Shanghai Lamarty Decoration Materials Co., Ltd

TEST REPORT

SCOPE OF WORK
Hard wood veneered MDF

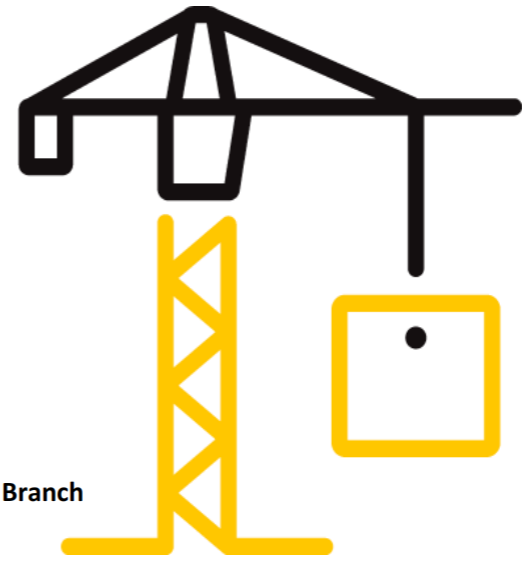
REPORT NUMBER
240806010SHF-001

TEST DATE(S)
2024-08-06 - 2024-09-14

ORIGINAL ISSUE DATE
2024-09-18

PAGES
18

DOCUMENT CONTROL NUMBER
LFT-APAC-SHF-OP-10l(February 1, 2024)



Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch

Test Report

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Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch
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Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Applicant: Shanghai Lamarty Decoration Materials Co., Ltd

Address: 9284 Xinge Road, Xinqiao Town, Songjiang District, Shanghai

Attn: Mr Feng

Test Type: Performance test, samples provided by the applicant.

Product Information

Product Name	Model	Specification
Hard wood veneered MDF	/	19mm
Sample ID	**Sample Amount**	**Sample Received Date**
S240806010SHF.001~014	1 package	2024-08-02
Sample Description		
19mm thickness		

Test Methods And Standards

Test Standard	In house method, EN 319:1993, EN 323:1993, EN ISO 2808:2019 Method 4A, EN 322:1993, EN ISO 26987:2012, EN ISO 2813:2014, EN 438-2:2016+A1:2018, Section 21, EN ISO 105-B02:2014, EN 15187:2024, EN 1399:1997, Method A, Method B, EN 12664:2001, With reference to EN 717-1:2004
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 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

Flora Fan Jackie Zhou

Name: Flora Fan Name: Jackie Zhou

Title: Reviewer Title: Project Engineer

Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Wood veneer thickness

Test Method: In house method provided by applicant

Test procedure: 1. Measure the thickness of sample with wood veneer.

2. Measure the thickness of sample without wood veneer.

3. The thickness difference between the two samples is the wood veneer thickness.

Test Result:

Thickness of sample with wood veneer(mm)	Thickness of sample without wood veneer(mm)	Thickness of wood veneer(mm)
18.95	18.11	0.84

Note:

1. Both samples with wood veneer and without wood veneer were provided by the applicant.

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Test Report

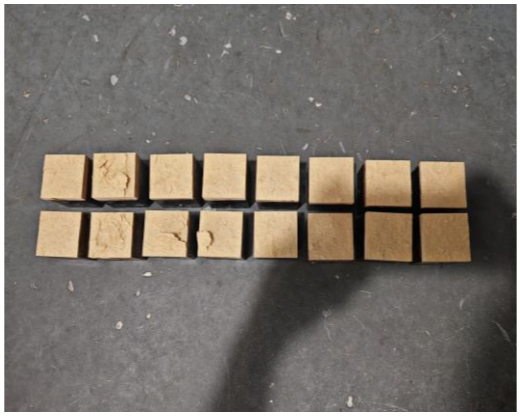
Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Tensile strength perpendicular to the plane of the board
Test Method: EN 319:1993
Conditioning: Conditioned at (20±2)°C and (65±5)% relative humidity until constant mass
Test Parameters:
Specimen size: 50mm × 50 mm (length × width)
Adhesive: Hot melt
Test speed: 3 mm/min

