



TEST REPORT

REPORT NUMBER: 161019002SHF-BP-2

ORIGINAL ISSUE DATE: 2016/12/23

EVALUATION CENTER

Intertek Testing Services Ltd., Shanghai
Plant 7, No. 6958 Daye Road, Fengxian District, Shanghai, China

RENDERED TO

Jiangsu Dongfang Botec Technology Co., Ltd.
No. 8 Huayu Rd. Donglai District, Yangshe Town, Zhangjiagang City, China

PRODUCT EVALUATED

Aluminum composite panel-ACP&CORE

EVALUATION PROPERTY

As requested by the applicant, for details refer to attached pages(s).

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Report Template Revision Date: 2016/9/1



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Applicant:	Jiangsu Dongfang Botec Technology Co., Ltd.
Applicant Address:	No. 8 Huayu Rd. Donglai District, Yangshe Town, Zhangjiagang City, China
Attn:	吴青松

Sample information:

Product:	Aluminum composite panel-ACP&CORE
Model:	/
Specification:	1220mm*2440mm*4mm
Sample Quantity:	10 pcs
Sample ID:	S161019002SHF-001~010
Date Received:	2016/10/18
Date Test Conducted:	2016/10/25

Conclusion:

For details refer to attached page(s).

Supersede report No. 161019002SHF-BP-1.

The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

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1 Test Items, Method and Results:

1.1 HEAT OF COMBUSTION TEST

The test was conducted in accordance with EN ISO 1716. This test evaluates the gross heat of combustion (QPCS) of products at constant volume in a bomb calorimeter.

1.2 SINGLE BURNING ITEM TEST

The test was conducted in accordance with EN 13823. This test evaluates the potential contribution of a product to the development of a fire, under a fire situation simulating a single burning item near to the product.

1.3 CLASSIFICATION CRITERIA

The classification was determined in accordance with EN 13501-1: 2007+A1: 2009. The classes A2 with their corresponding fire performance are given in the table below.

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

Class	Test Method(s)	Classification criteria	Additional classifications
A2	EN ISO 1716 and	$PCS \leq 3.0 \text{ MJ/kg}^a$ and $PCS \leq 4.0 \text{ MJ/m}^2^b$ and $PCS \leq 4.0 \text{ MJ/m}^2^c$ and $PCS \leq 3.0 \text{ MJ/kg}^d$	--
	EN 13823	$FIGRA \leq 120 \text{ W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5 \text{ MJ}$	Smoke production ^e and Flaming droplets/particles ^f

Note:

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

b. For any external non-substantial component of non-homogeneous products.

c. For any internal non-substantial component of non-homogeneous products.

d. For the product as a whole.

e. 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 $\leq 30 \text{ m}^2/\text{s}^2$ and TSP_{600s} $\leq 50 \text{ m}^2$; s2 = SMOGRA $\leq 180 \text{ m}^2/\text{s}^2$ and TSP_{600s} $\leq 200 \text{ m}^2$; s3 = not s1 or s2.

f. 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 600s;

d2 = not d0 or d1.

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2 RESULTS AND OBSERATIONS

Method	Parameter		Result
EN ISO 1716: 2010	PCS	PVDF Coating, MJ/m ²	0.3
		Aluminium Skin, MJ/kg	0
		Adhesive Film, MJ/m ²	1.8
		A2 Core, MJ/kg	2.1
		Adhesive Film, MJ/m ²	1.8
		Aluminium Skin, MJ/kg	0
		PE Coating, MJ/m ²	0.1
		The whole product, MJ/kg	1.9
EN 13823: 2010	FIGRA _{0.2MJ} , W/s		10
	THR _{600s} , MJ		1.2
	LFS, m		<Edge of Specimen
	SMOGR _A , m ² /s ²		0
	TSP _{600s} , m ²		22
	Flaming Droplets/ Particles		No flaming droplets/particles occur within 600s

Note

1. This test was conducted at the external approved facility, located at Guangzhou.
2. Per EN 13823, the samples were free standing at a distance of 80 mm from the backing 9 mm thick calcium silicate board. The density of the calcium silicate board was 900 kg/m³.

3 CLASSIFICATION

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

Fire behaviour	Smoke production		Flaming Droplets	
A2	-	s	-	d
		1		0

Reaction to fire classification: A2 - s1, d0

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4 Test Photos



Short Wing (Right), before test



Long Wing (Left), before test



Short Wing (Right), after test



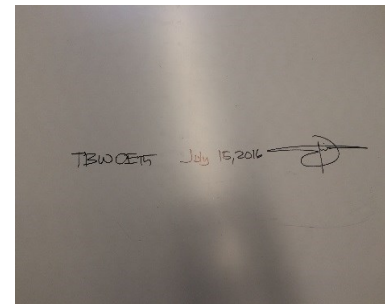
Long Wing (Left), after test

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Appendix A: Sample received photo



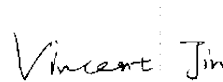
* According to the statement provided by the sponsor, these samples were sampled and selected by Thomas Bell-Wright international Consultants.

Approved by:


Name: Sun Sun
Title: Approver



Name: Harrison Li
Title: Reviewer


Name: Vincent Jin
Title: Project Engineer

The End of Report

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