

TEST REPORT

Order no: order: 2 from 02.10.2018

Signature: SL/Z-302/EN13823/613a/2018

Police, 03.12.2018

Tests methods:

1. EN 13823+A1:2010. Reaction to fire tests of building products – Building products excluding floorings exposed to the thermal attack by a single burning item.
2. EN ISO 11925-2:2010. Reaction to fire tests – Ignitability of products subjected do direct impingement of flame – Part 2: Single-flame source test.

Content of request: Research according to EN 13501-1+A1:2010.

Sponsor: Atrium Centrum Ploterowe Sp. z o.o.
ul. Goślawska 2D, 45-446 Opole
Media Ikonos Sp. z o. o.
ul. Goślawska 2D, 45-446 Opole

Material: Decorative self-adhesive foil Profiflex Deco FTP P80+
and FTP 80 AIR+

Composition: Self-adhesive materials for decoration consist of PVC foil, acrylic adhesive (weight 25 g/m²) and liner paper.

Manufacturer/supplier: Atrium Centrum Ploterowe Sp. z o.o.
ul. Goślawska 2D, 45-446 Opole
Media Ikonos Sp. z o. o.
ul. Goślawska 2D, 45-446 Opole

Assessment: The tested product fulfils the requirements of B-s1,d0 class according to EN 13501-1+A1:2010.

The reprint and the copying: only with the agreement of Media Ikonos Sp. z o. o.

Without the written consent of the Sychta Laboratory the report can be copied only in one piece.

Report applies only to the sample tested and is not necessarily indicative of the qualities of apparently identical or similar products.

Contain of test report: eight pages with signature and numbers.

1. Reaction to fire tests of building products according to EN 13823

1.1. Heat release rate

Name of measured quantity	Unit	Specimen			Average	Standard deviation
		1	2	3		
Duration of the test	s	1560	1560	1560	1560	0
Maximum heat release rate	kW	8,7	7,6	8,0	8,1	0,6
Total heat release THR	MJ	0,6	1,1	1,0	0,9	0,3
Total heat release in the first 600 s – THR _{600s}	MJ	0,6	1,1	1,0	0,9	0,3
Fire growth rate index FIGRA _{0,2MJ}	W·s ⁻¹	71	97	101	90	16
Fire growth rate index FIGRA _{0,4MJ}	W·s ⁻¹	0	49	48	32	28

Remarks: Specimen no. 1 - Profiflex Deco FTP 80 AIR+,
specimens no. 2 and 3 - Profiflex Deco FTP P80+.

