

MODERN INDUSTRIAL CO.,LTD

TEST REPORT

SCOPE OF WORK

Aluminium composite panel

REPORT NUMBER

231030004SHF-002

TEST DATE(S)

2023-11-13- 2023-11-29

ISSUE DATE

2023-11-30

PAGES

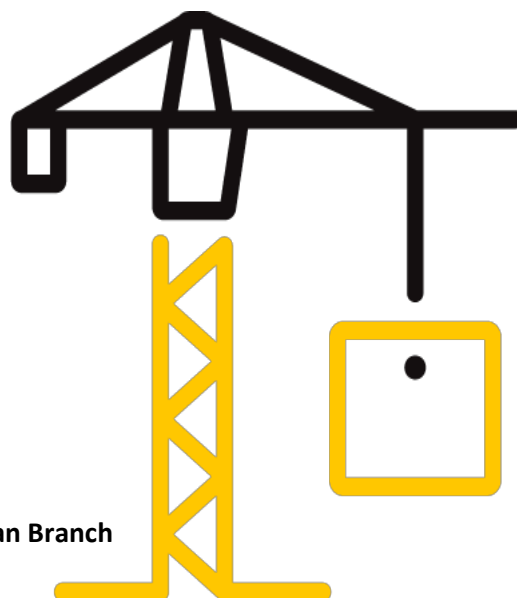
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DOCUMENT CONTROL NUMBER

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Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch



Test Report

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Test Report

Issue Date: 2023-11-30 Intertek Report No. 231030004SHF-002
Applicant: MODERN INDUSTRIAL CO.,LTD
Address: Phase 1, Sudair Industrial And Business City, Al Majmaah City, Riyadh Province, Saudi Arabia
Attn: FAN XIAOWEI
Manufacturer: MODERN INDUSTRIAL CO.,LTD
Address: Phase 1, Sudair Industrial And Business City, Al Majmaah City, Riyadh Province, Saudi Arabia
Test Type: Performance test, samples provided by the applicant.

Product Information

Product Name	Aluminium composite panel	Brand	/
Sample Description	Good Condition	Sample Amount	1 box
		Received Date	2023-11-13
Sample ID	Model	Specification	
S231030004SHF.006~007	/	/	

Test Methods And Standards

Test Standard	EN 13823:2020+A1:2022 and EN ISO 11925-2:2020
Specification Standard	EN 13501-1:2018
Test Conclusion	The samples were tested according to the above standards, and the results are shown in the following page.

Note:

1.This report does not involve sampling. The report only reflects conformity of the tested items of the samples provided by the testing applicant. Representativeness and authenticity of the submitted samples are responsibilities of the testing applicant.

Report Authorized


Name: Sally Xie Lu Cheng
Title: Reviewer Project Engineer

Test Report

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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 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 in a room corner near to the product.

1.2 IGNITABILITY TEST

The test was conducted in accordance with EN ISO 11925-2. This test evaluates the ignitability of a product under exposure to a small flame.

1.3 CLASSIFICATION CRITERIA

The classification was determined in accordance with EN 13501-1:2018. The class B with its corresponding fire performance is 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
B	EN 13823 and	$FIGRA_{0.2MJ} \leq 120 \text{ W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5 \text{ MJ}$	Smoke production ^a and Flaming droplets/particles ^b
	EN ISO 11925-2 ^c Exposure = 30 s	$F_s \leq 150 \text{ mm}$ within 60 s	

Note:

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

b. $d0 = \text{No flaming droplets/particles in EN 13823 within 600s}$;

$d1 = \text{no flaming droplets/particles persisting longer than 10s in EN 13823 within 600s}$;

$d2 = \text{not } d0 \text{ or } d1$.

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

c. 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 Items, Method and Results:

2 RESULTS AND OBSERATIONS

Method	Parameter	Result
EN 13823:2020+A1:2022	FIGRA _{0.2MJ} , W/s	5.99
	THR _{600s} , MJ	0.792
	LFS, m	<Edge of Specimen
	SMOGR _A , m ² /s ²	0
	TSP _{600s} , m ²	14.8
	Flaming Droplets/Particles	No flaming droplets/particles occur within 600s
EN ISO 11925-2:2020 Exposure = 30 s	F _s ≤ 150 mm within 60 s	Yes
	Ignition of the paper	No

Note

1. Per EN 13823, the samples were free standing at a distance of 80mm from the backing board. Backing board was a 15mm thick calcium silicate board. The density of the calcium silicate board was 850kg/m³.

3 CLASSIFICATION

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

Fire behaviour		Smoke production			Flaming droplets	
<i>B</i>	-	<i>s</i>	<i>1</i>	-	<i>d</i>	<i>0</i>

Reaction to fire classification: *B-s1, d0*

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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)

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Appendix A: Sample Received Photo



Front view (test side)



Back view

Revision:

NO.	Date	Changes
231030004SHF-002	2023-11-30	First issue