

Test Verification of Conformity

On the basis of the referenced test report(s), sample(s) tested of the below product have been found to comply with the standards harmonized with the directives listed on this verification at the time the tests were carried out. Other standards and Directives may be relevant to the product. This verification is part of the full test report(s) and should be read in conjunction with it (them).

Once compliance with all product relevant **CE** mark directives are verified, (i.e. product control, risk assessment) the manufacturer may indicate compliance by signing a Declaration of Conformity themselves and applying the mark to product identical to the tested sample(s).

Applicant Name & Address:	Changzhou Yaming Wood Industry Co., Ltd NO. 55 New Hengcui Road, Henglin Town, Economic Zone, Changzhou City, Jiangsu Province, 213103
Product Description:	Compact laminate panels for use on internal wall finishes
Ratings & Principle Characteristics:	Reaction to fire: Class D – s2, d2 Release of formaldehyde: Class E1 Durability: Immersion in boiling water – Pass
Models/Type References:	8051 Black (Thickness: 4mm, 8mm, 10mm, 18mm, 25mm)
Brand Name:	CHINA WUYA
Standards/ Specifications/ Directives:	EN 438-7:2005 Construction Products Regulation (CPR) No.305/2011
Verification Issuing Office Name & Address:	Intertek Testing Services Ltd., Shanghai No.5 Building, No. 6958 Daye Road, Fengxian District, Shanghai, China
Test Report Number(s):	180319002SHF-BP-1, 75 35 01619 (issued by NB 1023)

Sally Xie

Signature

Name: Sally Xie

Position: Senior technical supervisor

Date: June 13, 2018

This Verification is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to permit copying or distribution of this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Changzhou Yaming Wood Industry Co., Ltd

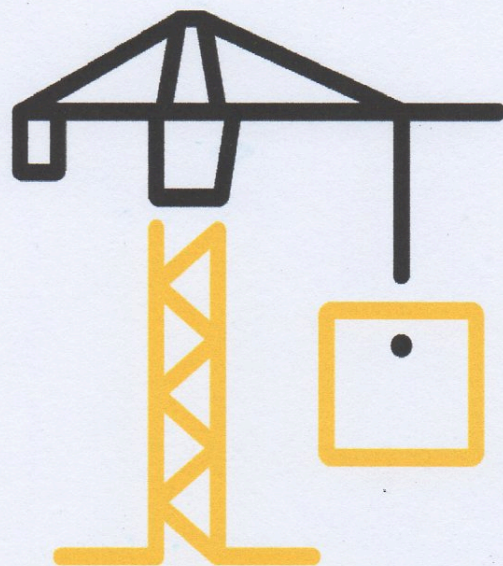
TEST REPORT

REPORT NUMBER
180319002SHF-BP-1

ISSUE DATE
2018/6/13

PAGES
14

DOCUMENT CONTROL NUMBER
LFT-APAC-SHF-OP-10d
© 2018 INTERTEK



Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

Applicant: Changzhou Yaming Wood Industry Co., Ltd

Applicant Address: NO. 55 New Hengcui Road, Henglin Town, Economic Zone, Changzhou City, Jiangsu Province, 213103

Sample information

Product:	COMPACT BOARD
Trade Mark:	CHINA WUYA
Model and/or type reference:	8051 Black (Thickness: 4mm, 8mm, 10mm, 18mm, 25mm)
Classification of installation and use:	The products are intended for internal wall finishes
Manufacturer:	Changzhou Yaming Wood Industry Co., Ltd
Sample ID:	S180319002SHF-001~006
Date of receipt of test item:	2018-04-11
Date (s) of performance of tests:	2018-04-12~2018-06-13

Testing information

Standard:	EN 438-7:2005
Rating(s):	Reaction to fire Class D-s2, d2
Possible Test Case Verdicts	
Test Case does not apply to the Test object:	N/A
Test object does meet the requirement:	P (Pass)
Test object does not meet the requirement:	F (Fail)

The submitted samples were tested in accordance with specified standards, and listed the result accordingly, refer to text for detail.