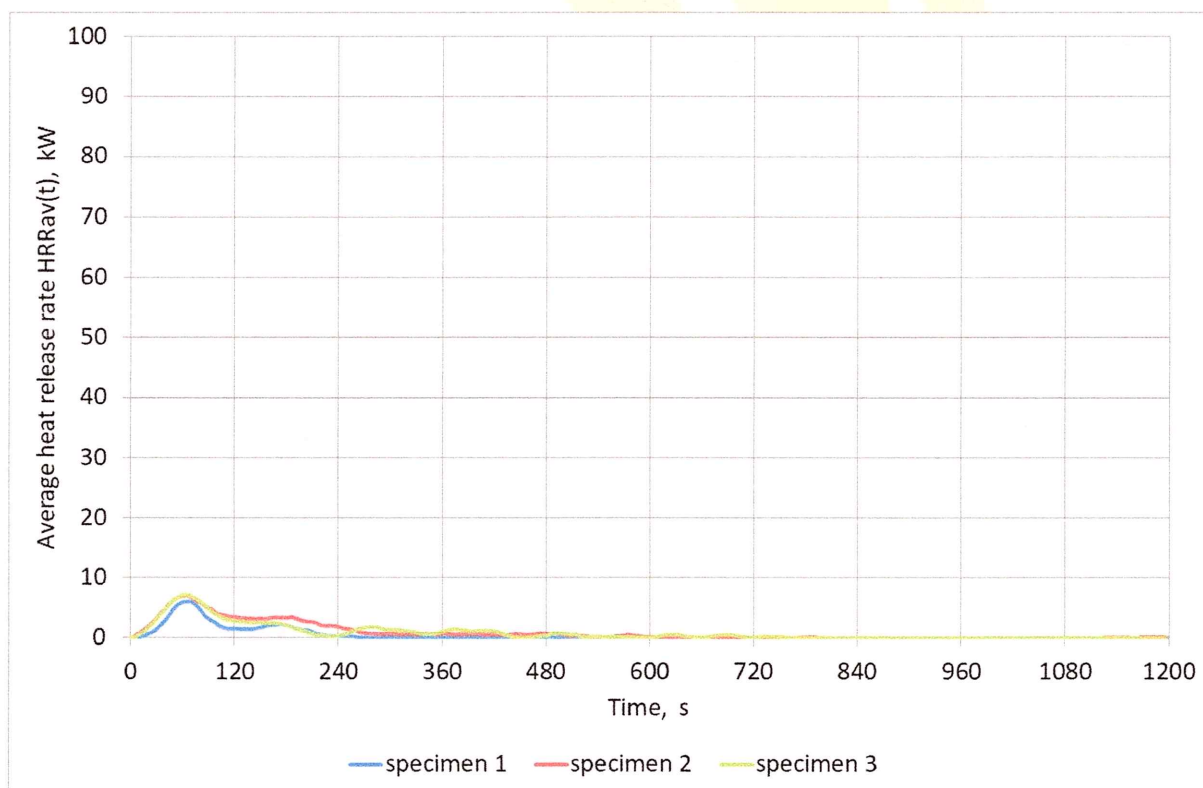


Figure 1.1. Average heat release rate $HRR_{av}(t)$, kW

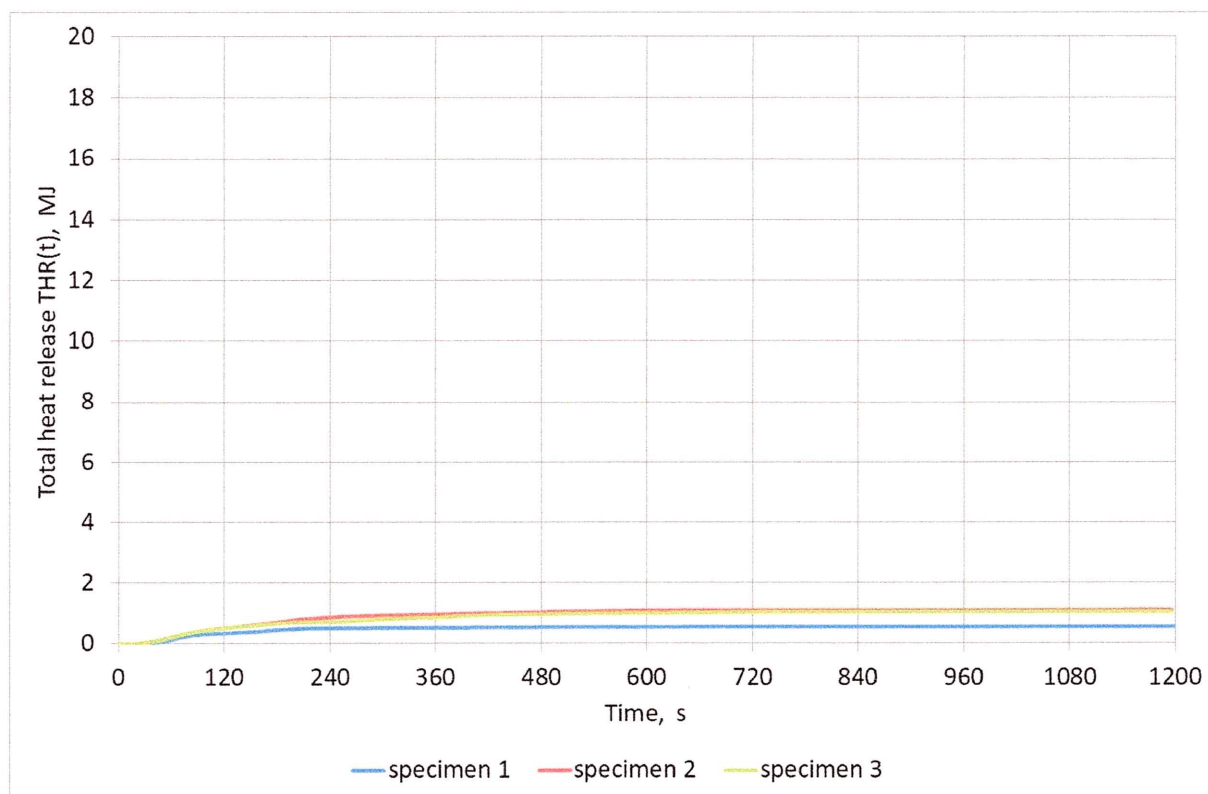


Figure 1.2. Total heat release $THR(t)$, MJ

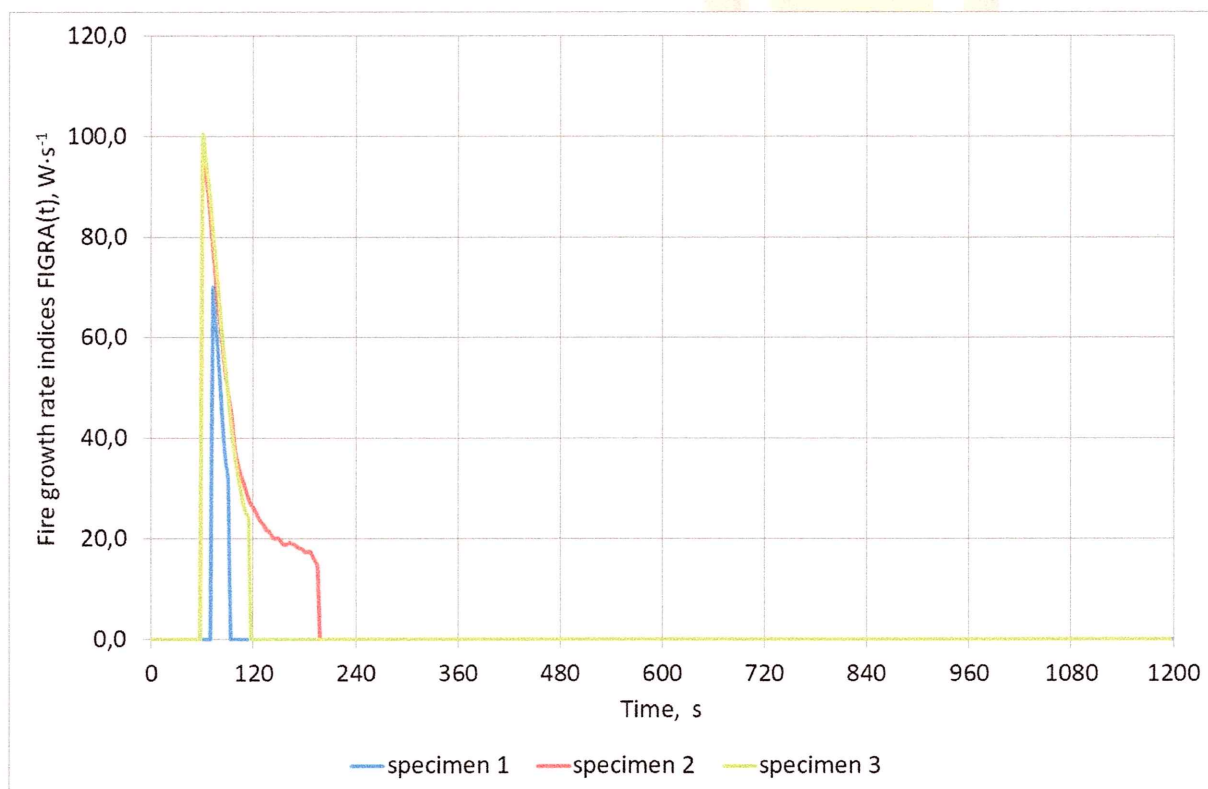


Figure 1.3. Fire growth rate index $FIGRA(t)$, $W \cdot s^{-1}$

1.2. Smoke production rate

Name of measured quantity	Unit	Specimen			Average	Standard deviation
		1	2	3		
Maximum light attenuation	%	7,7	7,1	8,5	7,8	0,7
Max. smoke production rate SPR	$\text{m}^2 \cdot \text{s}^{-1}$	0	0	0	0,2	0,0
Total smoke production - TSP	m^2	40	39	50	43	6
Total smoke production in the first 600 s - TSP _{600s}	m^2	26	25	28	26	2
Smoke growth rate index SMOGRA	$\text{m}^2 \cdot \text{s}^{-2}$	0	0	0	0	0

Remarks: none.

