

**CELAB®**

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# CERTIFICATE

Certificate Number **UCN** : **801836817139**  
Job : J21852  
Date of Issue : 2017-07-12  
Certificate valid up to : 2021-07-11

Brand Name : /  
Type : **WPC DECKING**  
Model N : **20MM, 21MM, 22MM, 23MM, 25MM**

Manufacturer : SHAOXING YONGSHENG NEW MATERIAL CO., LTD  
Address : NO.1 HUIJING ROAD, EAST AREA 2, SHANGYU INDUSTRIAL ZONE, HANGZHOU BAY,  
ZHEJIANG, CHINA


Standard Used : EN14041:2004+AC:2006

Conclusion :

*After inspection of the technical documentation issued by the customer, and in his request, we express our opinion that the product meets the technical requirement of the following directives and standards:  
(EU)305/2011 Construction products (CPR)*

*This opinion is only valid for the directive, the equipment and configuration described, in conjunction with the test data detailed above and with compliance with all applicable legal requirement for the product .*

*The following manufacturer documents was inspected:*

Presence of Declaration of conformity template	✓ OK
Presence of test report using standards as indicated in the declaration of conformity Test report reference : SCC(17)-41206A-117-10-C	✓ OK
Presence of  symbol in the product label.	✓ OK
Presence of instruction manual	✓ OK
Use of valid Harmonized standard in the declaration of conformity	✓ OK
Presence of product description in the technical construction file	✓ OK

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Massimiliano Bertoldi  
General Manager – CELAB  
[www.celab.com](http://www.celab.com)

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Presence of instruction manual	✓ OK
Use of valid Harmonized standard in the declaration of conformity	✓ OK
Presence of product description in the technical construction file	✓ OK

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Massimiliano Bertoldi  
General Manager – CELAB  
[www.celab.com](http://www.celab.com)



<b>TEST REPORT</b> <b>EN 14041:2004+AC:2006</b> <b>Resilient, textile and laminate floor coverings</b> <b>— Essential Characteristics</b>	
<b>Report</b>	
Report reference No.....	SCC(17)-41206A-117-10-C
Tested by (+signature).....	Jing Xijuan
Reviewed by (+signature).....	Gao Zhongming
Approved by (+ signature).....	Zhangliangdong
Date of issue .....	2017-7-5
Number of pages (Report).....	10
<b>Testing laboratory</b>	
Name.....	CHINA CEPREI (SICHUAN) LABORATORY
Address .....	No.45 Wenming Dong Road Longquanyi Chengdu 610100 P. R. China
Testing location .....	Same as above
<b>Client</b>	
Name .....	Shaoxing Yongsheng New Material Co., Ltd
Address.....	No.1 Huijing Road, East Area 2, Shangyu Industrial Zone, Hangzhou Bay, Zhejiang, China
<b>Test specification</b>	
Standard.....	EN 14041:2004+AC:2006
Test procedure .....	Commission
Procedure deviation .....	N.A.
Non-standard test method.....	N.A.
<b>Test report form/blank test report</b>	
Test report form No.....	SCC14041
TRF modified by.....	CHINA CEPREI (SICHUAN) LABORATORY
Master TRF.....	PS_INFO\2-ELS.MES\REPORTS\CCA
Copyright blank test report.....	This report is based on a blank test report prepared by CEPREISC using information obtained from the TRF originator.