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

Test Items, Method and Results:

EN 438-7:2005			
High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (Usually called Laminates) - Part 7: Compact laminate and HPL composite panels for internal and external wall and ceiling finishes			
Clause	Requirement - Test	Result - Remark	Verdict
4	Performance characteristics		
4.2	<p>Reaction to fire</p> <p>Interior grade non-flame retardant HPL panels are considered to be classified without further testing (CWFT) in the classes shown in Table 1. For products other than those covered by the CWFT Decision, or where the manufacturer seeks a higher class, the product shall be tested and classified according to EN 13501-1 and the resulting class and sub-class shall be declared.</p>	<p>Thickness: 4mm</p> <p>Reaction to fire class D-s2, d2</p> <p>Refer to test report in Appendix B (Issue by NB No. 1023)</p>	P
4.5	<p>Resistance to fixings</p> <p>Shall be determined as resistance to axial withdrawal of wood screws from the panel face according to ISO 13894-1:2000, test method 15, or in the case of Compact panels taken from Table 3.</p>	<p>Thickness: 4mm</p> <p>Screw holding value: 258 N/mm</p> <p>Thickness: 8mm</p> <p>Screw holding value: 307 N/mm</p> <p>Thickness: 10mm</p> <p>Screw holding value: 372 N/mm</p> <p>Thickness: 18mm</p> <p>Screw holding value: 5000 N</p> <p>Thickness: 25mm</p> <p>Screw holding value: 6350 N</p>	P
4.9	<p>Thermal resistance/conductivity</p> <p>Shall be determined in accordance with EN 12664 and the result shall be declared, or it shall be calculated from data taken from EN 12524, where the conductivity of the HPL part of the product shall be taken to be 0.3 W/(m·K).</p>	<p>Thickness: 4mm</p> <p>Mean temperature: 24°C</p> <p>Temperature difference: 17°C</p> <p>Thermal conductivity: 0.123 W/(m·K)</p> <p>Thermal resistance: 0.034 (m²·K)/W</p>	N/A

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

Clause	Requirement - Test	Result - Remark	Verdict
4.11	Additional characteristics for internal use		
4.11.1	Release of formaldehyde Formaldehyde emission level from HPL Compact laminate panels comply with Class E1 requirements without the need for testing	Thickness: 25mm 0.05 mg/m ³ Class E1	P
4.13	Durability		
4.13.1	Compact laminate panels/sidings for internal use The durability shall be demonstrated by testing the following properties: immersion in boiling water in accordance with EN 438-2:2005, Test method 12, and density in accordance with EN ISO 1183-1:2004, Test method A. Compact laminate panel shall comply with the requirements for a 'Pass' result specified in EN 438-4:2005. Laminate grade: CGS Density: $\geq 1.35 \text{ g/cm}^3$ Immersion in boiling water: Requirement for $2\text{mm} \leq t < 5\text{mm}$ (where t = nominal thickness): Mass increase $\leq 5.0\%$ Thickness increase: $\leq 6.0\%$ Appearance: \geq Rating 4 Requirement for $t \geq 5\text{mm}$ (where t = nominal thickness): Mass increase $\leq 2.0\%$ Thickness increase: $\leq 2.0\%$ Appearance: \geq Rating 4	Thickness: 4mm Density: 1.41 g/cm^3 Thickness: 25mm Density: 1.39 g/cm^3 Immersion in boiling water: Thickness: 4mm Measured value: Mass increase: 0.36% Thickness increase: 0.41% Appearance: Rating 5 Thickness: 8mm Measured value: Mass increase: 0.41% Thickness increase: 0.28% Appearance: Rating 5 Thickness: 25mm Measured value: Mass increase: 0.16% Thickness increase: 0.65% Appearance: Rating 5	P

