

TEST REPORT

PZ-Hoch-181147-4

for the proof of Fire behavior according to DIN 4102, part 1 and part 14

Translation of the German test report – no guarantee for translation of technical terms

company	DATAPLOT GmbH Gutenbergstraße 15 D-24558 Henstedt-Ulzburg
description of samples	directly printable floor foil
name of the material	"EMBLEM Walk on Sign II-WOS2"
sampling	by the company
content of request	Proof of flammability to classify building materials to class B1 "schwerentflammbar" according to DIN 4102, part 1 and part 14
validity of test report	30.10.2023
result	The tested self-adhesive film applied to massive mineral substrates (density $\geq 1,350 \text{ kg / m}^3$) meets the requirements of building material class B1 for fire-resistant floor coverings according to DIN 4102, Part 1 (May 1998) and Part 14 (May 1990).

This test report includes 4 pages and 7 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This test report must not be published and copied without preceding agreement of the test laboratory and if agreed, only during validity and unchanged concerning appearance and contents.

3. conducted tests

tests to determine the representative average values

test #	sample ID	designation
FL_1730-1	PN 28178	EMBLEM Walk on Sign II-WOS2 - blue
FL_1730-2	PN 28178	EMBLEM Walk on Sign II-WOS2 - blue

further attempts

test #	sample ID	designation
FL_1729	PN 28177	EMBLEM Walk on Sign II-WOS2 - white
FL_1731	PN 28179	EMBLEM Walk on Sign II-WOS2 - light green
FL_1732	PN 28180	EMBLEM Walk on Sign II-WOS2 - red

4. Inspection date

KW 43 and 44 in 2018

5. Result

The test has been examined according to DIN 4102-14 (May 1998)

tests to determine the average values

test number FL-#1730	sample 1	sample 2	sample	average
sample-no:	PN 28178	PN 28178	--	--
date of test	25.10.2018	29.10.2018	--	--
max. burning distance [cm]	2	3		3
self extinguishing [min:sek]	12:41	12:37	--	--
end of test [min:sek]	30:00	30:00	--	--
associated radiation intensity I [W/cm²]	1,1	1,1	--	1,1
max. smoke density [%]	1,6	1,7	--	--
Area integral smoke development [%min]	25,8	27,9	--	26,9

-- no data -/- no occurrence

further attempts

test number	FL-1729	FL-1731	FL-1732	--
sample-no:	PN 28177	PN 28179	PN 28180	--
date of test	25.10.2018			--
max. burning distance [cm]	2	2	2	--
self extinguishing [min:sek]	12:36	12:23	12:29	--
end of test [min:sek]	30:00 min	30:00 min	30:00 min	--
associated radiation intensity I [W/cm ²]	1,1	1,1	1,1	
max. smoke density [%]	1,5	1,8	1,8	
area integral smoke development [%min]	21,1	30,5	32,2	--

-- no data -/- no occurrence

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 6).

6. Explanations concerning the testing procedure

- none

7. 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.
- 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
- The explanations in DIN 4102-1, Annex D, in particular for third-party monitoring, are to be particularly observed.

8. 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, 17.05.2018

clerk in charge:



(Silke Biendara)



Head of the test laboratory:



