

FUJIAN SIJIA INDUSTRIAL MATERIAL CO., LTD

TEST REPORT

REPORT NUMBER

180503001SHF-BP-1

ISSUE DATE

2018/5/16

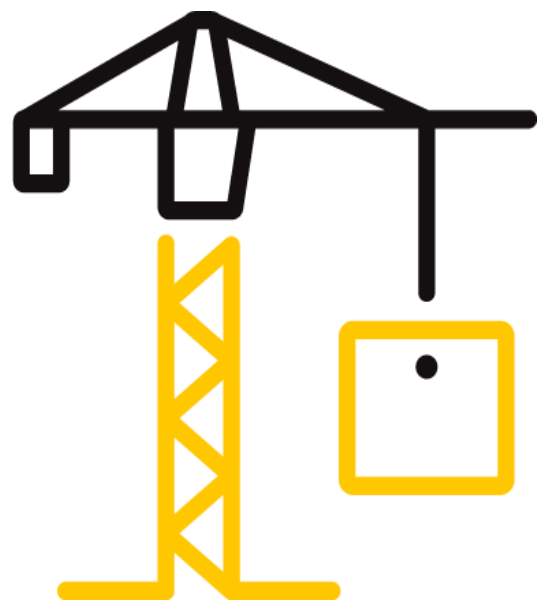
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DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10a

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Test Report

Issue Date: 2018/5/16 Intertek Report No. 180503001SHF-BP-1

Applicant: FUJIAN SIJIA INDUSTRIAL MATERIAL CO., LTD

Applicant Address: SIJIA INDUSTRIAL GARDEN ZONE, HUANXI TOWN, JINAN DISTRICT, FUZHOU,
FUJIAN CHINA

Attn: Xingxing Wu

SUBJECT: Performance testing
PVC flooring (Luxury Vinyl Tile)

Dear Sir,

This test report 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
S180503001SHF.001~009	/	7.25"*48"*2.0mm*0.3mm

SAMPLE RECEIVED: 2018/4/23
TESTED FROM: 2018/5/3 TO 2018/5/16

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Test Items, Method and Results:

EN ISO 10582:2012 (ISO 10582:2010) Resilient floor coverings - Heterogeneous poly(vinyl chloride) floor coverings - Specification

General requirements:

Characteristics	Test requirements	Test Method	Verdict
Side length	Deviation $\leq 0.15\%$ of nominal length up to 0.5mm maximum		Pass
Squareness	$\leq 0.25\text{mm}$ (Side length $\leq 400\text{mm}$) $\leq 0.35\text{mm}$ (Side length $> 400\text{mm}$)	ISO 24342:2007 +A1:2012	Pass
Straightness	$\leq 0.50\text{mm}$ (Side length $> 400\text{mm}$) (intended for heat welding)		Pass
Overall thickness	Average value: Nominal value (-0.10, +0.13)mm Individual value: Average value $\pm 0.15\text{mm}$	ISO 24346:2006	Pass
Total mass per unit area	Average value: Nominal value (-10%, +13%) g/m^2	ISO 23997:2007	Pass
Dimensional stability after exposure to heat	$\leq 0.25\%$ (tiles intended for dry-joint laying) $\leq 0.4\%$ (sheets and tiles intended for heat welding)	ISO 23999:2008	Pass
Curling after exposure to heat	$\leq 2\text{mm}$ (tiles intended for dry-joint laying) $\leq 8\text{mm}$ (sheets and tiles intended for heat welding)	ISO 23999:2008	Pass
Flexibility	Test using a 20mm mandrel. For products which show signs of cracking, perform a further test using a 50mm mandrel. If results show no further cracking, record the use of a 50mm mandrel	ISO 24344:2008 Method A	20mm Pass
Residual indentation	Average value: $\leq 0.1\text{mm}$	ISO 24343-1:2007	Pass
Effect of castor chair	After 25000 cycles, no delamination shall occur. No disturbance to the surface other than a slight change in appearance.	ISO 4918:2016	Pass
Colour fastness to artificial light	\geq Grade 6	ISO 105-B02:2014 Method 3	Pass
Thickness of wear layer	No requirement	ISO 24340:2006	N/A

Note:

1. N/A = Not applicable

No verdict can be given because there is no requirement.

