

# Yixing Hualong New Material Lumber Co., Ltd

## TEST REPORT

**REPORT NUMBER**

171019009SHF-BP-1

**ISSUE DATE**

2018/1/8

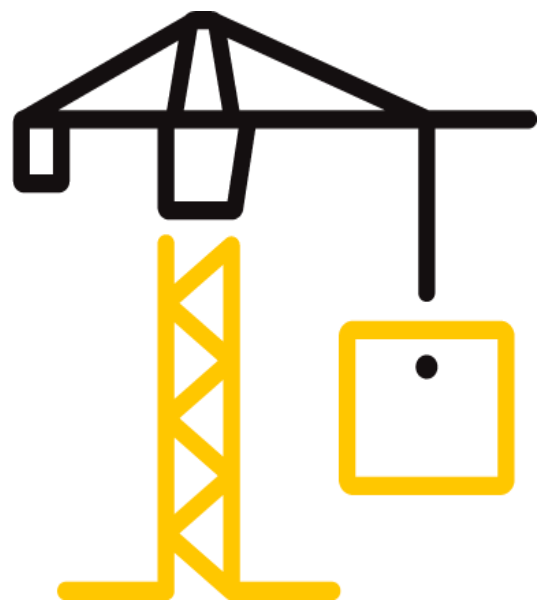
**PAGES**

25

**DOCUMENT CONTROL NUMBER**

LFT-APAC-SHF-OP-10a

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## Test Report

Issue Date: 2018/1/8 Intertek Report No. 171019009SHF-BP-1

Applicant: Yixing Hualong New Material Lumber Co., Ltd

Applicant Address: The South develop area of Xinjian Town, Yixing City, Jiangsu Province, China

Attn: Ivy Zang

**SUBJECT:** Performance testing  
WPC Decking

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
S171019009SHF.001~021	145*21mm 3663602948124,366360296 1543,3663602948445,3663 602948131,3663602948810 ,3663602948827,36636029 48773,3663602961550,366 3602947998,366360294800 1,3663602947967,3663602 771036.3663602947981	145*21mm

SAMPLE RECEIEVED: 2017/10/24、2017/12/4 and 2017/12/7

TESTED FROM: 2017/10/24 TO 2018/1/8

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## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

Test Item: Density

Condition: 96 hours at a temperature of  $23\pm 2^{\circ}\text{C}$  and relative humidity of  $50\pm 5\%$

Test Specimen: The test sample received on 2017/12/4

Test Items	Test Method	Test Results
Density	EN 15534-1:2014 Section 6.2 ISO 1183-1 Method A	1.276 g/cm <sup>3</sup>

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

Test Item: Moisture content

Condition: 96 hours at a temperature of  $23\pm 2^{\circ}\text{C}$  and relative humidity of  $50\pm 5\%$

Test Specimen: The test sample received on 2017/12/4

Test Items	Test Method	Test Results
Moisture content	EN 15534-1:2014 Section 6.3 EN 322:1993	0.4 %

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

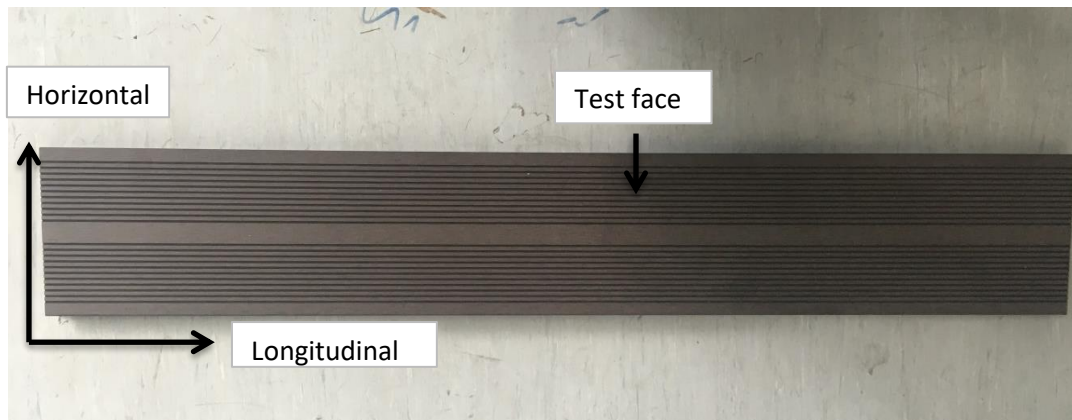
### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Slipperiness (Pendulum test)	EN 15534-1:2014 Section 6.4.2 CEN/TS 15676:2007 EN 15534-4: 2014 Section 4.4	Longitudinal direction: Mean: 44 Min.: 42 Horizontal direction: Mean: 60 Min.: 60	Pendulum value $\geq 36$	Pass