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

Clause	Requirement - Test	Result - Remark	Verdict
5	Evaluation of conformity		
5.1	<p>General</p> <p>The compliance of a wall or ceiling panel/siding with the requirements of this standard and with the stated values or classes shall be demonstrated by:</p> <ul style="list-style-type: none"> - Initial type testing - Factory production control by the manufacturer, including product assessment 		
5.2	<p>Type testing</p> <p>Shall be performed to demonstrate conformity with this standard or be demonstrated according to information given in this standard</p>	Refer to clause 4.2, 4.5, 4.11.1 and 4.13.1	P
5.3	<p>Factory production control</p> <p>The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market conform with the stated performance characteristics.</p>	<p>The manufacturer has established a Quality management system according to ISO 9001.</p> <p>See Appendix A</p>	P
6	<p>Marking and labeling</p> <p>Product which conform to the requirements of this document shall be clearly and indelibly marked by the manufacturer either directly on the panel or on an affixed adhesive label with following information:</p> <ul style="list-style-type: none"> a) the reference of this document, i.e. EN 438-7 b) the manufacturer's or supplier's identification c) the product name and batch number d) the year of manufacture, unless identified within the batch number 	See Appendix C 'Copy of marking plate'	P

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

Appendix A: ISO 9001 Certificate



Certificate of Approval

Certificate No. : 10116Q19455R0S

Awarded to

Changzhou Yaming Wood Industry Co.,Ltd.

Organization Code Certificate No. / Unified Social Credit Code:91320412739556509M
Add.:Honglian Village,Henglin Town,Wujin District,Changzhou City,Jiangsu Province,213103,The P.R Of China

Beijing ZhongLianTianRun Certification Center (ZLTR) certify that the Quality Management System of the above organization has been assessed and found to be in accordance with the requirements of the standard:

GB/T19001-2016 / ISO9001: 2015

SCOPE OF CERTIFICATION/REGISTRATION

The manufacture of fireproof board,decorative board (except regulations required range)

This certificate is made valid when used with certification scopes and the requirements of applicable laws and regulations. These requirements include, but are not limited to, administrative permits, scopes of qualifications, and CCC requirements.

Subject to operation conditions in requirements conformity with Quality Management System, This Certificate is valid for a period of three years only,

Date from: Dec 16th,2016 To: Dec 15th,2019

Date of Trade:Nov 21st,2017

The effectiveness of this Certificate shall be Validated by periodic surveillance audit of ZLTR for maintenance.

The time limit of the certificate is to Nov 18th,2018, please conducting the surveillance or re-certification assessment before Nov 18th,2018. If the assessment is overdue , the certificate is invalid.

Information of this certificate can be found on the official website of Beijing Zhonglian Tianrun Certification center (<http://www.zltr.com.cn>)



Accredited CB-MS
OCSM
Accredité CCN
Accredited CB-MS
(Certification Body - Management Systems)





Beijing Zhongliantianrun Certification Center

Room2603, 22nd Floor, 2nd Unit, Block 1, No.4 Yard, Qiyang Road, Chaoyang District, Beijing, P.R. China 100102
Information of this certificate can be found on the official website of Certification and Accreditation Administration of the People's Republic of China (<http://www.cca.gov.cn>)

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

Appendix B: NB Report

Reference No. 75 35 01619
Page 1 of 6



INSTITUTE FOR TESTING AND CERTIFICATION

třída Tomáše Bati 299, Louky, 763 02 Zlín, Czech Republic

TEST REPORT

Reference No. 75 35 01619/ 2018

Applicant: Changzhou Yaming Wood Industry Co., Ltd.
NO.55 NEW HENGCUI ROAD, HENGLIN TOWN,
CHANGZHOU CITY, JIANGSU PROVINCE, CHINA
213103

Product: COMPACT LAMINATE PANELS FOR
INTERNAL/EXTERNAL/WALL CEILING
FINISHES, THICKNESS ≥ 4 mm,
BRAND NAME: CHINA WUYA

Manufacturer: Changzhou Yaming Wood Industry Co., Ltd.
NO 55 NEW HENGCUI ROAD, HENGLIN TOWN,
CHANGZHOU CITY, JIANGSU PROVINCE, CHINA
213103