<b>Test item</b>	
Type of test object .....	WPC DECKING
Trademark .....	/
Test Model.....	20MM
Manufacturer.....	Shaoxing Yongsheng New Material Co., Ltd
Address .....	No.1 Huijing Road, East Area 2, Shangyu Industrial Zone, Hangzhou Bay, Zhejiang, China
Equipment mobility.....	/
Operating condition .....	N.A
Tested for IT power systems	: No
IT testing, phase-phase voltage (V)	: N.A.
Class of equipment	: N.A
Protection against ingress of water....	N.A
<b>Possible test case verdicts</b>	
Test case does not apply to the test object.....	: N(.A.)
Test object does meet the requirement.....	: P(ass)
Test object does not meet the requirement.....	: F(ail)
<b>Testing</b> .....	
Date of receipt of test item .....	: 2017-6-4
Date (s) of performance of tests .....	: 2017-6-4 to 2017-7-5
<b>General remarks</b>	
“(see remark #)” refers to a remark appended to the report.	
“(see appended table)” refers to a table appended to the report.	
Throughout this report a comma is used as the decimal separator.	
The test results presented in this report relate only to the object tested.	
This report shall not be reproduced except in full without the written approval of the testing laboratory.	
Brief description of the tested sample(s):	
Ambient temperature: 20°C~25°C humidity: 50%~55%	
Complete test was conducted on <b>20MM</b> . other model : <b>21MM, 22MM, 23MM ,25MM</b>	
<b>20MM, 21MM, 22MM, 23MM ,25MM</b> are the same series products	
A representative sample of the product covered by this report has been tested and complies with the applicable requirements of this standard.	

EN 14041			
Clause	Requirement - Test	Result - Remark	Verdict
4	Requirements		P
	General requirements		P
	Property test	Please see Annex A	P
4.1	Reaction to fire		P
4.1.1	Specimen preparation and conditioning		P
	Preparation of test specimens shall be as defined in the appropriate fire test standard, except in the case of textile floor coverings where a washing and cleaning procedure similar to that used in practice may be required to verify the durability of surface fire retardant treatments (see 4.1.3).		P
	The specimens shall be tested on one of the two standard substrates specified for floorings in EN 13238:2001 according to the intended end use.	The class of reaction to fire is Bf1	P
	The composition of the product, including the presence of any fire retardant additive (if applicable), shall be declared by the manufacturer prior to type testing.		N/A
4.1.2	Application rules		P
	If the specimens are tested using an adhesive, the test result is valid for the tested floor covering with that adhesive, or the generic adhesive type, in end use conditions.		N/A
	If the specimens are tested without using an adhesive, the test result is valid for the tested floor covering with and without using adhesives in end use conditions.	These requirements have been complied with. The specimens are tested without using an adhesive	P
4.1.3	Durability aspects		P
	Where required, textile floor coverings specimens to be tested shall be subjected to the laboratory spray extraction cleaning procedure according to ISO 11379 with the following modifications.	These requirements have been complied with.	P
	Clean the test specimens three times, with an interval of 2 h ± 15 min between cycles, each cleaning cycle consisting of two strokes: – for the first stroke use the spray extraction machine with simultaneous spray and extraction; – for the second stroke operate the machine only as an extraction machine.	These requirements have been complied with.	P
	Carry out the first cleaning cycle using the reference cleaning solution at ambient temperature (25 °C ± 10 °C) and the second and third cleaning cycle with water at ambient temperature without any addition of chemicals.	These requirements have been complied with.	P
4.1.4	Classification.	These requirements have been complied with.	P

EN 14041			
Clause	Requirement - Test	Result - Remark	Verdict
	If a claim for reaction to fire performance is made, the floor covering (except as provided for below) shall be tested and classified according to the requirements of EN 13501-1:2002 and the resulting class and subclass (as appropriate to the class itself) shall be declared.	Fire performance class is Bfl-S1 These requirements have been complied with.	P
4.2	Content of pentachlorophenol (PCP)		P
	Resilient, textile and laminate floor coverings shall not contain PCP or a derivative thereof as a component in the production process of the product or of its raw materials. In cases where verification is required, if the content is less than 5 ppm in the parts of the product affected by treatment, this requirement shall be considered to be met. For laminate floor coverings the method CEN/TR 148232, for textile floor coverings the method CEN/TS 144943 shall be used. For resilient floor coverings verification is not required.	These requirements have been complied with. It is resilient floor. The content is 4.65ppm.	P
4.3	Formaldehyde emission	These requirements have been complied with.	P
	When formaldehyde-containing materials have been added to the product as a part of the production process, the product shall be tested and classified into one of two classes: E1 or E2, as specified in Table 4 and Table 5.	These requirements have been complied with. The formaldehyde class is E1. The formaldehyde content is 0.120mg/m <sup>3</sup>	P
	The test requirement does not apply to floor coverings to which no formaldehyde-containing materials were added during production or post-production processing. These need not be classified, but may, without any testing, be declared as E1.		N/A
4.4	Water-tightness		P
	Where required, resilient floor coverings shall meet the requirements of EN 13553.		P
4.5	Slip resistance		P
4.5.1	Classification		P
	If a claim for slip resistance is made, the floor covering intended to be used in dry and non-contaminated conditions shall have a dynamic coefficient of friction of $\geq 0,30$ when tested ex-factory under dry conditions in accordance with EN 13893 and shall be declared as technical class DS. Although such floors may be subjected to occasional spillage and wet cleaning, the manufacturer does not guarantee the performance under these conditions.	The dynamic coefficient of friction is $>0.5$ .	P
4.5.2	Post-installation care		P
	The floor covering shall be treated, cleaned and maintained in accordance with the manufacturer's instructions	Pass. These requirements have been complied with.	P
4.6	Electrical behaviour (static electricity)		P