Note:

1. Requirement is cited from EN 15534-4:2014 Table 1.
2. Test surface and direction please refer to below picture.
3. The test sample received on 2017/10/24



## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Slipperiness (Inclination plan test)	EN 15534-1:2014 Section 6.4.3	Angle: 26.5	$\geq 24^\circ$	Pass
	EN 13451-1:2012 EN 15534-4: 2014 Section 4.4	Rating: Class C	Class C	

EN 13451-1:2012 Class of Slip resistance

Class	Angle
A	$12^\circ < X \leq 18^\circ$
B	$18^\circ < X \leq 24^\circ$
C	$X \geq 24^\circ$

Note:

1. Requirement is cited from EN 15534-4:2014 Table 1.
2. This test was conducted at the external qualified facility, located at Foshan.
3. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Indenter: a hardened steel spherical body with diameter of 10 mm

Test load: Additional load of 2000N with preload of 20N

Indentation time:  $(25 \pm 5)$  s

Recovery time: at least 24h

Test Items	Test Method	Test Results
Resistance to indentation	EN 15534-1:2014 Section 7.5	Brinell hardness: 85.7 MPa
	EN 15534-4:2014 Section 4.5.7	Rate of elastic recovery: 47 %

### Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Falling mass impact resistance	EN 15534-1:2014 Section 7.1.2.1 EN 15534-4: 2014 Section 4.5.1	Type Hollow profile Max. Crack length (mm): No Crack Max. Residual Indentation (mm): 0.30	None of 10 test specimens shall show a failure with a crack length $\geq 10$ mm or a depth of residual indentation $\geq 0,5$ mm.	Pass

### Note:

1. The falling mass was 1000g and the height was 700mm.
2. The test sample received on 2017/10/24



## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Flexural properties	EN 15534-1:2014 Annex A EN 15534-4: 2014 Section 4.5.2	Bending Strength: 24.4 MPa Modulus of elasticity: 2.8 GPa Maximum load: Mean: 4121 N Min.: 4022 N Deflection at 500N: Mean: 0.78 mm Max.: 0.86 mm	Flexural properties  -F'max: Mean $\geq$ 3300 N Min. $\geq$ 3000 N  -Deflection under a load of 500 N Mean $\leq$ 2,0 mm Max. $\leq$ 2,5 mm	Pass

### Note:

1. The test span was 250 mm offered by applicant
2. The test sample received on 2017/12/7

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Moisture resistance under cyclic test conditions	EN 15534-1:2014 Section 8.3.2 EN 15534-4: 2014 Section 4.5.5	Original MOR: 24.4 MPa After exposure, Mean MOR: 20.6 MPa Decrease: 16 % Min MOR: 19.0 MPa Decrease: 22 %	Decrease of bending strength, Mean $\leq$ 20 % Max. $\leq$ 30 %	Pass

### Note:

1. The test span was 250 mm offered by applicant
2. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

Test item: Tensile properties

Condition: 96 hours at a temperature of  $23 \pm 2$  °C and relative humidity of  $50 \pm 5$  %.

Test specimen: Type 1A

Test Items	Test Method	Test Results
Tensile properties	EN 15534-1:2014 Section 7.2 ISO 527-2:2012	Tensile strength Mean value: 19.8 MPa

### Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Swelling and water absorption (28 days immersion)	EN 15534-1:2014 Section 8.3.1 EN 15534-4: 2014 Section 4.5.5	Mean Swelling: 0.73 % in thickness 0.09 % in width 0.13 % in length Max. Swelling: 0.84 % in thickness 0.11 % in width 0.15 % in length Water absorption: Mean: 3.1 % Max.: 3.2 %	Means swelling: $\leq 4$ % in thickness $\leq 0,8$ % in width $\leq 0,4$ % in length Max. swelling: $\leq 5$ % in thickness $\leq 1,2$ % in width $\leq 0,6$ % in length Water absorption: Mean $\leq 7$ % Max. $\leq 9$ %	Pass

### Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Boiling Test	EN 15534-1:2014 Section 8.3.3 EN 15534-4: 2014 Section 4.5.5	Water absorption:  Mean: 2.8 % Max.: 2.9 %	Water absorption:  Mean $\leq$ 7 % Max. $\leq$ 9 %	Pass
Boiling Test	EN 15534-1:2014 Section 8.3.3 and Client's requirement	Mean Swelling: 1.63 % in thickness 0.12 % in width 0.11 % in length Max. Swelling: 1.82 % in thickness 0.18 % in width 0.12 % in length	/	/

Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

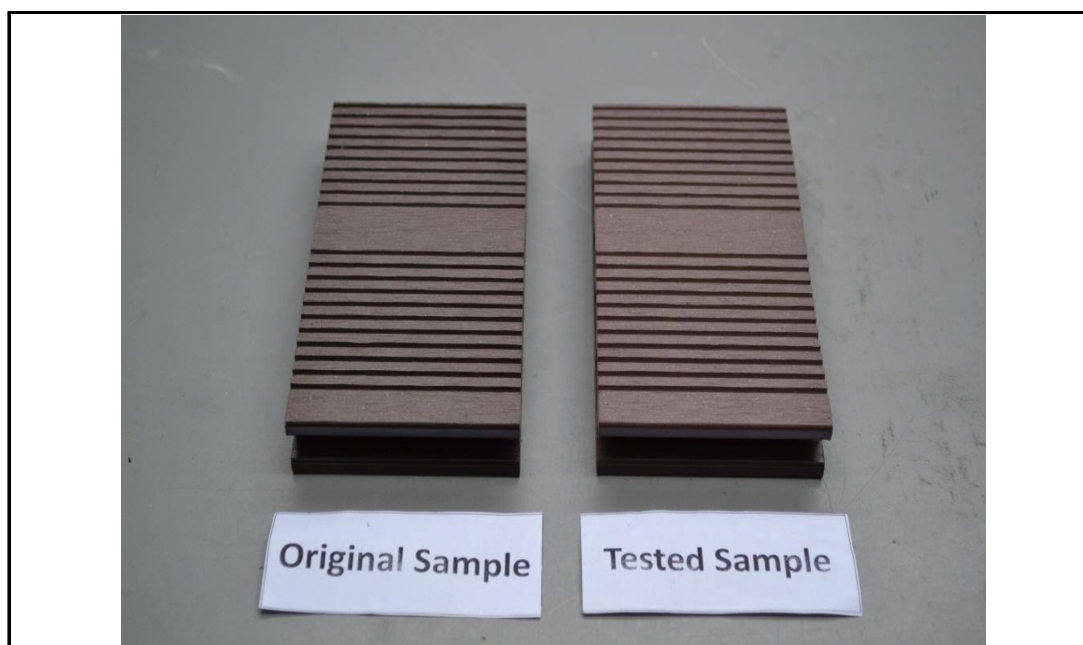
Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Resistance to artificial weathering	EN 15534-1:2014 Section 8.1 EN 15534-4: 2014 Section 4.5.5 ISO 4892-2: 2013, cycle 1	After 600h exposure: $\Delta L^* = 2.05$ $\Delta a^* = 1.32$ $\Delta b^* = 0.04$ $\Delta E^* = 2.45$ Grey Scale= 3-4	$\Delta L^*, \Delta a^*$ and $\Delta b^*$ shall be delared	N/A

Tested sample photo:



Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

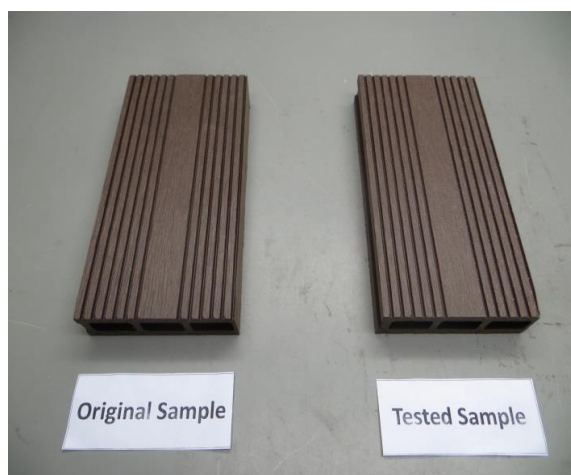
EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Parameters:

