

# Jiangsu A2Board Industry Co.,Ltd

## TEST REPORT

**SCOPE OF WORK**

A2 grade aluminum composite panel

**REPORT NUMBER**

210222002SHF-001

**TEST DATE(S)**

2021-02-22 - 2021-03-09

**ISSUE DATE**

2021-03-09

**PAGES**

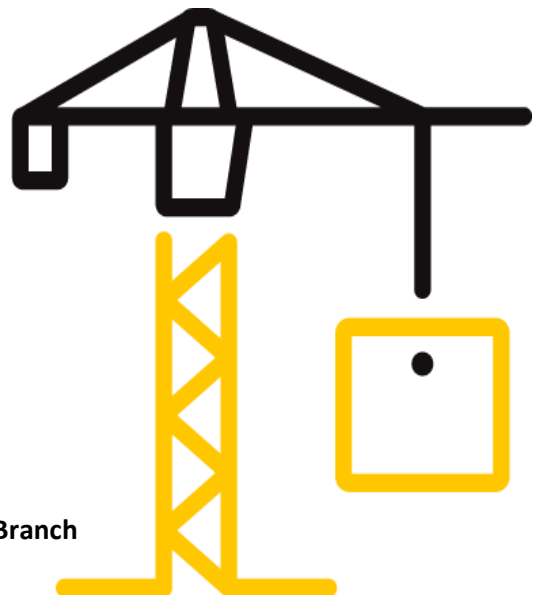
7

**DOCUMENT CONTROL NUMBER**

LFT-APAC-SHF-OP-10k(May 1, 2020)

© 2020 INTERTEK

Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch



## Test Report

### Statement

- 1.This report is invalid without company's special seal for testing on assigned page.
- 2.This report is invalid without authorized person's signature.
- 3.This report is invalid where any unauthorized modification indicated.
- 4.Don't copy this report in partial (except full copy) without any official approval in written by our company. This report is invalid without re-stamping the special seal for testing in copying report.
- 5.Any holder of this document is advised that this report is for the exclusive use of Intertek's Customer and is provided pursuant to the agreement between Intertek and its Customer. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. This report was made with due care within the limitation of a defined scope of work and on the basis of information, materials and instructions received from the Customer or its nominated third parties. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. The tests results are not intended to be a recommendation for any particular course of action. Customer is responsible for acting as it sees fit on the basis of such results.
- 6.Intertek's written consent is required to use Intertek's name or logo on the object, product or service being tested. The observations and test results in this report relate only to the sample under test. This report alone does not indicate that the item, product or service has passed any Intertek certification program.
- 7.The report was digital signed by Shang Hai, Intertek Group plc, please using Adobe Acrobat Reader to verify the authenticity.



## Test Report

Issue Date: 2021-03-09 Intertek Report No. 210222002SHF-001  
 Applicant: Jiangsu A2Board Industry Co.,Ltd  
 Address: No.3 west ring road Fengyi Guanlin town yixing city jiangsu Province, China  
 Attn: Xuefeng Miao  
 Manufacturer: Jiangsu A2Board Industry Co.,Ltd  
 Address: No.3 west ring road Fengyi Guanlin town yixing city jiangsu Province, China  
 Test Type : Performance test, samples provided by the applicant.

### Product Information

<b>Product Name</b>	A2 grade aluminum composite panel	<b>Brand</b>	A2board
<b>Sample Description</b>	Good Condition	<b>Sample Amount</b>	14 pcs
		<b>Received Date</b>	2021-02-20
<b>Sample ID</b>	<b>Model</b>	<b>Specification</b>	
S210222002SHF.001~003	A2-50450-PVDF	0.5*0.5*4 mm	

### Test Methods And Standards

<b>Test Standard</b>	EN 13823:2010+A1:2014 and EN ISO 1716:2010
<b>Specification Standard</b>	EN 13501-1:2018
<b>Test Conclusion</b>	The samples were tested according to the above standards, and the results are shown in the following page.

#### Note:

1.This report relates specifically to the sample(s) that were drawn and provided by the applicant or their nominated third party. The reported result(s) provide no warranty or verification on the sample(s) representing any specific goods and/or shipment and only relate to the sample(s) as received and tested.

### Report Authorized


  
Sally Xie                      Chao Wang  
 Name: Sally Xie                      Name: Chao Wang  
 Title: Reviewer                      Title: Project Engineer

# Test Report

Issue Date: 2021-03-09

Intertek Report No. 210222002SHF-001

## Test Items, Method and Results:

EN 13501-1:2018 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests

### 1.1 HEAT OF COMBUSTION TEST

The test was conducted in accordance with EN ISO 1716. This test evaluates the gross heat of combustion ( $Q_{PCS}$ ) 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 13501-1:2018. The class A2 with its corresponding fire performance is given in the table below.

