

Test report no. 173525

1. issue dated 10. 08 2017
(English Version)

Sponsor: Egger Kunststoffe GmbH & Co. KG
Im Weilandmoor 2
38518 Gifhorn

Order from: Surveillance contract

Order: Reaction to fire tests according to
DIN 4102-1:1998-05, fire class B1,
of high-pressure decorative laminate
"EGGER Schichtstoff Flammex"
from the production plant in Gifhorn

Technical	P-NDS04-315 from	28.09.2015
specification :	validity until	30.09.2020

The test report consists of 4 pages.
The test material has been consumed.



The test report shall be published unabridged. Any partial publishing requires written allowance by the testing institute. The test results refer only to the tested material.

1 Test material

- 1.1 Product name:** "EGGER Schichtstoff Flammex",
Dekor: H3395 (Holz), Struktur S12
- 1.2 Components:** multi-layer high-pressure decorative laminate,
sheets based on thermosetting resins
- 1.3 Sampling and delivery**
- date of audit: 05.07.2017 by member of the inspection body
- delivery: 05.07.2017 by member of the inspection body
- number of samples: 3 pieces 1000 mm x 1310 mm x 0,8 mm

2 Tests

2.1 Determination of thickness, weight per unit area and density

thickness	0,8	mm
weight per unit area	1,01	kg/m ²
density	1,32	kg/m ³

2.2 Reaction to fire tests

All fire tests were carried out according to DIN 4102-1:1998-05.

2.2.1 Brandschacht-test

The specimen were tested without substrate in longitudinal and transversal direction.

max. vertical flame spread	60	cm
time after beginning	00:33	min:s
max. smoke temperature	129	°C
time after beginning	01:17	min:s
residual length (single values)	55 46 51 47	cm
residual length (mean value)	50	cm
max. opacity of the smoke	61	%
integral value I	63	min*%
subsequent fire	nein	
flaming droplets/particles	nein	
The requirements were met.		

The development of smoke temperature is shown in fig. 1, the appearance of samples after burning in fig. 3.

The integral value $I = \int_0^{10} S \cdot dt$ was calculated from the curve in fig. 2.