Test Result:

Tensile strength	Failure model
Mean: 0.50 N/mm^2	Fracture within the MDF core



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Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Density
Test Method: EN 323:1993

Test Items	Test Method	Test Results
Density	EN 323:1993	712 kg/m^3

Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Film thickness

Test Method: EN ISO 2808:2019 Method 4A

Test Items	Test Method	Test Results
Film thickness	EN ISO 2808:2019 Method 4A	0.117 mm

Note:

1. Both samples with film and without film were provided by the applicant.

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Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Moisture Content
Test Method: EN 322:1993

Results:

Test Items	Test Method	Test Results
Moisture content	EN 322:1993	Average: 6.4%

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Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Determination of resistance to staining
Test Method: EN ISO 26987:2012
Conditioning: At a temperature of (23±2)°C and relative humidity of (50±5) % for a minimum of 24h

Test Result:

Staining materials	Duration of contact	Types of cleaning	Results	Index
White vinegar (5% acetic acid)	2 hours	Flowing water	Not affected	0
Rubbing alcohol (70% isopropyl alcohol)	2 hours	Flowing water	Not affected	0
White mineral oil (medicinal grade)	2 hours	Flowing water	Not affected	0
Sodium hydroxide solution (5% NaOH)	2 hours	Flowing water	Not affected	0
Hydrochloric acid solution (5% HCl)	2 hours	Flowing water	Not affected	0
Sulfuric acid solution (5% H_2SO_4)	2 hours	Flowing water	Not affected	0
Household ammonia solution (5% NH_4OH)	2 hours	Flowing water	Not affected	0
Household bleach (5.25% NaOCl)	2 hours	Flowing water	Not affected	0
Olive oil (light)	2 hours	Flowing water	Not affected	0
Kerozene (K1)	2 hours	Flowing water	Not affected	0
Unleaded gasoline (regular grade)	2 hours	Flowing water	Not affected	0
Phenol (5% active phenol)	2 hours	Flowing water	Not affected	0

Note:
1. The staining materials were specified by applicant.

Interpretation and presentation of results as per EN ISO 26987:2012

Index	Effect of the test after cleaning/abrasion
0	Not affected
1	Slightly
2	Moderate
3	Severe

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Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item:	Determination of gloss value
Test Method:	EN ISO 2813:2014
Conditioning:	Condition at (23 ± 2) °C and a relative humidity of (50 ± 5) % for at least 16 h before testing
Measuring	60° geometry (applicant' requirement)

Results:

Mean gloss value: 2.2

Note:

1. 60° geometry is specificed by applicant. Test was done as per applicant's requirement.

Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item:	Resistance to impact by large diameter ball
Test Method:	EN 438-2:2016+A1:2018, Section 21
Conditioning:	Condition the test specimens at (23 ± 2)°C and (50 ± 5)% relative humidity for at least 24h

Test Result:

Drop height: 1800mm
Indentation diameter: 9.69 mm

Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Colour fastness to artificial light

Test Method: EN ISO 105-B02:2014, Xenon-arc lamp
Exposure Cycle A1, Method 3

Test Result: Grade 4

Note:

1. Test item was subcontracted to Intertek Testing Services Ltd., Shanghai.

Address: 2/F, Building No.4, Shanghai Comalong Technology Service Park, 889 Yishan Road, Shanghai 200233, China.