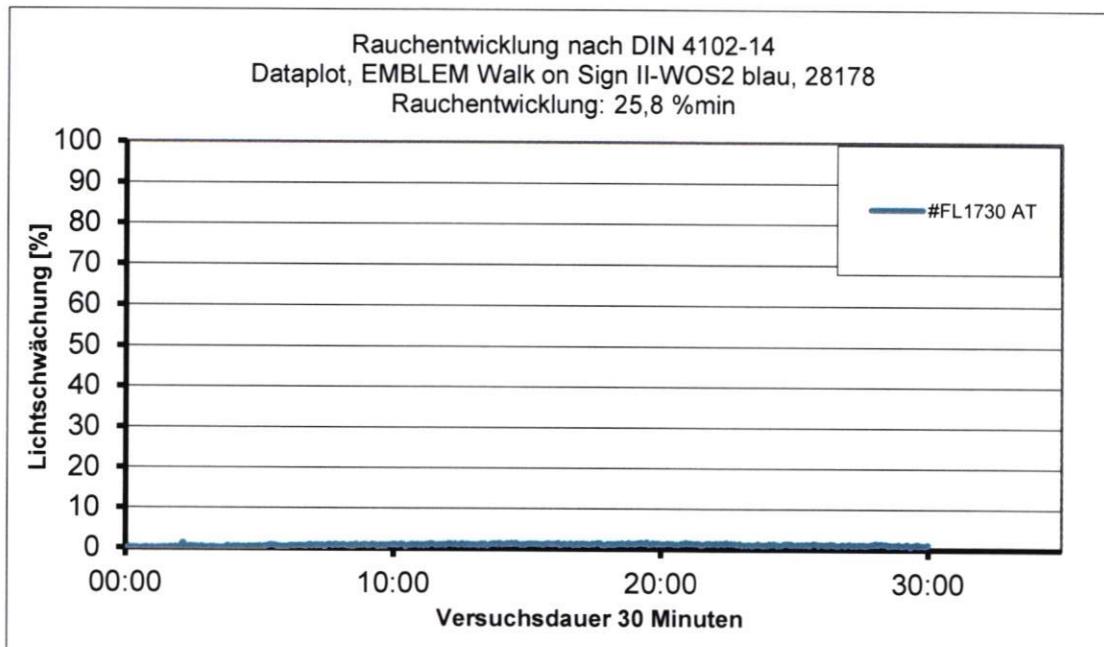
(Dipl.-Ing.(FH) Andreas Hoch)