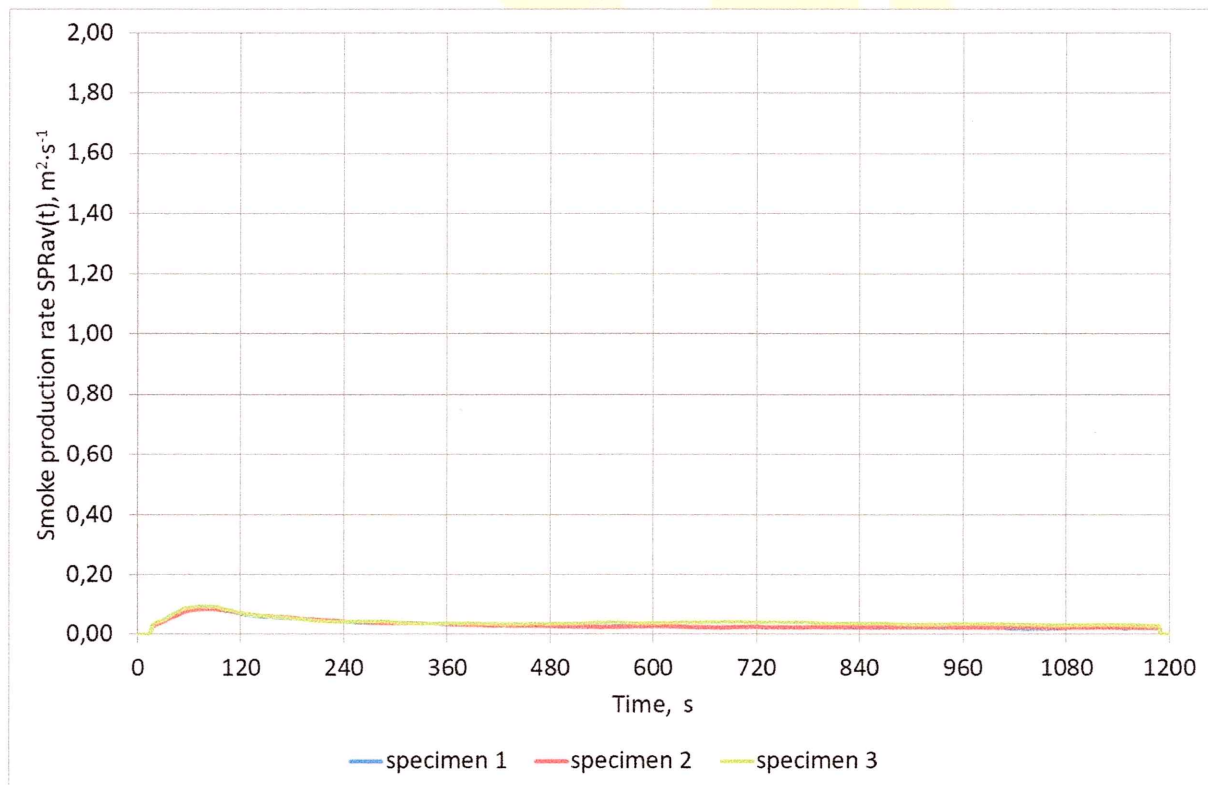


Figure 1.4. Smoke production rate $\text{SPR}_{\text{av}}(t)$, $\text{m}^2 \cdot \text{s}^{-1}$

