

CERTIFICATE

CENTEXBEL TYPE TESTING | CERTIFICATION REPORT N° pw701_2018

According to reports N° A18.01147.01, dated on 9/04/2018, we confirm that the below mentioned item was tested at CENTEXBEL with reference to EN-ISO 11952-2: Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test.

The items shows

'EU fire classification E'

Provided that it is properly applied.

The evaluation of this properties is based on evaluation scheme specified in EN 13501-1:2007 +A1:2009: Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests.

SAMPLE

Beelite 2D and 3D

Company

BEELITE nv

Avenue A. Franck 5 7700 Mouscron

Belgium

Certificate No. pw701 2018 is valid until 8/04/2023

Centexbel | Technologiepark 7 | BE 9052 Gent | Belgium, 9/04/2018

Inge De Witte, PhD Certification Manager





BEELITE nv Dhr. Patrick Dejaeger Avenue A. Franck 5 7700 Mouscron

Your message	Your reference	our reference	Gent
,		Jw/675	2018-04-12

Comments on report 18.01147.01

Dear,

From Europal we received several samples cardboard named Beelite 2D and 3D our references T1804348 and T1804349 to determine the EU fire classification according EN13501-1.

For this purpose we performed test according EN-ISO 11925-2: Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test

EN ISO 11925- 2^{25} evaluates the ignitability of a product under exposure to a small flame. The test is relevant for the classes B, C, D, E, B_{fl}, C_{fl}, D_{fl} and E_{fl}

The small flame test is quite similar to the DIN test used for the German class B2. Variants of this procedure are also found in other EU member states regulations. The test rig is shown in Figure 16 and the test specifications in Table 17.

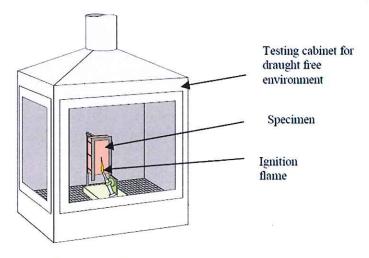


Figure 16 EN ISO 11925-2 Small flame test.



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The obtained test results were evaluated to the requirements mentioned in EN 13501-1:2007+A1:2009:Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests.

Table 1 — Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products

Class	Test method(s)	Classification criteria	Additional classification
A1	EN ISO 1182* and	$\Delta T \le 30$ °C; and $\Delta m \le 50$ %; and $t_4 = 0$ (i.e. no sustained flaming)	
	EN ISO 1716	PCS ≤ 2,0 MJ/kg * and PCS ≤ 2,0 MJ/kg * and PCS ≤ 1,4 MJ/m² * and PCS ≤ 2,0 MJ/kg *	
A2	EN ISO 1182* or	$\Delta T \le 50$ °C; and $\Delta m \le 50$ %; and $4 \le 20$ s	
	EN ISO 1716 and	PCS ≤ 3,0 MJ/kg *and PCS ≤ 4,0 MJ/m² *b and PCS ≤ 4,0 MJ/m² *d and PCS ≤ 3,0 MJ/kg *	
	EN 13823	FIGRA ≤ 120 W/s and LFS < edge of specimen and THR _{600s} ≤ 7,5 MJ	Smoke production ¹ and Flaming droplets/particles ⁹
В	EN 13823 and	FIGRA ≤ 120 W/s and LFS < edge of specimen and THR _{500x} ≤ 7,5 MJ	Smoke production * and Flaming droplets/particles *
	EN ISO 11925-2 ': Exposure = 30 s	F _s ≤ 150 mm within 60 s	
С	EN 13823 and	FIGRA ≤ 250 W/s and LFS < edge of specimen and THR _{500s} ≤ 15 MJ	Smoke production ¹ and Flaming droplets/particles ⁹
	EN ISO 11925-2 ': Exposure = 30 s	F _a ≤ 150mm within 60 s	
D	EN 13823 and	FIGRA ≤ 750 W/s	Smoke production and Flaming droplets/particles
	EN ISO 11925-2 ': Exposure = 30 s	F _s ≤ 150 mm within 60 s	
E	EN ISO 11925-2 ': Exposure = 15 s	F _s ≤ 150 mm within 20 s	Flaming droplets/particles "
F		No performance determined	

For homogeneous products and substantial components of non-homogeneous products.

introduced, the effect of which needs further investigation. This may result in a modification of the limit values and/or parameters for the evaluation of the smoke production.

81 = SMOGRA \leq 30m³/s² and $TSP_{800a} \leq$ 50m³; 82 = SMOGRA \leq 180m³/s² and $TSP_{800a} \leq$ 200m³; 83 = not s1 or s2 ⁹ di0 = No flaming droplets/ particles in EN 13823 within 600 s;

d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s;

d2 - not d0 or d1.

Ignition of the paper in EN ISO 11925-2 results in a d2 classification.

For any external non-substantial component of non-homogeneous products.
 Alternatively, any external non-substantial component having a PCS ≤ 2,0 MJ/m², provided that the product satisfies the following criteria of EN 13823: $FIGRA \le 20$ W/s, and LFS < edge of specimen, and $THR_{mon} \le 4,0$ MJ, and s1, and d0. 4 For any internal non-substantial component of non-homogeneous products.

For the product as a whole.

In the last phase of the development of the test procedure, modifications of the smoke measurement system have

Pass = no ignition of the paper (no classification);
Fail = ignition of the paper (d2 classification).
Under conditions of surface flame attack and, if appropriate to the end—use application of the product, edge flame attack

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Conclusion:

Based on the obtained results we can conclude that samples cardboard named Beelite 2D and 3D our references T1804348 and T1804349 fulfil the requirements to be classified as EU fire classification E.

We hope having been helpful with this information.

Yours sincerely,

PhD. Jo Wynendaele

Consultant Floor and Wall coverings