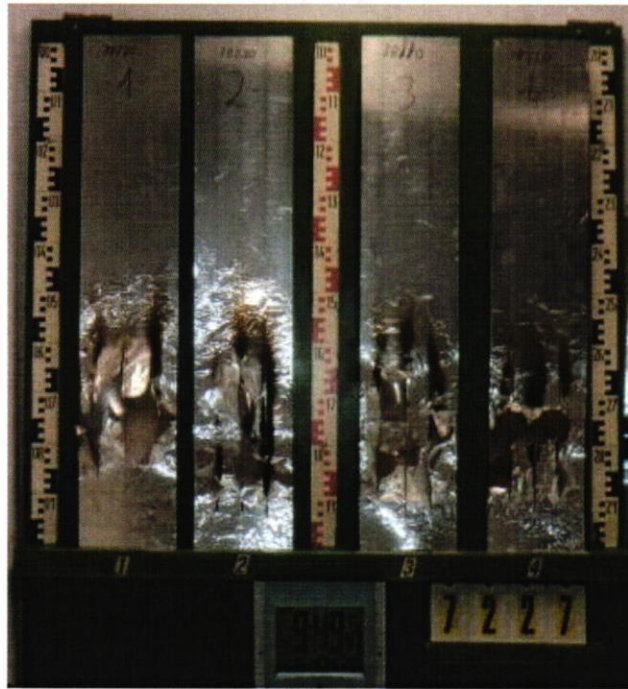

 (Dipl.-Ing.(FH) Jürgen Hammer)



Head of the test laboratory:

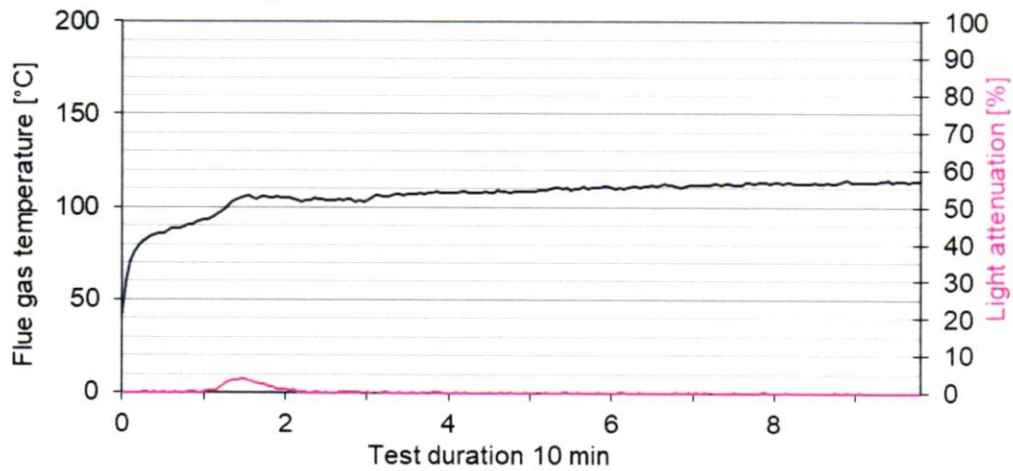

 (Dipl.-Ing.(FH) Andreas Hoch)

„Brandschacht“-test #7227

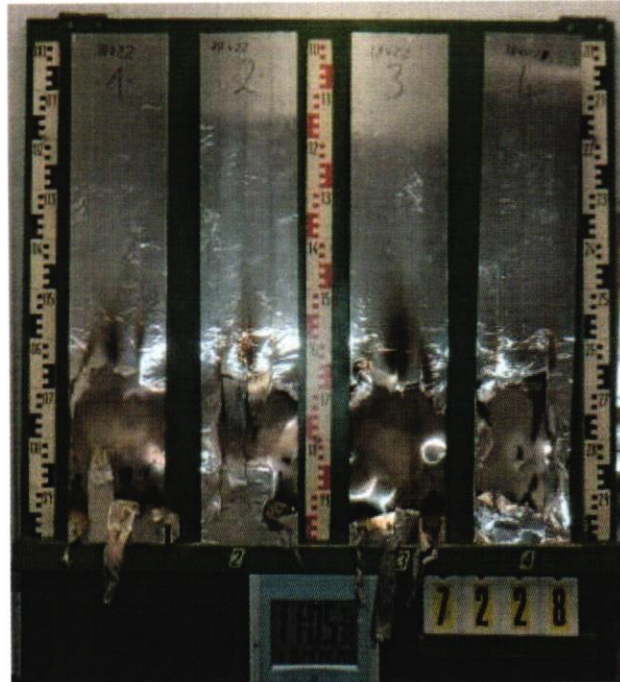


measurement

#7227, PN38230: OPTION TAPE, "100100", auf Alublech
 Max. flue temperature: 115°C, Smoke density integral: 2%/min
 Residual length: 55 cm