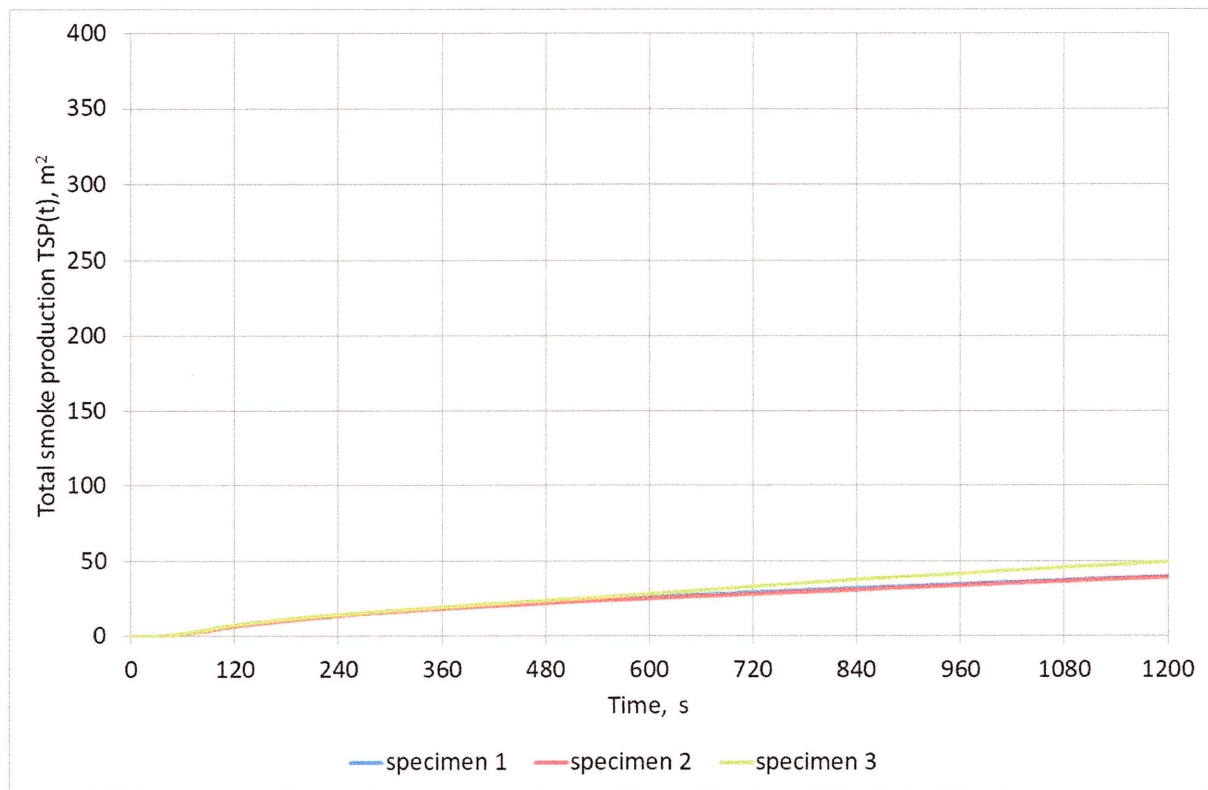


Figure 1.5. Total smoke production TSP(t), m²

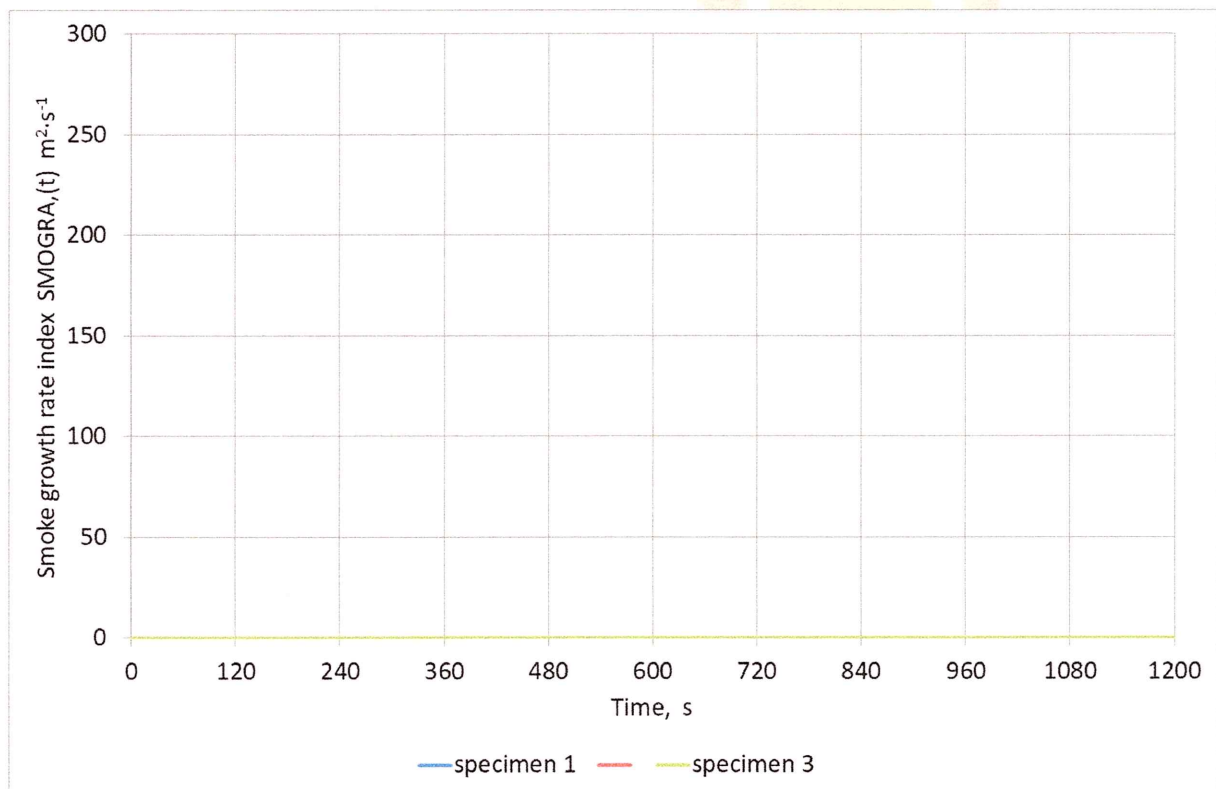


Figure 1.6. Smoke growth rate index SMOGRA(t), m²·s⁻²

1.3. Lateral flame spread on the long specimen wing and flaming particles or droplets

Name of measured quantity	Unit	Specimen		
		1	2	3
Lateral flame spread on the long specimen wing LFS < edge	YES/NO	NO	NO	NO
Flaming particles or droplets	YES/NO time, s	NO	NO	NO

1.4. Appearance of the specimen

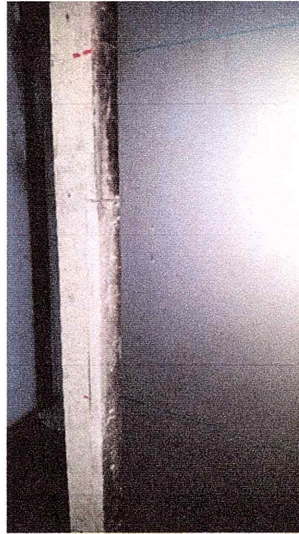
Specimen 1



Specimen 2



Specimen 3



2. Ignitability of products subjected do direct impingement of flame according to PN-EN ISO 11925-2

Surface ignition

Exposure time of pilot burner flame - 30 s

Name of measured quantity	Unit	Specimen no./Test direction						Final result
		lenght direction			cross direction			
		1	2	3	4	5	6	
Ignition of specimen	YES/NO	NO	NO	NO	-	-	-	NO
Ignition of paper	YES/NO	NO	NO	NO	-	-	-	NO
Flame spread > 150 mm	YES/NO	NO	NO	NO	-	-	-	NO
Time of arrival of the flame front 150 mm	s	-	-	-	-	-	-	-

Remarks: none.

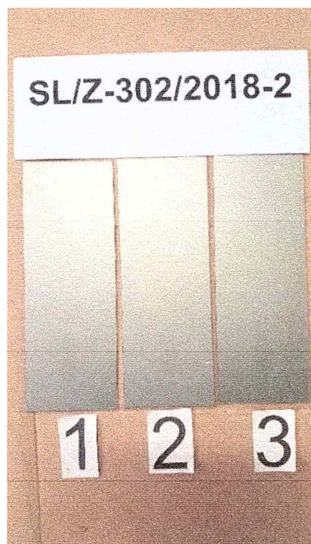


Figure 2.1. Appearance of the specimens

3. Final findings

Test method	Parameter/Unit	Measured value	Critical value	Classification
PN-EN 13823	FIGRA, W/s	90	≤ 120	B
	THR _{600s} , MJ	0,9	$\leq 7,5$	
	LFS < edge	NO	No	
	SMOGRA, m ² ·s ⁻²	0	≤ 30	s1
	TSP600s, m ²	26	≤ 50	