test #1730-1



test #1730-1

developing of smoke production

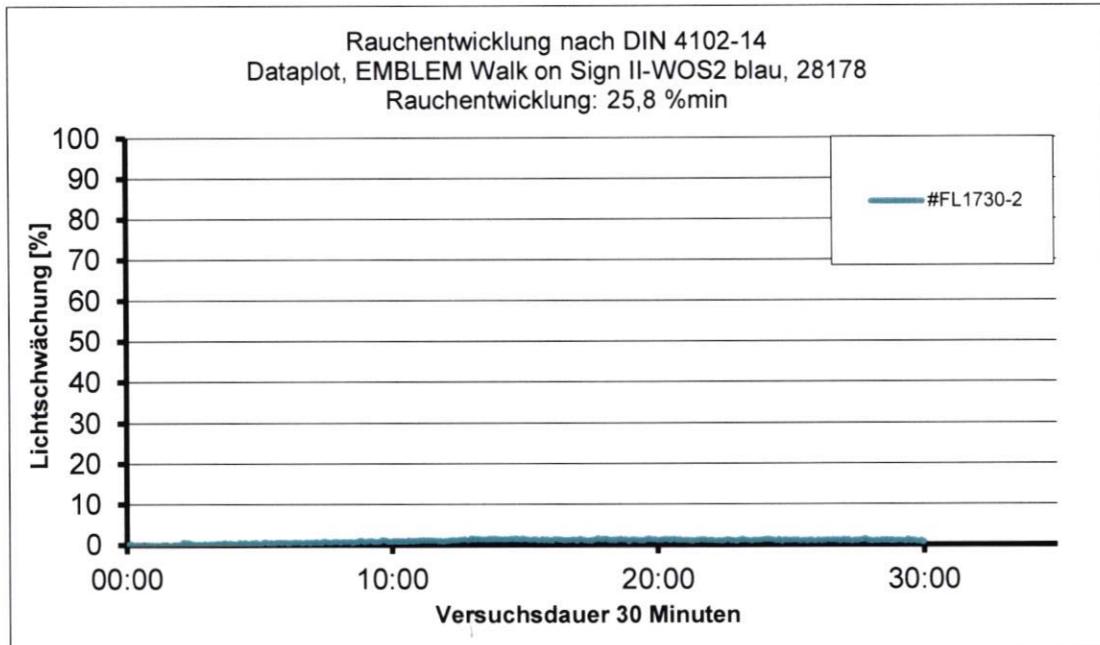


test #1730-2



test #1730-2

developing of smoke production

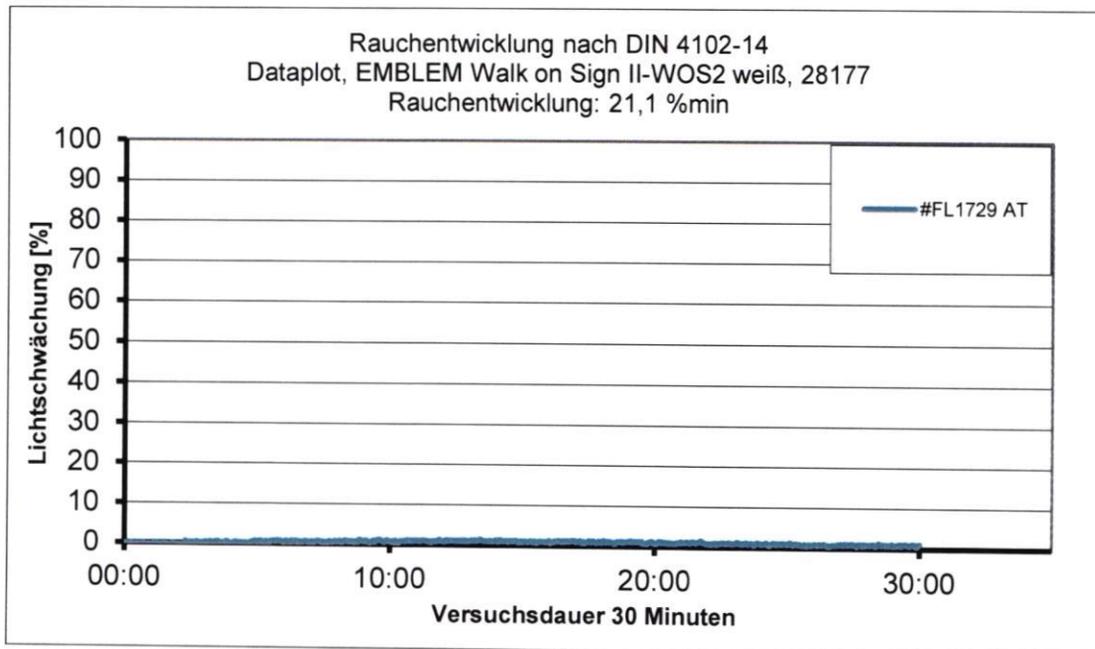


test #1729



test #1729

developing of smoke production

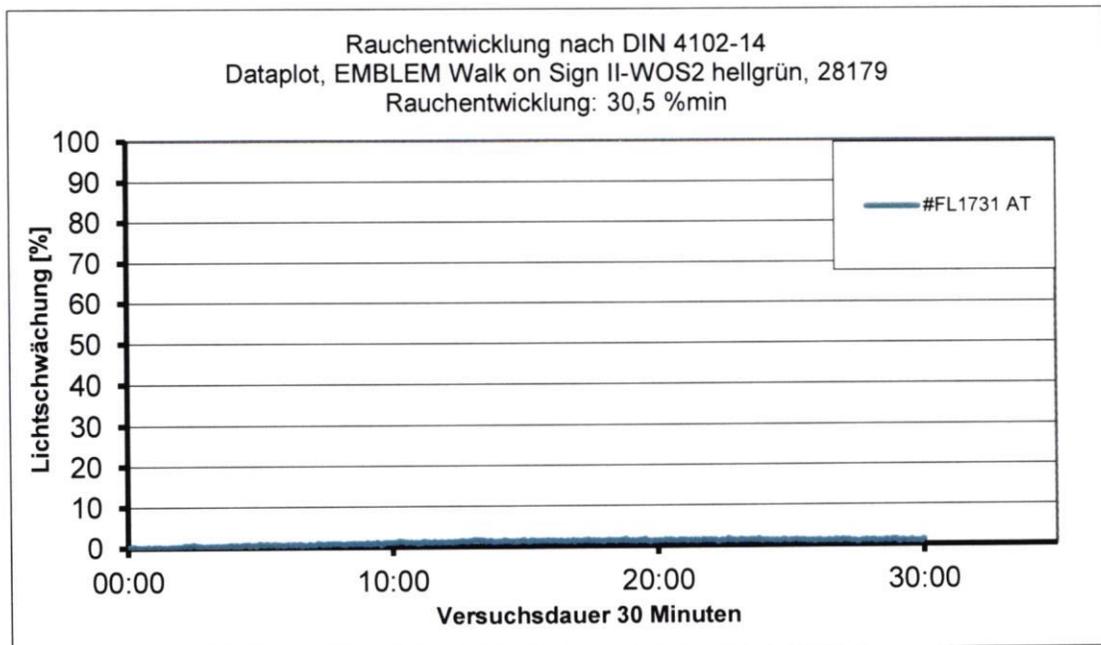


test #1731



test #1731

developing of smoke production