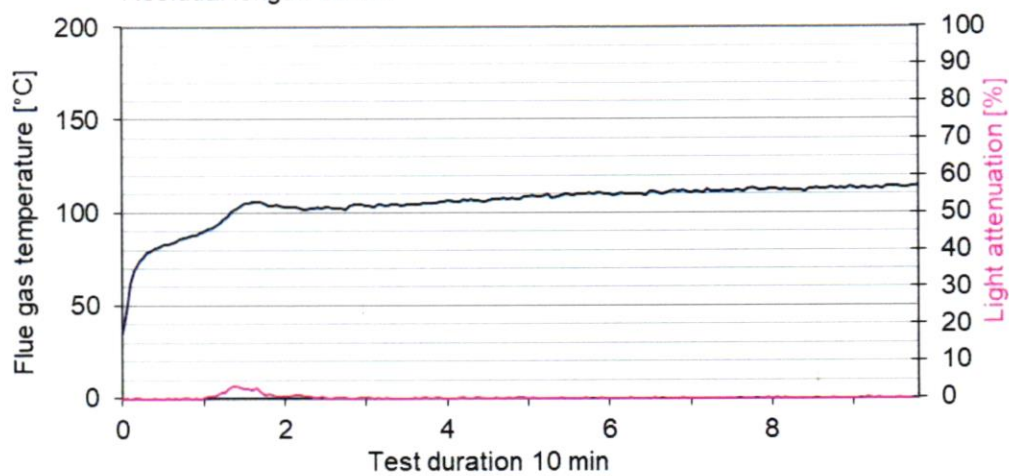


„Brandschacht“-test #7228



measurement

#7228, PN38422: OPTION TAPE, "100500", auf Alublech
Max. flue temperature: 115°C, Smoke density integral: 1%min
Residual length: 56 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 on aluminium panels
- flaming the edge and surface

4. Date of test CW 02 in 2024

5. Results

PN 38230: "100100":	surface-test						edge-test						Dim
	1	2	3	4	5	6	1	2	3	4	5	6	
samples no.													
ignition ¹⁾	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	--	--	s
reaching the mark of measurement ¹⁾²⁾	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	--	--	s
max. flame height	2	2	2	2	2	--	2	2	--	--	--	--	cm
time	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	--	--	
self cessation of the flames end of afterflame ¹⁾	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	--	--	s
end of glowing ¹⁾	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	--	--	s
flames were extinguished after ¹⁾	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	--	--	
smoke development (visual)	very little						very little						
dropping of burning material during 20 s ¹⁾	-/-	-/-	-/-	-/-	-/-	--	-/-	--	--	--	--	--	s
Appearance after test: -no destruction-													

PN 38422: "100500":	edge-test						surface-test						Dim
	1	2	3	4	5	6	1	2	3	4	5	6	
samples no.													
ignition ¹⁾	-/-	-/-	--	--	--	--	-/-	-/-	-/-	--	--	--	s
reaching the mark of measurement ¹⁾²⁾	-/-	-/-	--	--	--	--	-/-	-/-	-/-	--	--	--	s
max. flame height	2	2	--	--	--	--	3	3	4	--	--	--	cm
time	-/-	-/-	--	--	--	--	-/-	-/-	-/-	--	--	--	
self cessation of the flames end of afterflame ¹⁾	-/-	-/-	--	--	--	--	-/-	-/-	-/-	--	--	--	s
end of glowing ¹⁾	-/-	-/-	--	--	--	--	-/-	-/-	-/-	--	--	--	s
flames were extinguished after ¹⁾	-/-	-/-	--	--	--	--	-/-	-/-	-/-	--	--	--	s
smoke development (visual)	very little						very little						
dropping of burning material during 20 s ¹⁾	-/-	-/-	--	--	--	--	-/-	-/-	-/-	--	--	--	s
Appearance after test: -no destruction-													

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

K: warp / S: weft

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