EN 14041			
Clause	Requirement - Test	Result - Remark	Verdict
4.6.1	Applicability		P
	For those floor coverings for which the manufacturer makes a claim for antistatic performance or electrical resistance.		N/A
4.6.2	Requirements		P
4.6.2.1	Antistatic floor coverings		P
	The body voltage, measured in accordance with EN 1815 for resilient and laminate floor coverings or ISO 6356 for textile floor coverings, shall not exceed 2,0 kV when tested at 23 °C ± 1 °C and (25 ± 2) % relative humidity after conditioning the test specimens in the same atmosphere for seven days.		P
4.6.2.2	Electrical resistance		N/A
	<ul style="list-style-type: none"> <li>• Static dissipative floor coverings: The vertical resistance, measured in accordance with EN 1081 for resilient and laminate floor coverings or ISO 10965 for textile floor coverings, shall not exceed 109 Ω.</li> <li>• Conductive floor coverings: The vertical resistance, measured in accordance with EN 1081 for resilient and laminate floor coverings or ISO 10965 for textile floor coverings, shall not exceed 106 Ω.</li> </ul>		N/A
4.6.3	Durability aspects		P
	For textile antistatic floor coverings, a washing and cleaning procedure similar to that used in practice is required where applicable to verify the durability of surface antistatic treatments. In such cases the specimens to be tested shall be subjected to the laboratory spray extraction cleaning procedure according to ISO 11379 with the following modifications.	Not applicable	N/A
	Clean the test specimens three times, with an interval of 2 h ± 15 min between cycles, each cleaning cycle consisting of two strokes: – for the first stroke use the spray extraction machine with simultaneous spray and extraction; – for the second stroke operate the machine only as an extraction machine. Carry out the first cleaning cycle using the reference cleaning solution at ambient temperature 25 °C ± 10 °C and the second and third cleaning cycle with water at ambient temperature without any addition of chemicals. After this, the test of 4.6.2 shall be repeated and the requirements met.		N/A
4.7	Thermal conductivity		P
	When floor coverings are to be installed over an under-floor heating system the design thermal conductivity values given in EN 12524 shall be assumed for design calculation purposes.	These requirements have been complied with. The thermal conductivity is 0.235W/MK	P

EN 14041			
Clause	Requirement - Test	Result - Remark	Verdict
	Alternatively, the thermal resistance measured in accordance with EN 12667 may be used.	<0.17 These requirements have been complied with.	P
5	Evaluation of conformity		P
5.1	General		P
	The conformity of floor coverings with the requirements of this standard (including classes) shall be demonstrated by: – initial type testing; – factory production control by the manufacturer, including product assessment (see Annex D). For the purposes of testing, floor coverings may be grouped into families (see 3.1), where it is considered that the results for a given characteristic from any one product within the family are valid for all other floor coverings within that family	These requirements have been complied with.	P
5.2	Type testing		P
5.2.1	Initial type testing	These requirements have been complied with.	P
	Initial type testing shall be performed to show conformity with this standard. Tests previously performed in accordance with the provisions of this standard (same product, same characteristic(s), test method, sampling procedure, system of attestation of conformity, etc.) may be taken into account. In addition, initial type testing shall be performed at the beginning of the production of a new product type (unless a member of the same family) or at the beginning of a new method of production (where this may affect the stated properties). Whenever a change occurs in the product, the raw material or supplier of the components, or the production process (subject to the definition of a family), which would change significantly one or more of the characteristics, the type tests shall be repeated for the appropriate characteristic(s).	These requirements have been complied with.	P
5.2.2	Sampling, testing and compliance criteria		P
	The sample taken for testing shall be representative of the available material. Compliance criteria are specified in Clause 4. The results of all type tests shall be recorded and held by the manufacturer for at least 5 years.	These requirements have been complied with.	P
5.3	Factory production control (FPC)		P
	The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market conform to the stated performance requirements. The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product. Elements needed for the methods of FPC are given in Annex D.	These requirements have been complied with. The factory has passed the ISO9001 certificate.	P



