

GUANGZHOU GOODSENSE DECORATIVE BUILDING MATERIALS CO., LTD

TEST REPORT

SCOPE OF WORK

Aluminum Core Composite Panel

REPORT NUMBER

190920010SHF-001

TEST DATE(S)

2019-09-20~2019-10-15

ISSUE DATE

2019-10-16

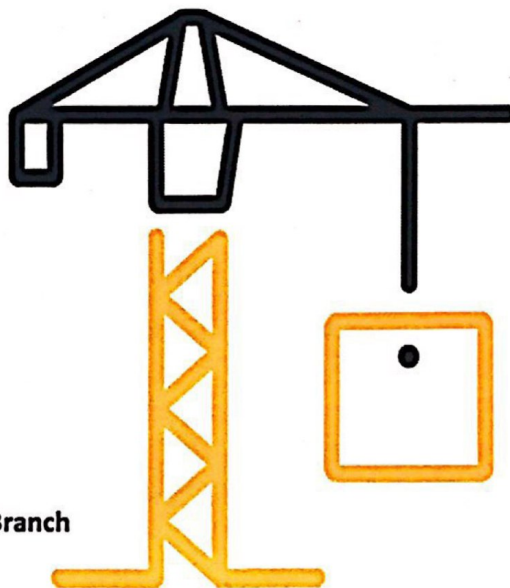
PAGES

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DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10k(May 1, 2019)

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Test Report

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Test Report

Issue Date: 2019-10-16 Intertek Report No. 190920010SHF-001
Applicant: GUANGZHOU GOODSENSE DECORATIVE BUILDING MATERIALS CO., LTD
Address: NO.2 XIZHUYUAN, YANJIANG ROAD, TANBU TOWN, HUADU DISTRICT, GUANGZHOU, CHINA
Attn: Yunhua Duan
Manufacturer: GUANGZHOU GOODSENSE DECORATIVE BUILDING MATERIALS CO., LTD
Address: NO.2 XIZHUYUAN, YANJIANG ROAD, TANBU TOWN, HUADU DISTRICT, GUANGZHOU, CHINA
Test Type : Performance test, samples provided by the applicant.

Product Information

Product Name	Aluminum Core Composite Panel	Remark	GOODSENSE
Sample Description	Good Condition	Sample Amount	17 PCS
		Received Date	2019-09-19
Sample ID	Model	Specification	
S190920010SHF.001~005	FC9906	4*0.5	

Test Methods And Standards

Test Standard	ASTM D3363-05(2011) ^{e2} , With reference to ASTM E8/E8M-16a, In house method, ASTM E831-19, ASTM C518-17
Specification Standard	/
Test Conclusion	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

Flora
Name: Flora Fan
Title: Reviewer



Jackie Zhou
Name: Jackie Zhou
Title: Project Engineer

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Test Items, Method and Results:

Test items	Test Methods	Test Results
Dry Film Hardness	ASTM D3363-05(2011) ^{e2}	Scratch hardness: 2H

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Test Items, Method and Results:

Test Item: Tension Testing

Test Method: With reference to ASTM E8/E8M-16a

Specimen Type: Standard Sheet-Type, 12.5mm wide

Test Condition:

Test speed: 2 mm/min

Test Items	Test Results
Ultimate load (Machine direction)	2512N
Ultimate load (Across machine direction)	2649N

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Test Items, Method and Results:

Test Item: Outdoor temperature resistance test

Test Method: In house method

Test Procedure : (Provided by applicant)

1. The samples were divided into two sets, one set was placed in the oven at 80°C for 24h, and the other set was placed in the chamber at -40°C for 24h.
2. Observe the appearance of samples after test.If any, record the defects.

Test Results:

Set	Conditioning	Test Results
1	80°C, 24h	No visible change on surface
2	-40°C, 24h	No visible change on surface

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Test Items, Method and Results:

Test Item: Linear thermal expansion coefficient
Test Method: ASTM E831-19
Conditioning: Condition the specimens at 23±2°C and 50±5%RH for more than 72h before testing.
Specimen: 10 mm x 10 mm