1. Solution: (50±5) g/L NaCl
2. PH Value: 6.5~7.2
3. Test Duration: 96 hours

Test Items	Test Method	Test Results
Neutral salt spray test	EN 15534-1: 2014 Section 8.6	Exposure time (h): 96
	ISO 9227:2012	$\Delta E^*$ = 0.39
	EN 15534-4:2014 Section 4.5.7	Grey Scale= 5

Tested sample photo:



Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test item: ISO 16869:2008 Plastics - Assessment of the effectiveness of fungistatic compounds in plastics formulations

Test organisms:

*Aspergillus niger* ATCC 6275, *Chaetomium globosum* ATCC 6205, *Paecilomyces variotii* CBS 628.66, *Penicillium funiculosum* ATCC 9644, *Trichoderma longibrachiatum* ATCC 13631

Test condition: 21days, Humidity > 85%RH, Temperature: 24°C

Rating evaluation:

Rating	Growth	Interpretation
0	No growth	The material is resistant to fungal attack
1	Initial growth (compared with the rest of the agar surface)	The material is partially protected against fungal attack or generally not susceptible to such attack
2	Obvious growth and sporulation	The material is susceptible to fungal attack

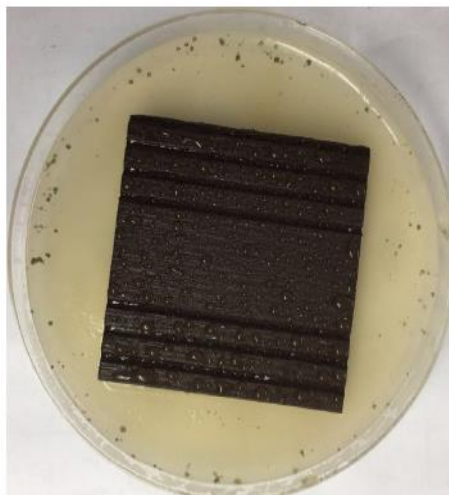
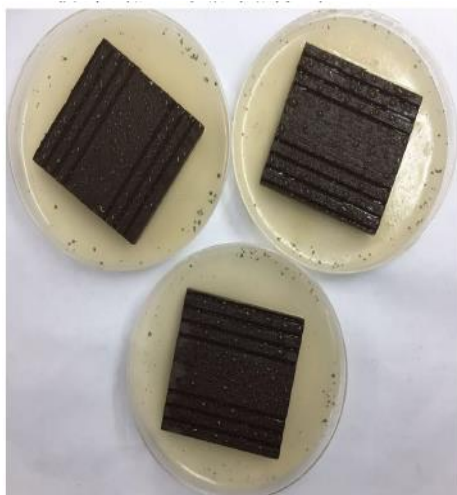
Test result:

Evaluation	Observed growth on specimens
0	No growth

Note:

1. This test was conducted at the external approved facility, located at Guangzhou.
2. The test sample received on 2017/10/24