Elaborated by: Milan Kovář

Issued on: 6th June 2018



RNDr. Radomir Čevelík
Representative of Notified Body No. 1023

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

**INSTITUTE FOR TESTING AND CERTIFICATION**

Notified Body 1023

763 02 Zlín, Czech Republic

Notified Body No. 1023 * State Authorized Body No. 224 * Product and Management Systems Certification Bodies * Accredited Laboratory

Reference No. 75 35 01619
Page 2 of 6

1. Introduction

This report was elaborated on the basis of the application No. 753501619, registered on 10/04/2018 and tests results carried out by the notified testing laboratory in accordance with the procedure mentioned in the article 1.4 of the Annex V to the Regulation (EU) No. 305/2011 of the European Parliament and of the Council of 9 March 2011, as amended, laying down harmonised conditions for the marketing of construction products („CPR“).

2. Assessment and verification of constancy of performance according to Regulation (EU) No 305/2011 of the European Parliament and of the Council, as amended

Compact laminate panels for wall and ceiling finishes as construction products are assessed on the basis of relevant clauses of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9th March 2011 laying down harmonised conditions for marketing of construction products and repealing Council Directive 89/106/EEC, as amended (called „CPR“).

2.1. System of assessment and verification of constancy of performance (AVCP)

The submitted product is assessed pursuant to system of AVCP 3 of the CPR (Annex V). The type testing was carried out according to Annex ZA of the standard EN 438-7:2005.

2.2. Indicators specifying basic requirements for construction works

The initial type testing (type testing) was carried out by the notified body (the notified test laboratory) in the following range of relevant properties according to Table ZA.3b (of the EN 438-7):

- Reaction to fire
 - Ignitability – surface and edge exposure according to EN ISO 11925-2 (exposure time: 30 s)
 - Single burning item (SBI) test according to EN 13823+A1 and Annex B of EN 438-7 (for external use)
 - Classification according to EN 13501-1+A1

Flexural tensile strength (flexural strength and modulus of elasticity) testing has not been required by the manufacturer.

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

**INSTITUTE FOR TESTING AND CERTIFICATION**

Notified Body 1023

763 02 Zlín, Czech Republic

Notified Body No. 1023 * State Authorized Body No. 224 * Product and Management Systems Certification Bodies * Accredited Laboratory

Reference No. 75 35 01619

Page 3 of 6

2.3 Product specification

Compact laminate panel sidings of walls and ceilings, for internal and external use.

Manufactured panel thickness: 4 mm to 25 mm.

The manufacturer declares no flame retardants using.

2.4 Sampling place and number of samples taken

The test samples were sent by the manufacturer. The number of the test samples sent was as follows:

- Compact laminate panels for internal/external/wall ceiling finishes, thickness of 4 mm, in the amount of 3 pcs of panels (1500 x 1000 x 4) mm, 3 pcs of panels (500 x 200 x 4) mm, 3 pcs of panels (800 x 500 x 4) mm, 3 pcs of panels (200 x 1000 x 4) mm, 3 pcs of panels (800 x 1000 x 4) mm, 1 pc of panel (700 x 1000 x 4) mm.

The test samples were registered under the registration number 75 35 01619/1 on 25/04/2018.

2.5 Place and date of testing

- Institut pro testování a certifikaci (ITC), a.s., NB 1023, accredited laboratory No. 1004 Zlín (May 2018)
- Centrum stavebního inženýrství (CSI), a.s. Prague, Fire Technical Laboratory, Accredited test laboratory No.1007.4, NB 1390 (June 2018)

2.6 Test results

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1



INSTITUTE FOR TESTING AND CERTIFICATION

Notified Body 1023

763 02 Zlín, Czech Republic

Notified Body No. 1023 * State Authorized Body No. 224 * Product and Management Systems Certification Bodies * Accredited Laboratory