Table - Class 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	$FIGRA_{0.2MJ} \leq 120 \text{ W/s}$ and LFS < edge of specimen and $THR_{600s} \leq 7.5 \text{ MJ}$	Smoke production <sup>e</sup> and Flaming droplets/particles <sup>f</sup>

**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.  $s1 = SMOGRA \leq 30 \text{ m}^2/\text{s}^2$  and  $TSP_{600s} \leq 50 \text{ m}^2$ ;  $s2 = SMOGRA \leq 180 \text{ m}^2/\text{s}^2$  and  $TSP_{600s} \leq 200 \text{ m}^2$ ;  $s3 = \text{not } s1 \text{ or } s2$ .
- f.  $d0 = \text{no flaming droplets/particles in EN 13823 within 600s}$ ;  
 $d1 = \text{no flaming droplets/particles persisting longer than 10s in EN 13823 within 600s}$ ;  
 $d2 = \text{not } d0 \text{ or } d1$ .  
 Ignition of the paper in EN ISO 11925-2 results in a  $d2$  classification.

# Test Report

Issue Date: 2021-03-09

Intertek Report No. 210222002SHF-001

## Test Items, Method and Results:

### 2 RESULTS AND OBSERATIONS

Method	Parameter		Result
EN ISO 1716:2010	PCS	Top Coating, MJ/m <sup>2</sup>	0.2853
		Aluminium Skin, MJ/kg	0
		Adhesive film, MJ/m <sup>2</sup>	2.5153
		A2 Core, MJ/kg	2.5123
		Back Coating, MJ/m <sup>2</sup>	0.3117
		the whole product, MJ/kg	2.3273
EN 13823:2010+A1:2014 *	FIGRA <sub>0.2MJ</sub> , W/s		0
	THR <sub>600s</sub> , MJ		0.5
	LFS, m		<Edge of specimen
	SMOGRA, m <sup>2</sup> /s <sup>2</sup>		0
	TSP <sub>600s</sub> , m <sup>2</sup>		27
	Flaming droplets/particles		No flaming droplets/particles occur within 600s

#### Note

- \*Test item is subcontracted on accreditation by CNAS L0057.
- Per EN 13823, the samples were free standing at a distance of 80mm from the backing board. Backing board was a 12mm thick calcium silicate board. The density of the calcium silicate board was 900kg/m<sup>3</sup>.
- The information of each component of the product was declared by applicant, see below table.

Layer No. (from face to back)	Material of each Layer	Mass per unit area (kg/m <sup>2</sup> )	Thickness (mm)
1	Top Coating	0.022	0.028
2	Top Aluminium Skin	1.36	0.5
3	Adhesive film	0.056	0.08
4	A2 core	5.76	3.0
5	Adhesive film	0.056	0.08
6	Back Aluminium skin	1.36	0.5
7	Back Coating	0.0218	0.011

### 3 CLASSIFICATION

The classification has been carried out in accordance with EN 13501-1.

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

Reaction to fire classification: A2 - s1, d0

## Test Report

Issue Date: 2021-03-09

Intertek Report No. 210222002SHF-001

### Test Items, Method and Results:

#### 4 Test Photos of EN 13823



Before test (Long wing)



Before test (Short wing)



After test (Long wing)



After test (Short wing)

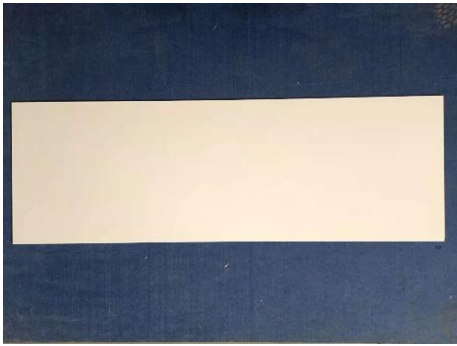


## Test Report

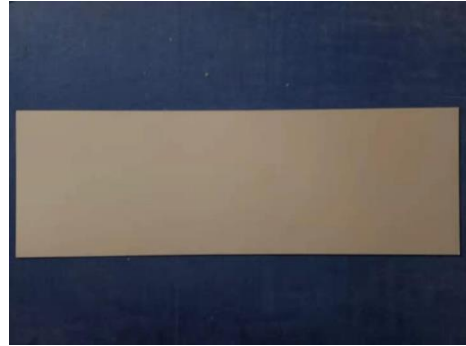
Issue Date: 2021-03-09

Intertek Report No. 210222002SHF-001

### Appendix A: Sample Received Photo



Front view(test side)



Back view



Section view



Top Coating



Adhesive Film



A2 Core



Back Coating

### Revision:

NO.	Date	Changes	Author	Reviewer
210222002SHF-001	2021-03-09	First issue	Chao Wang	Sally Xie