Test Report

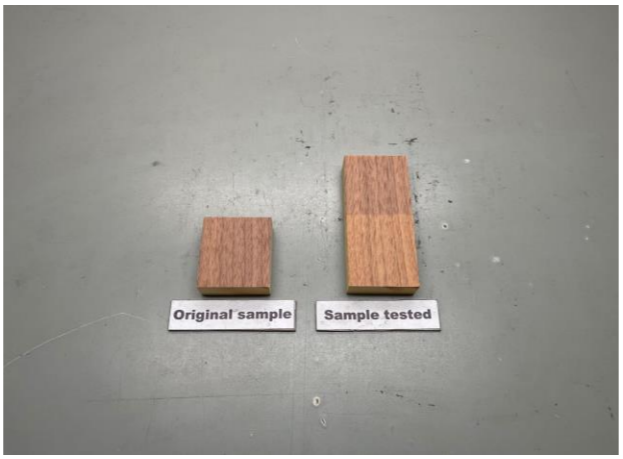
Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Effect of light exposure
Test Method: EN 15187:2024

Test Result: Less than grade 6

Test photo:



After test

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Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Resistance to stubbed cigarette
Test Method: EN 1399:1997, Method A
Conditioning: At a temperature of (23±2) °C and relative humidity (50±5) % for a minimum of 48hours

Test Results:

Cigarette brand	Type of cleaning	Rating
CHUNGHUA	Ethanol	Rating 4
PEONY	Ethanol	Rating 4
BAISHA	Ethanol	Rating 4

Note:

According to EN 1399:1997, the interpretation and presentation of the effect of test after cleaning/abrasion as rating 1-5:

1 = Blistering and/or destruction of surface;
2 = Severe brown mark, but no destruction of surface;
3 = Moderate change of gloss and/or moderate brown stain;
4 = Slight change of gloss only visible at certain viewing angles and/or slight brown stain;
5 = No visible change.

Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Resistance to burning cigarette
Test Method: EN 1399:1997, Method B
Conditioning: At a temperature of (23±2) °C and relative humidity (50±5) % for a minimum of 48hours

Test Results:

Cigarette brand	Type of cleaning	Rating
CHUNGHUA	Ethanol	Rating 2
PEONY	Ethanol	Rating 2
BAISHA	Ethanol	Rating 2

Note:

According to EN 1399:1997, the interpretation and presentation of the effect of test after cleaning/abrasion as rating 1-5:

1 = Blistering and/or destruction of surface;

2 = Severe brown mark, but no destruction of surface;

3 = Moderate change of gloss and/or moderate brown stain;

4 = Slight change of gloss only visible at certain viewing angles and/or slight brown stain;

5 = No visible change.

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Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Thermal conductivity and thermal resistance
Test Method: EN 12664:2001
Conditioning: Condition the test specimen at (23±2)°C and (50±5)% relative humidity to constant mass

Test Result:

Sample	Thickness	Mean Temperature	Temperature Difference	Thermal Conductivity	Thermal Resistance
	(mm)	(°C)	(°C)	[W/(m·K)]	[(m^2·K)/W]
1	18.55	23.7	20.3	0.112	0.165
2	18.63	23.6	20.3	0.113	0.165
3	18.64	23.6	20.3	0.114	0.163
Average	18.61	24	20	0.113	0.164

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Test Report

Original Issue Date: 2024-09-18 Intertek Report No. 240806010SHF-001

Test Items, Method and Results:

Test Item: Formaldehyde emission test

Test Method: With reference to EN 717-1:2004 chamber method, formaldehyde content was detected by UV-VIS spectrophotometer.

Test condition:

Chamber type:	1m^3 stainless steel chamber
Climatic conditions:	(23 ± 0.5)°C, (45 ± 3)% R.H.
Air exchange rate:	1.0 h^{-1}
Loading factor:	1.0 m^2/m^3
Test duration:	240 hours
Test result:	ND

Note:

1. mg/m^3 = milligram per cubic meter
2. Detection limit = 0.02 mg/m^3
3. ND = Not detected (less than the detection limit)
4. Test location: Central Chemical Lab of Intertek Testing Services Ltd., Zhejiang
Address: Building 2, 500 Shuiyueting East Road, Haining, Zhejiang, China

Test Report

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Appendix A: Sample Received Photo

Revision:

NO.	Date	Changes
240806010SHF-001	2024-09-18	First issue