Reference No. 75 35 01619
Page 4 of 6

Table 1 – Ignitability results (lengthwise)

Characteristic (parameter)	Surface exposure (characteristic for individual test specimens)	Edge exposure (characteristic for individual test specimens)
Ignition of the test specimen Yes/No	No, No, Yes, No, No, No	Yes, Yes, Yes, Yes, Yes, Yes
Flame reaching of a mark in distance of 150 mm Yes/No	No, No, No, No, No, No	No, No, No, No, No, No
Burning time to reach 150 mm (s)	- , - , - , - , - , -	- , - , - , - , - , -
Ignition of the filter paper	No, No, No, No, No, No	No, No, No, No, No, No

Table 2 – Ignitability results (crosswise)

Characteristic (parameter)	Surface exposure (characteristic for individual test specimens)	Edge exposure (characteristic for individual test specimens)
Ignition of the test specimen Yes/No	No, No, No, No, No, No	Yes, Yes, Yes, Yes, Yes, Yes
Flame reaching of a mark in distance of 150 mm Yes/No	No, No, No, No, No, No	No, No, No, No, No, No
Burning time to reach 150 mm (s)	- , - , - , - , - , -	- , - , - , - , - , -
Ignition of the filter paper	No, No, No, No, No, No	No, No, No, No, No, No

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1



INSTITUTE FOR TESTING AND CERTIFICATION

Notified Body 1023

763 02 Zlín, Czech Republic

Notified Body No. 1023 * State Authorized Body No. 224 * Product and Management Systems Certification Bodies * Accredited Laboratory

Reference No. 75 35 01619
Page 5 of 6

Table 3 – SBI test results

Characteristic (parameter)	Determined values of the parameter for individual test specimens			Mean value of the parameter
LFS < edge	Yes	Yes	Yes	Yes
FIGRA _{0,2 MJ} (W/s)	236.9	218.7	248.9	234.8
FIGRA _{0,4 MJ} (W/s)	236.9	218.7	248.9	234.8
THR _{900s} (MJ)	32.6	30.4	34.7	32.6
SMOGRA (m ² /s ²)	5.6	6.9	5.1	5.9
TSP _{900s} (m ²)	52.8	54.8	53.0	53.5
Flaming (burning) droplets/particles	Yes	Yes	Yes	Yes
Time of flaming (s)	>20	>20	>20	>20

Table 4 – Reaction to fire classification

Fire behaviour	Smoke production	Flaming droplets/particles	Final class
D	s2	d2	D – s2, d2

Notified Body NB 1023 has carried out the testing in accordance with the paragraph 1.4 of Annex V to the Regulation (EU) No 305/2011, as amended for the product specified in the Art. 2.3 of this Report and concluded that

all requirements of this paragraph of the above Regulation and the relevant harmonized standard have been met and this report may be issued as a basis for affixing CE marking to these products.

This Report is applicable only to products identically marked and named, such as those which were the subject to testing, provided that the products characteristics have not been changed or no significant changes in their production (materials, technology, manufacturing equipment, etc.) have been done.

3. List of documents used to elaborate the Test Report

- Application No. 753501619 for assessment of CE-marked construction products

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1



INSTITUTE FOR TESTING AND CERTIFICATION

Notified Body 1023

763 02 Zlín, Czech Republic

Notified Body No. 1023 * State Authorized Body No. 224 * Product and Management Systems Certification Bodies * Accredited Laboratory