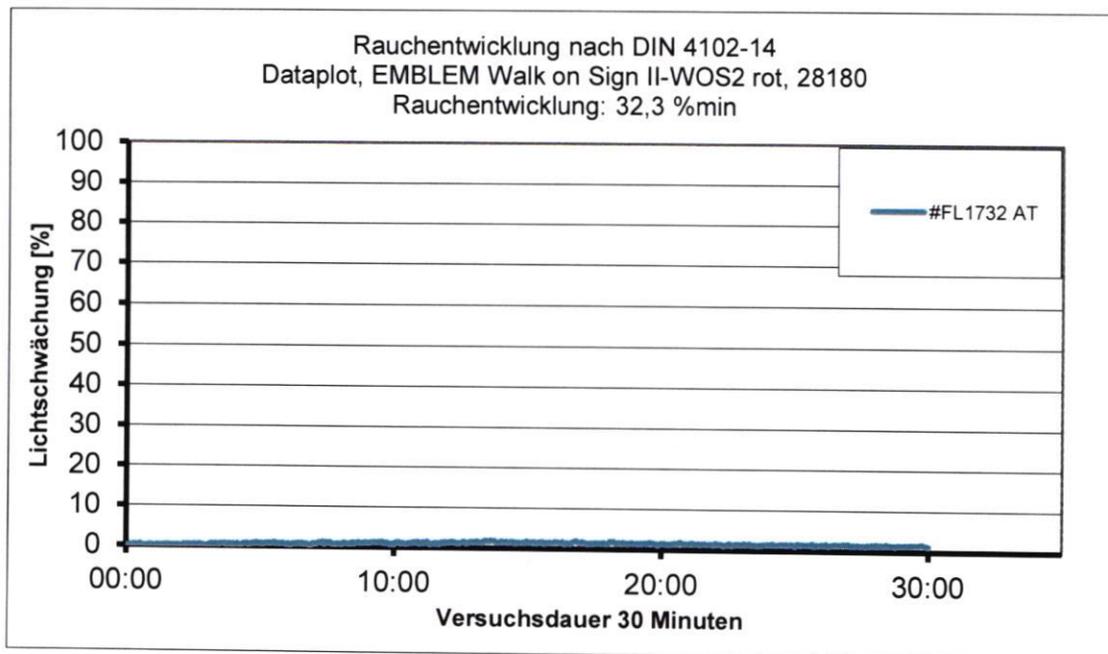


test #1732



test #1732

developing of smoke production



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**

From the material, samples were cut out for the edge and surface test.

The supplied self-adhesive film was applied to the fiber-cement board by a member of the test institute (Hoch-PN13676, 6 mm, 1950 kg / m³).

