

Materials Co.Ltd Foshan Vallen Decoration Materials Vallen Decoration Materials Co. Ltd Co., Ltd.

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171101003SHF-BP-1-R1

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Intertek Testing Services Ltd., Shanghai No.7 Building, No. 6958 Daye Road, Fengxian District, Shanghai, China Materials Co. Tel: 021-61136116 Fax: 021-61189921 Website: www.intertek.com

Test Report

Issue Date: 2017-12-4 Intertek Report No. 171101003SHF-BP-1-R1

Applicant: Foshan Vallen Decoration Materials Co., Ltd.

Applicant Address: 2nd, ChuangYe Road, XinJiao Industrial zone, DaLiang Shunde District, Foshan city

Guangdong Pr.China

Attn: Crystal

Manufacturer: Foshan Vallen Decoration Materials Co., Ltd.

Naterials Co.Ltd Manufacturer 2nd, ChuangYe Road, XinJiao Industrial zone, DaLiang Shunde District, Foshan city

Address: Guangdong Pr.China

SUBJECT: Performance testing

Aluminum core composite panel

Dear Sir.

This test report for represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

TEST METHODS AND STANDARDS	
Refer to the next following Pages.	

SAMPLE ID	MODEL	SPECIFICATION
S171101003SHF.001~008	4mm(0.6,0.6)	/
No	58- 102	
CO2		

SAMPLE RECEIEVED: 2017/11/1; 2017/11/3

TESTED FROM: 2017/11/1 2017/11/23

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LFT-APAC-SHF-OP-10a Version: 1-September-2017



Test Report		Intertek Repor).1	
Issue Date:	2017-12-4	Intertek Repor	rt No. 171101003SHF-BP	-1-R1
Test Items, Method a		,		
Test Items	Test Methods	Test Results	Test Requirements	Verdict
Climbing Drum Peel for Adhesives	ASTM D1781- 98(2012)	Average peel torque: 162 mm·N/mm Failure mode: Within the adhesive	N/A¹	N/A ¹
Core shear ultimate strength	ASTM C393/C393M-16	Mean value: MD: 1.27 Mpa AMD: 1.43 MPa	N/A¹	N/A¹
Shear strength	ASTM D732-10	Mean value: 33.93 MPa	N/A ¹	N/A1
Thickness	In house method	Mean value: 4.18 mm	N/A ¹	N/A ¹
Coating thickness	in nouse method	Mean value: 28 μm	N/A ¹	N/A ¹
Measuring adhesion by tape test	ASTM D3359-17 Method B	Dry adehesion: Adhesion classification: 5B Percent area removed: 0%, None	MajNaje	N/A ¹
Muriatic acid resistance (72 hours, 10%HCl)	ASTM D1308-	No visual change	N/A¹	N/A ¹
Sulfuric acid Resistance (18 hours, 20% H ₂ SO ₄)	02(2013) spot test, covered	No visual change	N/A ¹	N/A ¹
Alkaline resistance (1 hour, 20%NaOH)	131	No visual change	N/A ¹	N/A ¹
Dry Film Hardness	ASTM D3363- 05(2011) ^{£2}	Scratch hardness: 2H	Grade≥F²	Pass
Mortar Resistance (24 Hour Pat Test)	AAMA 2605 Section 8.7.2	There was no loss of film adhesion or visual change in apperance.	There shall no loss of film adhesion or visual change in apperance. ²	Pass
Detergent Resistance	AAMA 2605 Section 8.7.4	No loss of adhesion of the film to the metal. No blistering and no siginificant visual change in apperance.	No loss of adhesion of the film to the metal. No blistering and no siginificant visual change in apperance. ²	Pass

- 1. N/A = Not applicable, no requirement and verdict can be given.
 1. The requirement was cited from the AAMA 2605-17a

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Test Items, Method and Results:

Test Item: Climbing Drum Peel for Adhesives

Conditioning: Condition the test specimens at (23 ± 1)°C and (50 ± 2)% relative humidity for 7 days

Test Item	Test Method	Test Result
Climbing Drum Peel for Adhesives	ASTM D1781-98(2012)	Average peel torque: 162 mm·N/mm Failure mode: Within the adhesive
Note:	**	
Sample received: 2017/11/03		
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Test Items, Method and Results:

Test Item: Core shear ultimate stress Test Method: 3-Point Mid-span Loading

Test span: 150 mm Test speed: 6 mm/min

Specimen: 200mm*75mm*4mm, 5 pieces/direction, Nominal facing thickness: 0.6mm

Test Item	Test Method	Test Result
Core shear ultimate strength	ASTM C393/C393M-16	Mean value: MD: 1.27 MPa AMD: 1.43 Mpa
Note:		ection.
MD = Manufacturing direction;	AMD = Across-manufacturing dire	ection.
Sample received: 2017/11/03		Mar
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Test Items, Method and Results:

Test Item: Shear strength 1.25 mm/min Test speed:

Shear strength		
	ASTM D732-10	Test Result Mean value: 33.93 MPa
Note:		1
Sample received: 2017/11/0	01	-0.
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Test Items, Method and Results:

Test Item: Thickness and coating thickness

Condition the test specimens at (23 ± 1)°C and (50 ± 2)% relative humidity for 24h. Conditioning:

est Item	Test Method	Test Result	
hickness	to be one analysis	Mean value: 4.18 mm Mean value: 28 μm	
Coating thickness	In house method	Mean value: 28 μm	
Note:			, ,0
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Sample ID: S171101003SHF.0	04		0
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Test Items, Method and Results:

AAMA 2605-17a Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Etrusions and Panels

Test items	Test Methods	Test Results	Test Requirements	Verdict
Dry Film Hardness	ASTM D3363- 05(2011) ⁶²	Scratch hardness: 2H	Grade≥F	Pass
Note:	•			
Sample received: 2	2017/11/01			- 0
Sample ID: \$17110	1003SHF.005			
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Test Items, Method and Results:

Measuring adhesion by tape test Test Item: Test Method: ASTM D3359-17 Method B

10%, None

1 to 10%, None

1 t Test Item Test Method Test Result Measuring adhesion by tape test

Note:

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Test Items, Method and Results:

Test Item: Effect of household chemicals 150mm*150mm, 9 pieces Specimen:

Test Item	Test Method	Test Result	
Muriatic acid resistance (72 hours, 10%HCl)	ACTA DADOS 03/2045\	No visual change	
Sulfuric acid Resistance (18 hours, 20% H ₂ SO ₄)	ASTM D1308-02(2013)	No visual change	
Muriatic acid resistance (72 hours, 10%HCI) Sulfuric acid Resistance (18 hours, 20% H ₂ SO ₄) Alkaline resistance (1 hour, 20%NaOH) Note: Sample received: 2017/11/01 Sample ID: S171101003SHF.007	spot test, covered	No visual change	4
Note:		50.1	,
Sample received: 2017/11/01			
Sample ID: S171101003SHF.007		: 2/5	
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Materials Co.,Ltd Intertek Report No. 171101003SHF-BP-1-R1 Issue Date: 2017-12-4

Test Items, Method and Results:

AAMA 2605-17a Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Etrusions and Panels

Test items	Test Methods	Test Results	Test Requirements	Verdict
Mortar Resistance (24 Hour Pat Test) ¹	AAMA 2605 Section 8.7.2	The state of the s	There shall no loss of film adhesion or visual change in apperance.	Pass
Detergent Resistance ²	AAMA 2605 Section 8.7.4	51.74		Pass

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1. The specimens were exposed for 24 hours to 100% relative humidity at 38°C.

2. The specimens was immersed in the detergent solution at 38°C for 72 hours.

Foshan Vallen Decoration 3. Sample received: 2017/11/01 Sample ID: S171101003SHF.008



Materials Co. Ltd Issue Date: 2017-12-4

APPENDIX: SAMPLE RECEIVED PHOTO







Fig.2 Sample received on 2017/11/3

REPORT AUTHORIZED

)ecoration When signed with physical or electronic signature, the contents of this report have been prepared and approved per Intertek's quality process in accordance with ISO 17025.

Title: Approver

Daniel Zhang

Title: Project Engineer

Revision:

evision: NO.	DATE	CHANGES	AUTHOR	REVIEWER
171101003SHF-BP-1	2017/11/23	First issue	Evyn Cui	Daniel Zhang
171101003SHF-BP-1-R1		Add the summary page	Evyn Cui	Daniel Zhang
			ASIIEN	
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