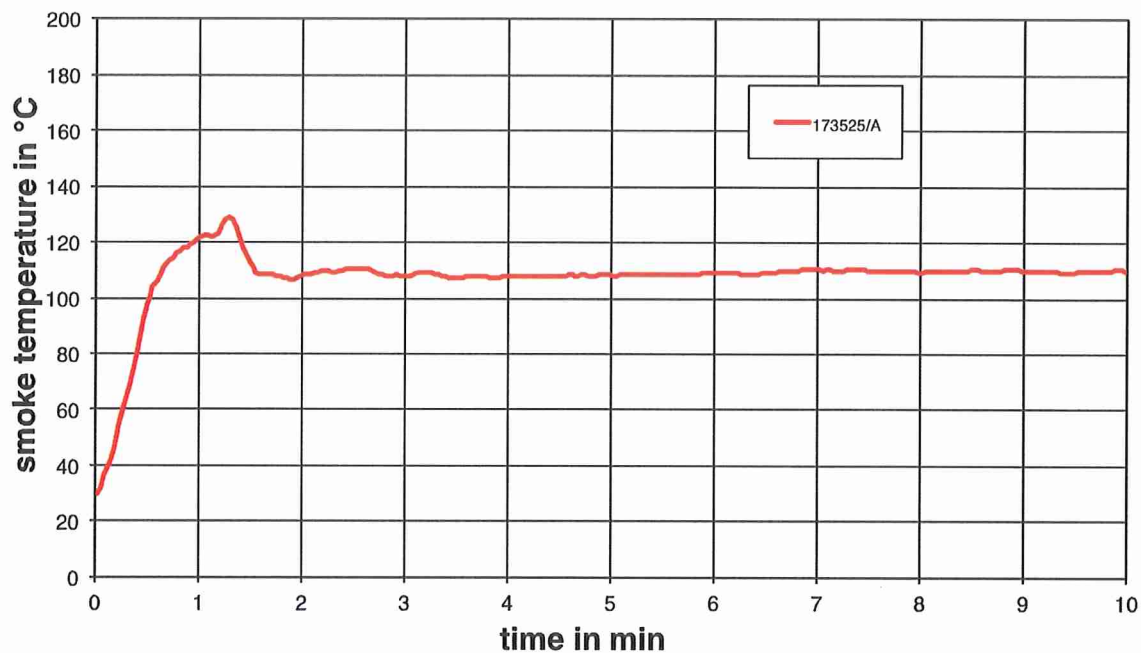


fig 1: smoke temperature

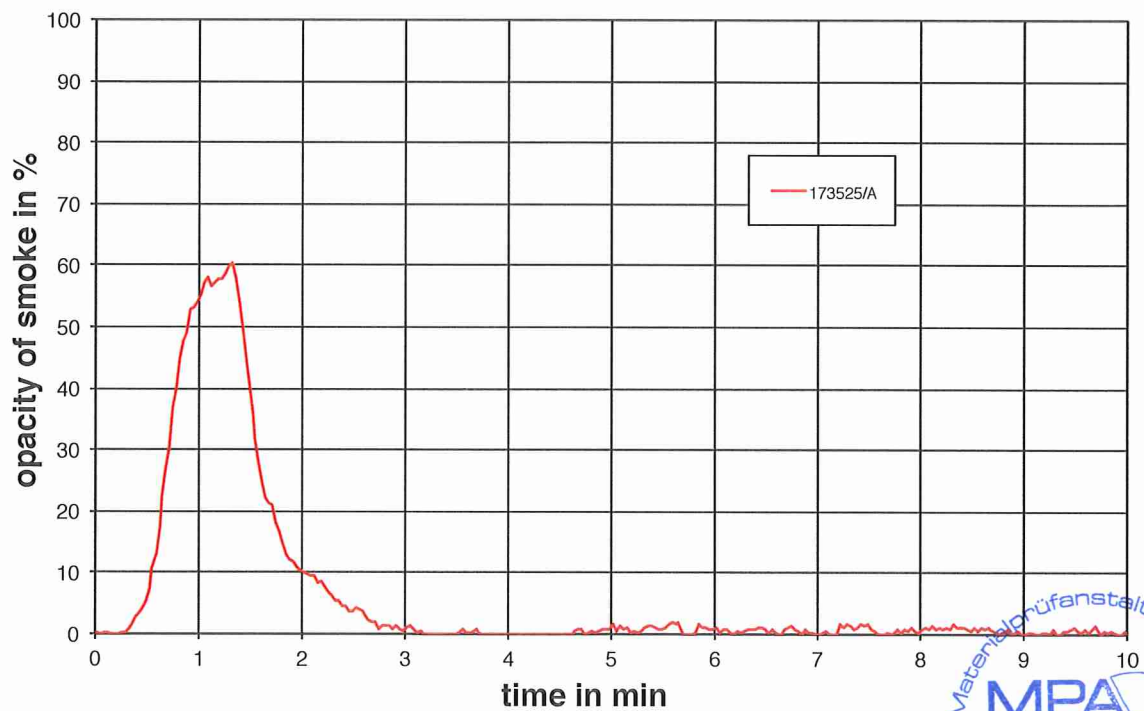


fig 2: opacity of smoke

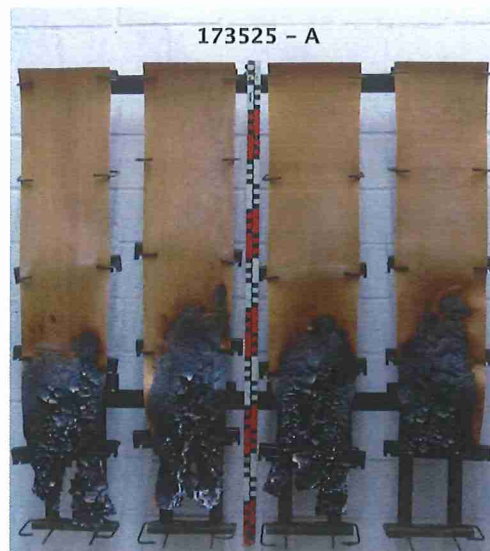


fig 3: Appearance of specimen
after 10-minutes burning


2.2.2 Single-flame source test

The tests were carried out by edge flame attacks according to DIN 4102-1:1998-05 clause 6.2.5.2 and by surface flame attacks according to DIN 4102-1:1998-05 clause 6.2.5.3.

position of flame application	edge					surface					
specimen no.	1	2	3	4	5	6	7	8	9	10	
ignition occurs after	s	0,8	0,9	0,3	0,4	0,4	6,8	6,3	7,6	5,5	7,2
duration of flames	s	14,1	14,7	15,1	14,9	14,9	8,9	9,6	7,7	10,4	8,2
max. vertical flame spread	mm	20	20	20	20	20	20	20	20	20	20
smoke production	low										
flaming droplets/particles	no										
The requirement was met.											

Hannover, 10.08.2017


Head of fire laboratory



(ORR Dipl.-Ing. Restorff)



Technician



(Dipl.-Ing. Piechulla)