Reference No. 75 35 01619

Page 6 of 6

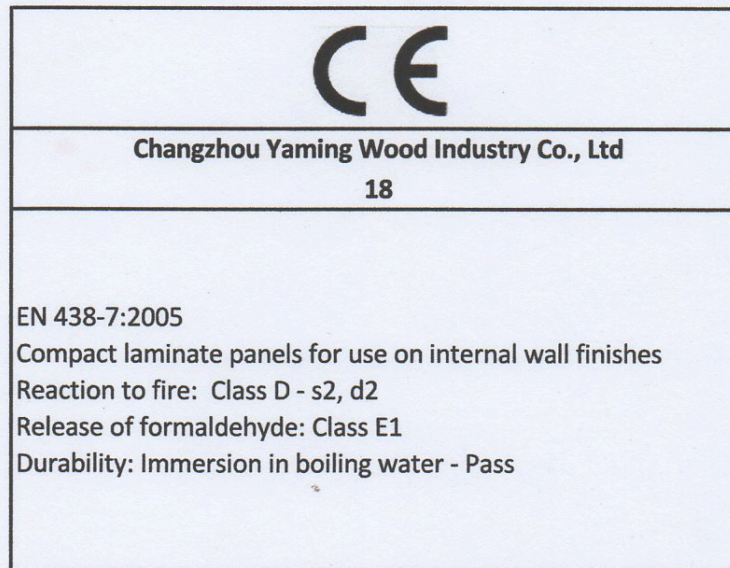
- EN 438-7: 2005 High-pressure decorative laminates (HPL) – Sheets based on thermosetting resins (Usually called Laminates) – Part 7: Compact laminate and HPL composite panels for internal and external wall and ceiling finishes/
- Test report of Accredited laboratory, reference No. 753501619/01, elaborated by ITC, a.s., Accredited laboratory No. 1004 Zlín, on 09/05/2018
- Test Report, reference No. 18/440/P351, elaborated by Centrum stavebního inženýrství a.s., Fire Technical Laboratory, Prague, on 06/06/2018
- Classification Report using Results of Reaction to Fire No. 75 35 01619K/2018, elaborated by ITC, a.s. Zlín, on 06/06/2018

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

Appendix C: Copy of Marking Plate



Note:

1. If the CE marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.
2. The various components of the CE marking must have substantially the same vertical dimension, which may not be less than 5 mm.
3. CE marking and label shall be affixed visibly, legibly and indelibly.

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-1

APPENDIX: SAMPLE RECEIVED PHOTO



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 Xie
Name: Sally Xie
Title: Reviewer

Kyle Wang
Name: Kyle Wang
Title: Project Engineer



Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
180319002SHF-BP-1	2018/6/13	First issue	Kyle Wang	Sally Xie

Changzhou Yaming Wood Industry Co.,Ltd

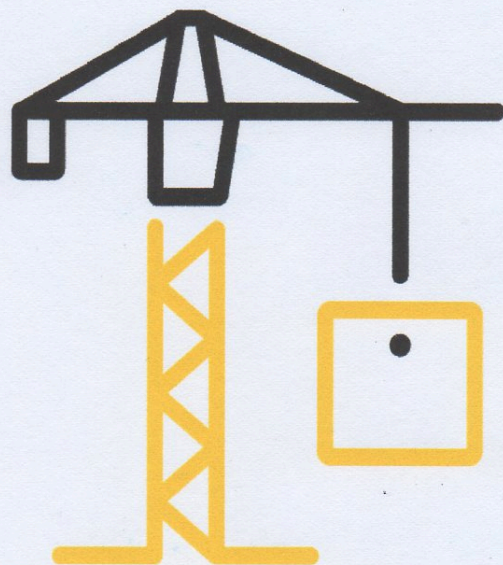
TEST REPORT

REPORT NUMBER
180319002SHF-BP-2

ISSUE DATE
2018/6/13

PAGES
6

DOCUMENT CONTROL NUMBER
LFT-APAC-SHF-OP-10a
© 2018 INTERTEK



Test Report

Issue Date: 2018/6/13 Intertek Report No. 180319002SHF-BP-2

Applicant: Changzhou Yaming Wood Industry Co.,Ltd

Applicant Address: NO.55 New Hengcui Road, Henglin Town, Economic Zone, Changzhou City, Jiangsu Province, 213103

Attn: Lina Chen

SUBJECT: Performance testing
COMPACT BOARD

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
S180319002SHF.007~009	8051 Black	4mm Brand Name: CHINA WUYA

