TEST REPORT

No. : SHCCM160200598
Date : Mar. 22, 2016
Page: 1 of 8

[redacted]

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

Sample Name	:	PET ACOUSTIC PANEL
Sample Number	:	SHCCM160200598
Test Required	:	EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements—Part 1: Classification using data from reaction to fire tests, class B.
Product specification	:	2440x1220x9mm
Manufacturer		[redacted]
Date of Receipt	:	Feb. 23, 2016
Test Period	:	Feb. 23, 2016 to Mar. 22, 2016
Test result(s)	:	For further details, please refer to the following page(s)

******** To be continued********

Signed for SGS-CSTC Standards
Technical Services (Shanghai) Co., Ltd.

Erin Huang
Authorized signatory

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I. Test conducted

This test is conducted as per EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests. And the test methods as following:

1. EN 13823:2010 Reaction to fire tests for 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 building products subjected to direct impingement of flame — Part 2: Single-flame source test.

II. Details of classified product

a) Nature and end use application

The product “PET ACOUSTIC PANEL” is defined as sound absorbing and decorative materials. It’s used as sound absorbing and decorative materials. End use application: interior wall, ceiling, office furniture, etc., but not limited to the above products.

b) Description

The details of the product given above have been prepared from information provided by the sponsor of the test.

Color	Beige
Thickness	9.4mm
Mass per unit area	About 2.2kg/m^2

Mounting and fixing:

Fire cement board, with its density approximate 1800kg/m^3, thickness 6mm, is as the substrate.

The test specimens are fixed mechanically to be substrate with screws. No joint in the long wing.

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III. Test results

Test method	Parameter	Number of tests	Results
EN 13823	FIGRA（W/s）	3	42.5
	LFS < edge of specimen		Yes
	THR_{600s}（MJ）		4.6
	SMOGRA（m^2/s^2）		0
	TSP_{600s}（m^2）		25.0
	Flaming particles or droplets		No

Test method	Parameter	Specimen number	Results
EN ISO 11925-2 Exposure = 30 s	*F*s ≤ 150 mm	6	Yes
	Ignition of the filter paper		No

IV. Classification and direct field of application

This classification has been carried out in accordance with EN 13501-1:2007+A1:2009.

a) Classification

The product, PET ACOUSTIC PANEL, classification is as following,

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

Reaction to fire classification: B－s1, d0

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

******** To be continued********

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b) Field of application

This classification for the submitted sample is valid for the following end use condition:

--- With all substrates classified A1 and A2

--- With screws to the substrate in mounting for fixing

--- No joint

This classification is valid for the following product parameters:

---Characteristics of various layers identical to those as described in § II b) of this test reports.

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.

Warning:

This classification report does not represent type approval or certification of the product.

The test laboratory has, therefore, play no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.

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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		ΔT≤30℃, and Δm≤50%, and t_f=0(i.e. no sustained flaming)	-
	EN ISO 1716		*PCS*≤2.0MJ/kg [a] and *PCS*≤2.0MJ/kg [b c] and *PCS*≤1.4MJ/m^2 [d] and *PCS*≤2.0MJ/kg [e]	-
A2	EN ISO 1182 [a] or	and	ΔT≤50℃, and Δm≤50%, and t_f≤20 s	-
	EN ISO 1716		*PCS*≤3.0MJ/kg [a] and *PCS*≤4.0MJ/m^2 [b] and *PCS*≤4.0MJ/m^2 [d] and *PCS*≤3.0MJ/kg [e]	-
	EN 13823		*FIGRA*≤120W/s and *LFS*＜edge of specimen and THR_{600s}≤7.5MJ	Smoke production [f] and Flaming droplets/particles [g]
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		Within 60s *F*s≤150mm	

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Class	Test method(s)	Classification criteria	Additional classification
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	*F*s≤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	*F*s≤150mm within 60 s	
E	EN ISO 11925-2 [i] Exposure =15s	*F*s≤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/m^2 , 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 ≤ 30m^2/s^2 and TSP_{600s} ≤ 50m^2 ; s2 = SMOGRA ≤ 180m^2/s^2 and TSP_{600s} ≤ 200m^2; 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.

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Test photos:



Before test



After test

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TEST REPORT



Before test



After test

Note: The test was performed by SGS other internal laboratory.

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