### Test Photos:





## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

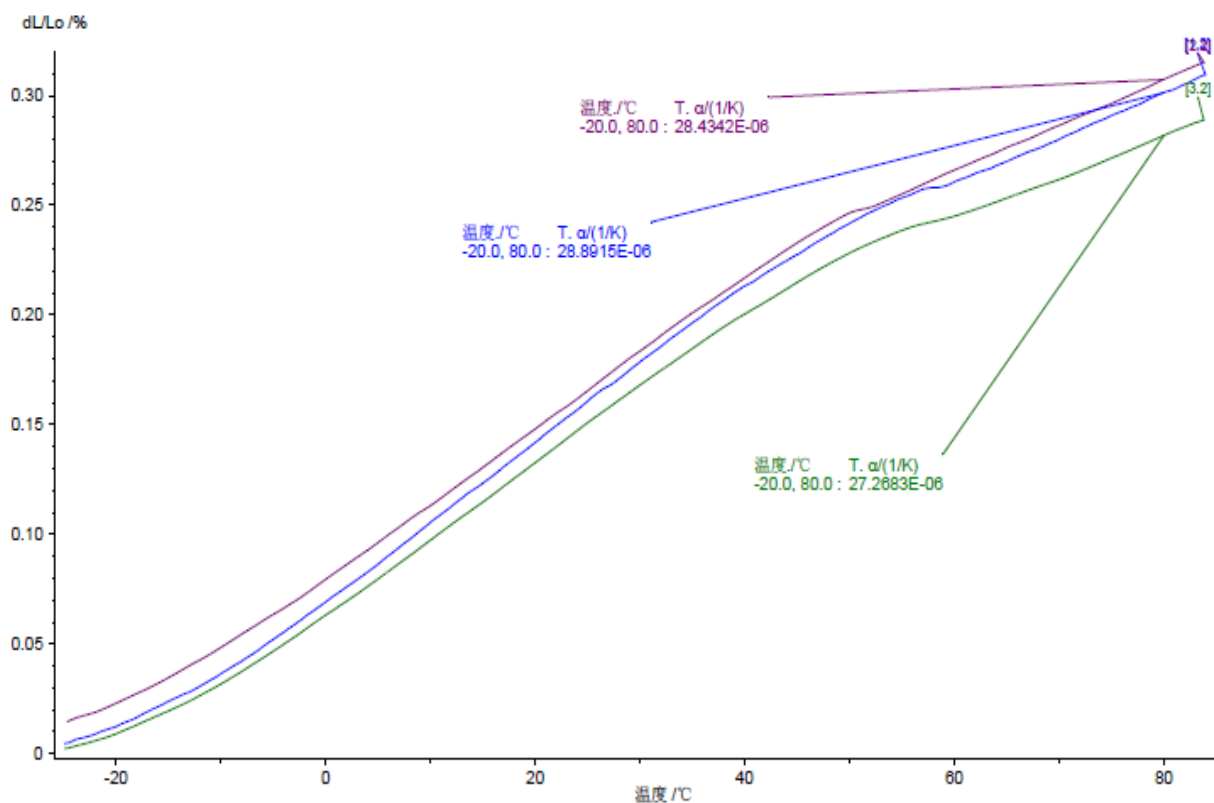
EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test Items	Test Method	Test Results	Test requirements	Verdict
Linear thermal expansion coefficient	EN 15534-1:2014 Section 9.2 EN 15534-4: 2014 Section 4.5.6	Mean: 28.2 $\times 10^{-6} \text{ K}^{-1}$	$\leq 50 \times 10^{-6} \text{ K}^{-1}$	Pass

Note:

1. This test was conducted at the external approved facility, located at Shanghai

Test graph



Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test condition: Place the test pieces horizontally in the oven, maintain the test pieces in the oven for 60 min. at 100°C.

Test Items	Test Method	Test Results
Heat reversion	EN 15534-1:2014 Section 9.3 EN 479-1999 EN 15534-4:2014 Section 4.5.7	Test Temperature: 100°C  Mean: 0.07 %

### Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test condition: ambient air temperature 23±2°C

Test Items	Test Method	Test Results
Heat build-up	EN 15534-1:2014 Section 9.4 EN 15534-4:2014 Section 4.5.7	Set temperature rise for use in horizontal position: 30 °C
		Actual temperature rise for black control specimen: 29.8 °C
		Temperature of test specimen: 54.1 °C
		Predicted heat build-up ΔT: 28.5 °C
		Gap: 1.3 °C

### Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test condition: ambient air temperature 23±2°C

Test Items	Test Method	Test Results
Heat build-up	EN 15534-1:2014 Section 9.4 EN 15534-4:2014 Section 4.5.7	Set temperature rise for use in horizontal position: 50 °C
		Actual temperature rise for black control specimen: 50.3 °C
		Temperature of test specimen: 73.1 °C
		Predicted heat build-up ΔT: 47.5 °C
		Gap: 2.8 °C

### Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test condition: ambient air temperature 23±2°C

Test Items	Test Method	Test Results
Heat build-up	EN 15534-1:2014 Section 9.4 EN 15534-4:2014 Section 4.5.7	Set temperature rise for use in horizontal position: 80 °C
		Actual temperature rise for black control specimen: 80.4 °C
		Temperature of test specimen: 101.5 °C
		Predicted heat build-up ΔT: 75.9 °C
		Gap: 4.5 °C

### Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### Test Items, Method and Results:

EN 15534-4: 2014 Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) Part 4: Specifications for decking profiles and tiles

Test item: Single flame source test and Radiant heat source test

Test Method	Parameter	Test Results	Test Requirements	Classification
EN ISO 9239-1:2010	Critical flux (transverse), kW/m <sup>2</sup>	5.1	Critical flux $\geq$ 4.5 kW/m <sup>2</sup>	C <sub>fl</sub> -s1
	Critical flux (longitudinal), kW/m <sup>2</sup>	4.8		
	Smoke production, %×minutes	154	s1 =Smoke $\leq$ 750 %×minutes	
EN ISO 11925-2:2010 Exposure=15 s	Fs, mm	33	Fs $\leq$ 150 mm within 20 s	

### Note:

1. This test was conducted at the external approved facility, located at Guangzhou.
2. Requirement is cited from EN 13501-1:2007+A1:2009.

