

PIVOT DECORATIVE MATERIALS CO., LTD

PIVOT INDUSTRIAL PARK, HUASHI, JIANGYIN JIANGSU, CHINA

The following sample(s) was / were submitted and identified on behalf of the client as:

Product Description: FIRE-RESIST ALUMINIUM COMPOSITE PANEL

Manufacturer: PIVOT DECORATIVE MATERIALS CO., LTD

Country of Origin: CHINA

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Required:

This test is conducted as per EN 13823:2002 and EN ISO 11925-2:2002, and the results classification has been carried out in accordance with EN 13501-1:2007.

Test Results: -- See attached sheet --

Test Duration:

Sample Receiving Date : AUG.20, 2008

Test Performing Date : AUG.20, 2008 TO SEP.17, 2008

Signed for and on behalf of
SGS-CSTC Co., Ltd.

Jaffery Lee
Engineer

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I. Test reference

1. EN 13501-1:2007 Fire classification of construction products and building elements—Part 1: Classification using data from reaction to fire tests.
2. EN 13823:2002 Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item.
3. EN ISO 11925-2:2002 Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test.

II. Product details:

Descriptions (EN 13823)	1) No substrate and free standing at a distance of 80mm from the backing board in the trolley. 2) The specimen is fixed mechanically in the trolley.
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Remark: The details of the product given above have been prepared from information provided by the sponsor of the test.

III. Test results:

Test method	Parameter	Specimen number	Results
EN 13823	FIGRA (W/s)	3	7.5
	LFS< edge of specimen		YES
	THR _{600s} (MJ)		2.1
	SMOGRA (m ² /s ²)		4.0
	TSP _{600s} (m ²)		14.4
	Flaming particles or droplets		NO
EN ISO 11925-2 Exposure = 30 s	F _s ≤ 150 mm	6	YES
	Ignition of the filter paper		NO

To be continued...

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IV. Classification

This classification has been carried out in accordance with **EN 13501-1:2007**.

Conclusion: The product, SI – TERMINAL, classification is as following.

Fire behaviour		Smoke production			Flaming droplets	
B	—	s	1	,	d	0

Reaction to fire classification: B—s 1 , d 0

Remark: The classes with their corresponding fire performance are given in annex A.

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

Annex A

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 ^a and	$\Delta T \leq 30^\circ\text{C}$, and $\Delta m \leq 50\%$, and $t_f = 0$ (i.e. no sustained flaming)	-
	EN ISO 1716	$PCS \leq 2.0\text{MJ/kg}$ ^a and $PCS \leq 2.0\text{MJ/kg}$ ^{b,c} and $PCS \leq 1.4\text{MJ/m}^2$ ^d and $PCS \leq 2.0\text{MJ/kg}$ ^e	-
A2	EN ISO 1182 ^a or	$\Delta T \leq 50^\circ\text{C}$, and $\Delta m \leq 50\%$, and $t_f \leq 20\text{ s}$ $PCS \leq 3.0\text{MJ/kg}$ ^a and $PCS \leq 4.0\text{MJ/m}^2$ ^b and $PCS \leq 4.0\text{MJ/m}^2$ ^d and $PCS \leq 3.0\text{MJ/kg}$ ^e	-
	EN ISO 1716		-
	EN 13823	$FIGRA \leq 120\text{W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5\text{MJ}$	Smoke production ^f and Flaming droplets/particles ^g

To be continued...

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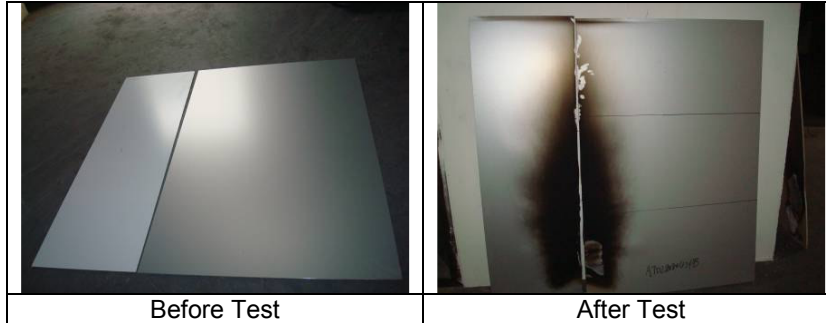
B	EN 13823	and	FIGRA≤120W/s and LFS<edge of specimen and THR _{600s} ≤7.5MJ	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure =30s		60s 内 Fs≤150mm	
C	EN 13823	and	FIGRA≤250W/s and LFS<edge of specimen and THR _{600s} ≤15MJ	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure=30s		Fs≤150mm within 60 s	
D	EN 13823	and	FIGRA≤750W/s	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure=30s		Fs≤150mm within 60 s	
E	EN ISO 11925-2 ⁱ Exposure =15s		Fs≤150mm within 20 s	flaming droplets/particles ^h
F	No performance determined			

^a For homogeneous products and substantial components of non-homogeneous products.
^b For any external non-substantial component of non-homogeneous products.
^c 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 ≤ 20 W/s, and LFS < edge of specimen, and THR_{600s} ≤ 4,0 MJ, and s1, and d0.
^d For any internal non-substantial component of non-homogeneous products.
^e For the product as a whole.
^f In the last phase of the development of the test procedure, modifications of the smoke measurement system have been 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.
s1 = SMOGRA ≤ 30m²/s² and TSP_{600s} ≤ 50m²; s2 = SMOGRA ≤ 180m²/s² and TSP_{600s} ≤ 200m²; s3 = not s1 or s2
^g d0 = 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.
^h Pass = no ignition of the paper (no classification);
Fail = ignition of the paper (d2 classification).
ⁱ Under conditions of surface flame attack and, if appropriate to the end-use application of the product, edge flame attack.

To be continued...

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Photo Appendix:



End of Report

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