SAMPLE RECEIVED: 2018/4/11
TESTED FROM: 2018/4/12 TO 2018/6/13

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-2

Test Items, Method and Results:

Test Item: Resistance to surface wear

Test Method: With reference to EN 438-2:2005, Section 10

Conditioning: Condition the test specimens at $(23\pm 2)^{\circ}\text{C}$ and $(50\pm 5)\%$ relative humidity for at least 72h

Test Condition:

Rotation frequency: 60 r/min

Abrasive material: Taber S-42 abrasive paper strips

Load on each wheel: 500 g

Test revolutions: 1000 r

Test Result:

Parameter	Specimen 1	Specimen 2	Specimen 3
Mass/Weight loss, (mg)	479.7	486.8	507.3
Average value, (mg)	491.3		

Note:

1. Abbreviation "r" = revolutions/cycles

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-2

Test Items, Method and Results:

Test Item: Resistance to staining

Test Method: EN 438-2:2005, Section 26

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 72h

Test Result:

Group	Staining agent	Duration of contact	Result of visual changes
1	Water	16 h	5
1	Acetone	16 h	5
1	Cleaning solution	16 h	5
2	Coffee (approx. 80°C)	16 h	5
3	Sodium hydroxide (25% solution)	10 min	5
3	Hydrogen peroxide (30% solution)	10 min	5
3	Shoe polish	10 min	5

Assessment of results

Numerical rating	Description
5	No visible change.
4	Slight change of gloss and/or colour, only visible at certain viewing angles.
3	Moderate change of gloss and/or colour.
2	Marked change of gloss and/or colour
1	Surface distortion and/or blistering.

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-2

Test Items, Method and Results:

Test Item: Resistance to scratching

Test Method: EN 438-2:2005, Section 25

Conditioning: Condition the test specimens at (23±2)°C and (50±5)% relative humidity for at least 72h

Test Result:

Parameter	Specimen 1	Specimen 2	Specimen 3
Rating scale	Rating 1	Rating 1	Rating 1

Scratch resistance rating scale

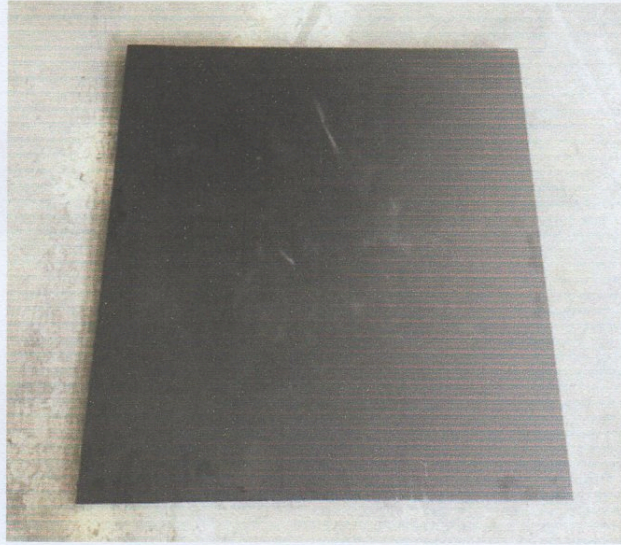
	Discontinuous scratches, or faint superficial marks, or no visible marks.	≥ 90 % continuous double circle of scratch marks clearly visible.
Rating 5	6 N	> 6 N
Rating 4	4 N	6 N
Rating 3	2 N	4 N
Rating 2	1 N	2 N
Rating 1	-	1 N

Test Report

Issue Date: 2018/6/13

Intertek Report No. 180319002SHF-BP-2

APPENDIX: SAMPLE RECEIVED PHOTO



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 Xie *Kyle Wang*
Name: Sally Xie Name: Kyle Wang
Title: Reviewer Title: Project Engineer



Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
180319002SHF-BP-2	2018/6/13	First issue	Kyle Wang	Sally Xie