The classification has been carried out in accordance with EN 13501-1.

Fire behaviour		Smoke production	
C <sub>fl</sub>	-	s	1

Reaction to fire classification C<sub>fl</sub>-s1

### Note:

1. The test sample received on 2017/10/24

## Test Report

Issue Date: 2018/1/8

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### APPENDIX: SAMPLE PHOTO RECEIVED ON 2017/10/24



Front View (Test surface)



Back View



Side View

## Test Report

Issue Date: 2018/1/8

Intertek Report No. 171019009SHF-BP-1

### APPENDIX: SAMPLE PHOTO RECEIVED ON 2017/12/4



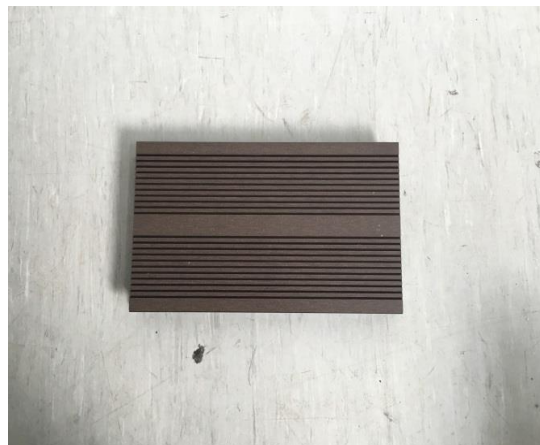
Front View (Test surface)



Back View



Side View



Front View (Test surface)



Back View



Side View



## Test Report

Issue Date: 2018/1/8

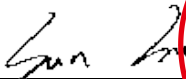



Intertek Report No. 171019009SHF-BP-1

### APPENDIX: SAMPLE PHOTO RECEIVED ON 2017/12/7



### 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.

			
Name: Sun Sun		Name: Daniel Zhang	Name: Kyle Wang
Title: Approver		Title: Reviewer	Title: Project Engineer

### Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
171019009SHF-BP-1	2018/1/8	First issue	Kyle Wang	Daniel Zhang





The Organization

# Yixing Hualong New Material Lumber Co., Ltd.

The South Develop Area of Xinjian Town, Yixing City, Jiangsu Province, P.R. China

has been assessed and certified as meeting the requirements of

## FSC® Chain-of-Custody

The company was assessed against the following standards:

FSC-STD-40-004 Version 3.0 FSC Standard for Chain of Custody Certification – April 2017  
FSC-STD-50-001 V1-2 Requirements for use of the FSC trademarks by Certificate Holders – November 2010

for the products detailed in the scope below

**Purchasing FSC 100% wood wool, manufacturing (transfer system) and  
sales of FSC 100% wood-plastic composites and relevant products  
including garden furniture and packing case**

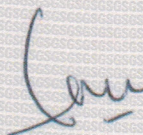
This certificate is valid from 2 January 2018 until 10 August 2021  
and remains valid subject to satisfactory surveillance audits.

Recertification audit due before 22 March 2021

Issue 4. Certified since August 2011

SGS Ref # CN11/30951

Authorised by



SGS Hong Kong Limited

17/F, The Octagon, No.6 Sha Tsui Road,

Tsuen Wan, New Territories, Hong Kong.

t +(852)2334 4481 f +(852)2333 2257 [www.sgs.com](http://www.sgs.com)

The validity of this certificate shall be verified on <http://info.fsc.org/>

For the full list of product groups covered by the certificate see <http://info.fsc.org/>