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

3. **Arrangement of samples** - freely suspended sample arrangement

4. **Date of test** KW 43 and 44 in 2018

5. **Versuchsergebnisse:**

PN 28178	edge-test						surface-test					
samples no.	1	2	3	4	5	-	1	2	3	4	5	-
ignition ¹⁾	1	1	-	-	-	-	10	-/-	-/-	-/-	-/-	-
reaching the mark of measurement ¹⁾²⁾ [s]	-/-	-/-	-	-	-	-	-/-	-/-	-/-	-/-	-/-	-
max. flame height [cm]	3	3	-	-	-	-	3	3	3	3	2	-
time ¹⁾²⁾ [s]	3	4	-	-	-	-	-/-	-/-	-/-	-/-	-/-	-
self-extinguishing of the flames ¹⁾ [s]	15	15	-	-	-	-	-/-	-/-	-/-	-/-	-/-	-
Flames were extinguished after ¹⁾ [s]	-/-	-/-	-	-	-	-	-/-	-/-	-/-	-/-	-/-	-
smoke development (visual)	light						light					
dropping of burning material during 20 [s]	-/-	-/-	-	-	-	-	-/-	-/-	-/-	-/-	-/-	-
Appearance after the test:	Slight discoloration in the burner area.											

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

PN 28177	edge-test						surface-test					
samples no.	1	2	3	4	5	-	1	2	3	4	5	-
ignition ¹⁾	1	1	-	-	-	-	-/-	-/-	-	-	-	-
reaching the mark of measurement ¹⁾²⁾ [s]	-/-	-/-	-	-	-	-	-/-	-/-	-	-	-	-
max. flame height [cm]	3	3	-	-	-	-	2	2	-	-	-	-
time ¹⁾²⁾ [s]	3	4	-	-	-	-	-/-	-/-	-	-	-	-
self-extinguishing of the flames ¹⁾ [s]	15	15	-	-	-	-	-/-	-/-	-	-	-	-
Flames were extinguished after ¹⁾ [s]	-/-	-/-	-	-	-	-	-/-	-/-	-	-	-	-
smoke development (visual)	light						very light					
dropping of burning material during 20 [s]	-/-	-/-	-	-	-	-	-/-	-/-	-	-	-	-
Appearance after the test:	Slight discoloration in the burner area.											

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

PN 28179	edge-test							surface-test						
samples no.	1	2	3	4	5	-		1	2	3	4	5	-	
ignition ¹⁾	1	1	-	-	-	-		1	10	-	-	-	-	
reaching the mark of measurement ¹⁾²⁾ [s]	-/-	-/-	-	-	-	-		-/-	-/-	-	-	-	-	
max. flame height [cm]	3	3	-	-	-	-		2	3	-	-	-	-	
time ¹⁾²⁾ [s]	2	2	-	-	-	-		-/-	12	-	-	-	-	
self-extinguishing of the flames ¹⁾ [s]	15	15	-	-	-	-		-/-	15	-	-	-	-	
Flames were extinguished after ¹⁾ [s]	-/-	-/-	-	-	-	-		-/-	-/-	-	-	-	-	
smoke development (visual)	light							very light						
dropping of burning material during 20 [s]	-/-	-/-	-	-	-	-		-/-	-/-	-	-	-	-	
Appearance after the test:	Slight discoloration in the burner area.													
¹⁾ time mentioned from the beginning of the test ²⁾ during 20 Sec -/- no appearance -- no information														

PN 28180	edge-test							surface-test						
samples no.	1	2	3	4	5	-		1	2	3	4	5	-	
ignition ¹⁾	1	1	-	-	-	-		-/-	-/-	-	-	-	-	
reaching the mark of measurement ¹⁾²⁾ [s]	-/-	-/-	-	-	-	-		-/-	-/-	-	-	-	-	
max. flame height [cm]	3	3	-	-	-	-		2	2	-	-	-	-	
time ¹⁾²⁾ [s]	2	2	-	-	-	-		-/-	-/-	-	-	-	-	
self-extinguishing of the flames ¹⁾ [s]	15	15	-	-	-	-		-/-	-/-	-	-	-	-	
Flames were extinguished after ¹⁾ [s]	-/-	-/-	-	-	-	-		-/-	-/-	-	-	-	-	
smoke development (visual)	light							light						
dropping of burning material during 20 [s]	-/-	-/-	-	-	-	-		-/-	-/-	-	-	-	-	
Appearance after the test:	Slight discoloration in the burner area.													
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 tested material is considered to be non-burning dripping / sloping