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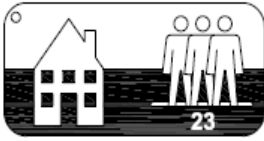

Test Items, Method and Results:

Identification requirements:

Type	Wear-layer binder content
I	Minimum 80%
II	Minimum 30%

Declared by client: Type I

Level of use class:

Class	Symbol	Intensity of use
23		Domestic Heavy
31		Commercial Moderate

Note:

1. The classification scheme and use intensity symbols are described in EN ISO 10874:2012.

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Test Items, Method and Results:

Test Item: Side length, straightness and squareness

Test Method: ISO 24342:2007+A1:2012

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Result:

Test item	Nominal value (mm)	Tested value (mm)	Tolerance (mm)	Tolerance (%)
Length	1219.20	1219.27	0.07	0.01
Width	184.15	184.22	0.07	0.04

Test item	Short edge max. value (mm)	Long edge max. value (mm)
Squareness	0.03	0.10
Straightness	0.02	0.07

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Test Items, Method and Results:

Test Item: Overall thickness

Test Method: ISO 24346:2006

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Condition:

Foot diameter of thickness gage: 8 mm

Mass applied: 400 g

Test Result:

Nominal value: 2.00 mm

Average value: 2.03 mm

Tolerance: 0.03 mm

Max. value: 2.05 mm

Min. value: 2.00 mm

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Test Items, Method and Results:

Test Item: Total mass per unit area

Test Method: ISO 23997:2007

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Result:

Nominal value: 3550 g/m^2

Average value: 3450 g/m^2

Tolerance: -2.8 %

Note:

For average result up to and equal to $1000 \text{ g}/\text{m}^2$, express to the nearest $5 \text{ g}/\text{m}^2$.

For average result over $1000 \text{ g}/\text{m}^2$, express to the nearest $10 \text{ g}/\text{m}^2$.

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Test Items, Method and Results:

Test Item: Dimensional stability and curling

Test Method: ISO 23999:2008

Conditioning:

Temperature: 23 °C

Relative humidity: 50 %

Duration: 24 h

Measure the initial length and curling

Test Condition:

Temperature: 80 °C

Duration: 6 h

Reconditioning:

Temperature: 23 °C

Relative humidity: 50 %

Duration: 24 h

Measure the final length and curling

Test Result:

Specimen	Dimensional stability (%)		Curling (mm)
	Length direction/Machine direction	Width direction/Across machine direction	
1	0.08	0.04	0.05
2	0.08	0.03	0.03
3	0.08	0.04	0.04
Average	0.10	0.05	0
Max.	0.08	0.04	0.05

Note:

1. Dimensional stability = (initial length - final length)×100/initial length

Express the average value to the nearest 0.05%

A negative value indicates expansion, and a positive value indicates shrinkage

2. Curling = final curling - initial curling

Express the average value to the nearest 0.5mm

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Test Items, Method and Results:

Test Item: Flexibility

Test Method: ISO 24344:2008 Method A

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Condition:

Diameter of mandrel: 20 mm

Test Result:

Surface	Length direction/Machine direction	Width direction/Across machine direction	Verdict
Face out	No crack or break	No crack or break	Pass
Face inside	No crack or break	No crack or break	

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Test Items, Method and Results:

Test Item: Residual indentation

Test Method: ISO 24343-1:2007

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Condition:

Indenter: Steel cylindrical indenter, with the edge of the flat base slightly rounded
Indenter diameter: 11.3 mm
Total load applied: 500 N
Indentation time: 150 min
Recovery time: 150 min

Test Result:

Residual Indentation	Result (mm)
Specimen 1	0.05
Specimen 2	0.03
Specimen 3	0.04
Average value	0.04

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Test Items, Method and Results:

Test Item: Castor chair test

Test Method: ISO 4918:2016

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Condition: At a temperature range of 18°C to 25°C

Load mass: 90 kg

Test castors: Type W

Speed of rotating platform: 20 r/min

Speed of castor assembly: 50 r/min

Total test revolutions: 25000 r

Mounting of the specimen: Installation with adhesive to the support

Test Result:

Type of damage	Observation (Yes/No)	Verdict
Delamination	No	Pass
Opening of joints	No	
Surface damage	No	
Crazing	No	

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Test Items, Method and Results:

Test Item: Colour fastness to artificial light
Test Method: ISO 105-B02:2014, Xenon-arc lamp
Exposure Cycle A1, Method 3

Test Result: Above Grade 6

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Test Items, Method and Results:

Test Item: Thickness of wear layer

Test Method: ISO 24340:2006

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Result:

Nominal value:	0.30 mm
Average value:	0.30 mm
Max. value:	0.31 mm
Min. value:	0.28 mm

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APPENDIX: SAMPLE RECEIVED PHOTO



Front view



Back view

REPORT AUTHORIZED

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.



Sally _____ *Torres Qi* _____

 Name: Sally Xie Name: Torres Qi

 Title: Reviewer Title: Project Engineer

Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
180503001SHF-BP-1	2018/5/16	First issue	Torres Qi	Sally Xie