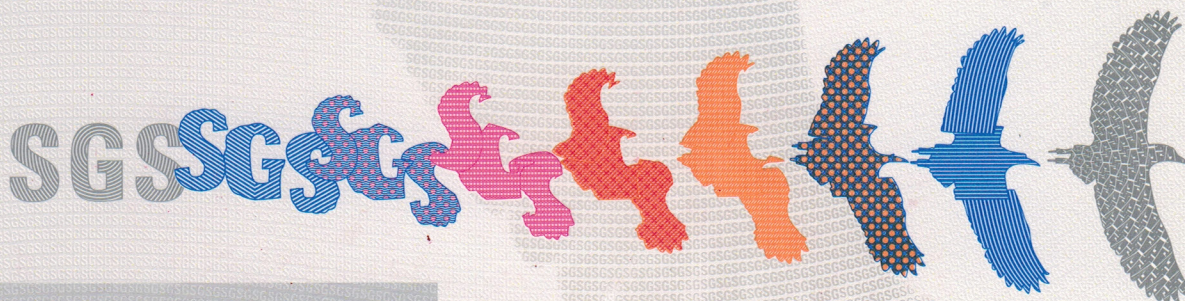
This certificate itself does not constitute evidence that a particular product supplied by the certificate holder is FSC-certified (or FSC Controlled Wood).  
Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is  
clearly stated on sales and delivery documents

This certificate remains the property of SGS. The certificate and all copies or reproductions shall be returned or destroyed of requested by SGS.

Page 1 of 1



The mark of  
responsible forestry







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# 认证证书

兹证明

**宜兴市华龙塑木新材料有限公司**

统一社会信用代码: 913202827746787390

江苏省宜兴市新建镇工业集中区南开发区

完成质量管理体系审核并符合以下标准要求

**ISO 9001:2015**

认证范围

**塑木复合材料的制造和销售**

证书编号: 184702Q

初次注册日期:

2018年03月29日

发 证 日 期:

2018年03月29日

证书有效期至: (按体系保持的连续性而定)

2021年03月28日

ACM LIMITED 授权人签字

在证书有效期内每 12 个月内须接受一次  
监督审核并将监督审核合格标签粘贴于右  
侧指定位置, 此证书方为有效。本证书可  
在国家认证认可监督管理委员会网站  
([www.cnca.gov.cn](http://www.cnca.gov.cn))查询。

(1)  
监督审核  
合格标签  
粘贴处

(2)  
监督审核  
合格标签  
粘贴处





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# Certificate of Registration

This is to certify that the  
Quality Management System  
of

**YIXING HUALONG NEW MATERIAL LUMBER CO.,LTD.**

Unified social credit code: 913202827746787390

**Industrial Concentrated Area(S)  
Xingjian Town, Yixing, Jiangsu, China**

Has been independently assessed and is  
compliant with the requirements of:

**ISO 9001:2015**

For the following scope of activities:

**Manufacture and Sales of Plastic Wood Composite Materials**

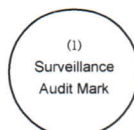
Certificate Number: 184702Q

Date of initial registration  
Date of this certificate  
Certificate expiry (subject to the company  
maintaining its system to the required standard)

29/03/2018  
29/03/2018  
28/03/2021

**Authorised Signatory**

During validity period of the certificate a surveillance audit should be carried out once within each 12 months. The label should be pasted on specified position of right side of the certificate then it is valid. The certificate can be checked out at CNCA website ([www.cnca.gov.cn](http://www.cnca.gov.cn)).





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# 认证证书

兹证明

**宜兴市华龙塑木新材料有限公司**

统一社会信用代码: 913202827746787390

江苏省宜兴市新建镇工业集中区南开发区

完成环境管理体系审核并符合以下标准要求

**ISO 14001:2015**

认证范围

**塑木复合材料的制造和销售**

证书编号: 184702R

初次注册日期:

2018年03月29日

发 证 日 期:

2018年03月29日

证书有效期至: (按体系保持的连续性而定)

2021年03月28日

ACM LIMITED 授权人签字

在证书有效期内每 12 个月内须接受一次  
监督审核并将监督审核合格标签粘贴于右  
侧指定位置, 此证书方为有效。本证书可  
在国家认证认可监督管理委员会网站  
([www.cnca.gov.cn](http://www.cnca.gov.cn))查询。

(1)  
监督审核  
合格标签  
粘贴处

(2)  
监督审核  
合格标签  
粘贴处







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# Certificate of Registration

This is to certify that the  
Environmental Management System  
of

**YIXING HUALONG NEW MATERIAL LUMBER CO.,LTD.**

Unified social credit code: 913202827746787390

**Industrial Concentrated Area(S)  
Xingjian Town, Yixing, Jiangsu, China**

Has been independently assessed and is  
compliant with the requirements of:

**ISO 14001:2015**

For the following scope of activities:

**Manufacture and Sales of Plastic Wood Composite Materials**

Certificate Number: 184702R

Date of initial registration  
Date of this certificate  
Certificate expiry (subject to the company  
maintaining its system to the required standard)

29/03/2018  
29/03/2018  
28/03/2021

**Authorised Signatory**

During validity period of the certificate a surveillance audit should be carried out once within each 12 months. The label should be pasted on specified position of right side of the certificate then it is valid. The certificate can be checked out at CNCA website ([www.cnca.gov.cn](http://www.cnca.gov.cn)).