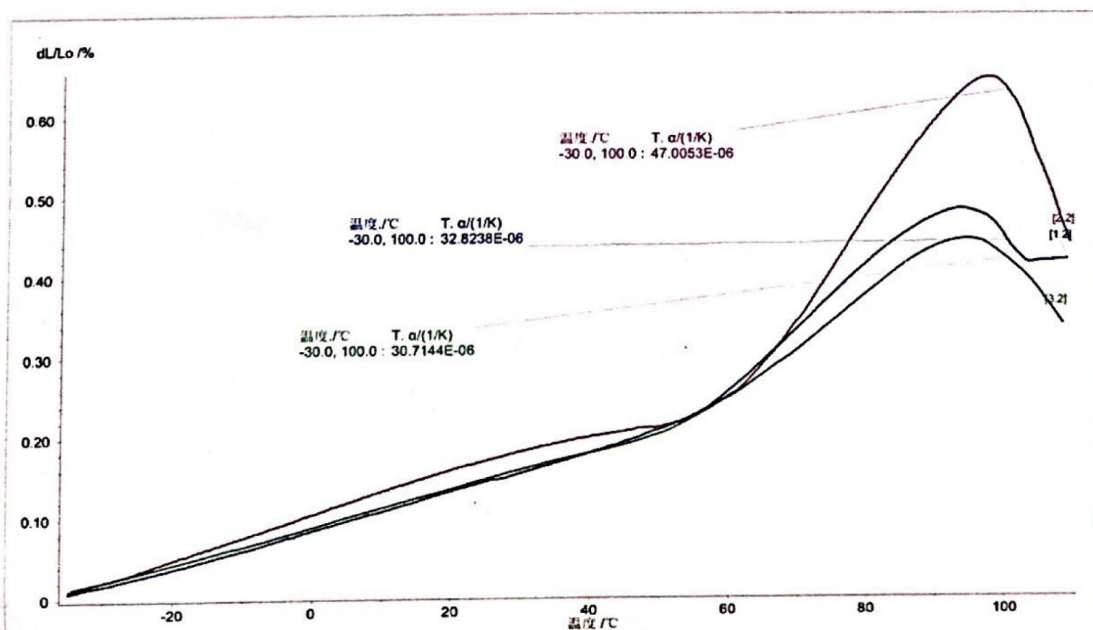
Test Result:

Specimen	Coefficient of linear thermal expansion um/(m.°C)
#1	47.0
#2	32.8
#3	30.7
Average	36.8

Note:

1. Test item was subcontracted on accreditation by CNAS L2233.
2. The test direction was along the length of sample. Test temperature range was from -30°C~100°C.

Test graph:



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Test Items, Method and Results:

Test Item: Thermal conductivity and thermal resistance

Test Method: ASTM C518-17

Conditioning: Condition the test specimen at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity to constant mass

Test Result:

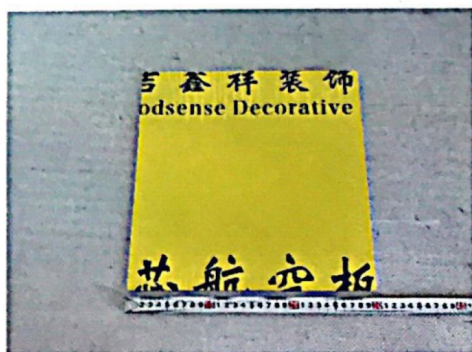
Sample	Thickness	Mean Temperature	Temperature Difference	Thermal Conductivity	Thermal Resistance
	(mm)	($^{\circ}\text{C}$)	($^{\circ}\text{C}$)	($\text{W}/\text{m}\cdot\text{K}$)	($\text{m}^2\cdot\text{K}/\text{W}$)
1	3.89	24.9	12.3	0.128	0.030
2	3.90	24.9	12.1	0.146	0.027
3	3.95	24.9	12.3	0.135	0.029
Average	3.91	25	12	0.136	0.029

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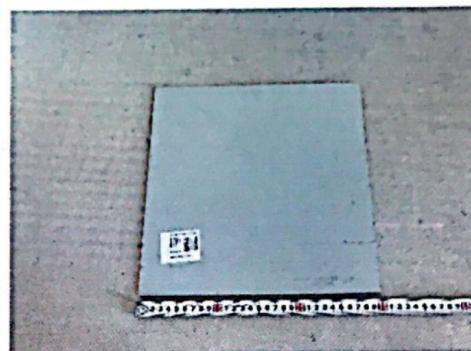
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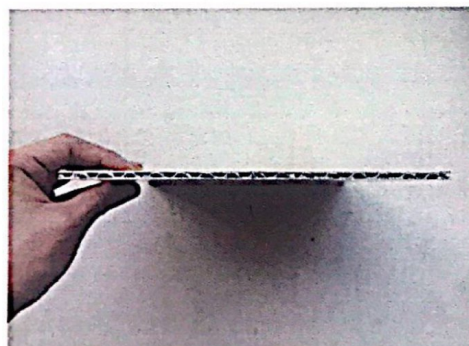
Appendix A: Sample Received Photo



Front view (test face)



Back view



Section view

Revision:

NO.	Date	Changes	Author	Reviewer
190920010SHF-001	2019-10-16	First issue	Jackie Zhou	Flora Fan