	Flaming particles or droplets, time s	NO	NO	d0
PN-EN ISO 11925-2 Exposure time 30 s	Flame spread > 150 mm in 60 s, mm	NO	NO	-
	Ignition of paper	NO	NO	no d2

The tested product meets the requirements of **B-s1,d0** class according to EN 13501-1+A1:2010

4. Remaining required information with norm

Date of receipt of samples: 28.11.2018

System of the sampling: sponsor took and delivered samples.

Description of the samples: Self-adhesive foils glued to steel sheet 0,8 mm thick marked as Profiflex Deco FTP P80 + and Profiflex Deco FTP 80 AIR +. 4 samples dimensions of 1500x1000 mm and 4 samples dimensions of 1500x500 mm (two sets for each type of foil) and 12 samples dimensions of 250x90 mm (6 of each type) were delivered by the sponsor.

Conditioning of specimens: constant mass at a temperature of 23 ± 2 °C, and relative humidity of 50 ± 5 %.

Description of the substrate and fixing to the substrate: Samples were glued to the standard metal substrate of classes A1 according PN-EN 13238: 2011 section 5.3 (steel sheet density 7850 ± 50 kg/m³ and thickness of $0,8 \pm 0,2$ mm).

Declaring: The test results rate to the behaviour of the test specimens under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the products in use.

Operator:

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dr inż. Krzysztof Sychta

Date and place of test : 30.11.2018, Police