## **YIXING HUALONG NEW MATERIAL LUMBER CO., LTD.**

Address: The south develop area of Xijian town, Yixing city 214253, Jiangsu, China

Tel: +86-510-87280368 / Fax: +86-510-87285000

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# **Product Formulation**

## **1. Wood plastic composite (WPC) decking raw materials formulation**

The raw materials formulation of the wood plastic composite (WPC) decking boards is 35% of HDPE pellets, and 55% of wood fiber, and 10% of additives :

Paint 1-2%, lubrication agent (compound) 2-3%, Coupling agent 2-3%, calcium carbonate 3-5%, antioxidants 0.3-0.5%, anti-UV (UV-531) 0.3-0.5%

## **2. Wood plastic composite (WPC) decking production processing**

Firstly we have to dry the wood fiber in order to remove the moisture, then we will mix all the raw materials through the high mixing machine, after mixing totally the mixture will be extruded to make the wood plastic composite pellets, and then the wood plastic composite pellets will be extruded out again, but this time the difference is that there is a special mould at the end of the extrusion machine. The wood plastic composite pellets will be extruded through this mould to form the decking shape, then the decking board is produced. After the decking boards are extruded out from the production lines, we will do the surface finishing, and cutting into required length, finally will be packaged well with pallets.



**Yixing Hualong New Material Lumber Co., Ltd**





**Yixing Hualong New Material Lumber Co.Ltd**  
**The South Develop Area of Xinjian Town**  
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tel:086-510-87286777 fax;086-510-87285000  
mobile:086-13861244179  
[www.hualong-wpc.com](http://www.hualong-wpc.com)

**Your decking profile with 145\*25mm .**

Weight per meter 2.53KG + -5% ,  
weight per SQM 17.45KG + -5%.  
Dimension :145mm + - 1mm  
25mm + -0.5mm (5.3mm + -0.05mm)  
Loading test with gap 35cm and 515 kg + -10%  
flexure strength 30 MPA + -10%.  
flexural modulus 3 GPA + -10%.  
deflection test 9.92mm + -10%.

**Your fence profile with 140\*20mm .**

Weight per meter 2.14 kg + -5% ,  
weight per SQM15.28kg + -5% .  
Dimension :140mm + - 1mm  
20mm + -0.5mm (4mm + -0.05mm)  
Loading test with gap 28cm and 531kg + -10%.  
flexure strength 42 MPA + -10%.  
flexural modulus 4 GPA + -10%.  
deflection test 9.56mm + -10%.

**Your fence profile with 110\*20mm .**

Weight per meter 1.32 kg + -5% ,

weight per SQM 12.00kg + -5% .

Dimension : 110mm + - 1mm

20mm + -0.5mm (3.5mm + -0.05mm)

Loading test with gap 28cm and 250kg + -10%.

flexure strength 25 MPA + -10%.

flexural modulus 3 GPA + -10%.

deflection test 8.81mm + -10%.

Limited Warranty for those three products with 5 years .



## **YIXING HUALONG NEW MATERIAL LUMBER CO.,LTD.**

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### **Limited Warranty:**

Hualong WPC decking comes with a 5-year limited warranty, which should be under proper usage that provides comprehensive coverage against splintering, splitting, rot or decay, and in termite damage. Our products have been tested by China's government organization, which issued a formal test report for our products quality. We can provide this test report copy if it is needed.

Exclusions: Items damaged due to acts of vandalism, misuse, or improper installation is not covered. Proof of purchase (dated register receipt) is required for warranty claims. We don't reimburse for transportation or delivery costs, or compensate the individual or any outside party for assembling or disassembling the product.

### **Attention:**

Although Wood Plastic Composite product has many good features in outdoor usage, while it has some shortages also. The most evident shortage is its IMPACT RESISTANCE is not very good, this is decided by inside structure of this material.

Here is our recommendation:

Please try to keep this material away from heavy impact or attack during usage.

Please take care of it during transportation, installation and storage, avoid its falling from high place.



2020/01/02