EN 14041			
Clause	Requirement - Test	Result - Remark	Verdict
6	Marking and labelling		P
	Products which conform to the requirements of this document shall be clearly and indelibly marked by the manufacturer either on their package or on an adhesive label with the following information:		P
	a) the number and the year of this European Standard	EN 14041:2004+AC:2006	P
	b) the manufacturer's or supplier's identification;	Shaoxing Yongsheng New Material Co., Ltd	P
	c) the product name and batch number (possibly in code form		P

EN 14041			
Clause	Requirement - Test	Result - Remark	Verdict

## ANNEX A

No.	Property	Test Method	Test Result	Verdict
1	24H rate of moisture content	EN322	1.6%	P
2	Rate of breaking elongation	ENISO5079	0.30%	P
3	Bending Strength	EN310	35Mpa	P
4	Impacting Strength(unnotched)	ENISO180	8.6KJ/m <sup>2</sup>	P
5	Compression strength	DIN52192	54Mpa	P
6	Hardness(HS)	EN53505	80	P
7	Density	EN14041	1379.3kg/m <sup>3</sup>	P
8	UV-resistant aging	EN1297	950 hours	P

### Photos of the sample



## *Notice*

1. This test report shall be invalidation without the cachet of the testing laboratory.
2. This copied report shall be invalidation without sealed the cachet of the testing laboratory.
3. This report shall be invalidation without tester signature, reviewer signature and approver signature.
4. This altered report shall be invalidation.
5. Client shall put forward demurrer within 15days after received report. The testing laboratory shall refuse disposal if exceeded the time limit.
6. The test results presented in this report relate only to the object tested.

Post code: 610100

Add: No.45 Wenming Dong Road Longquanyi District, Chengdu,  
Sichuan.

# Shaoxing Yongsheng New Material Co., Ltd

## Limited Warranty statement

Shaoxing Yongsheng New Material Co., Ltd (Hereinafter ‘YONGSHENG’) warrants to the original PURCHASER (‘PURCHASER’) that, for the period set forth in the following sentence, under normal use and service conditions from an authorized YONGSHENG products distributor/agent/dealer/importer, that YONGSHENG products shall be free from material defects in workmanship and materials. And shall not split, splinter, rot, or suffer structural damage from termites or fungal decay. The term of such warranty shall be TWENTY (20) years for Solid WPC, and FIFTEEN (15) years for Hollow WPC from the original PURCHASER from YONGSHENG and is installed and maintained according to manufacturer’s guidelines

If a defeat occurs within the warranty period, PURCHASER must, within thirty (30) days from discovery of the claimed defect but no later than the end of warranty period, notify YONGSHENG in writing at the following E-mail Address:

Email: [sales@wpcflooring.com](mailto:sales@wpcflooring.com)

Shaoxing Yongsheng New Material Co., Ltd

Shangyu Economic Technical Development Area, Hangzhou Bay

Zhejiang, China

Attn: Yongbin Wang

[Tel:0086-575-82001681](tel:0086-575-82001681)

PURCHASER must include in this notification to proof purchase information, such as PI number, and statement & photos explaining the defect and date the products were installed. YONGSHENG may request additional information. After reviewing all information, YONGSHENG shall make a determination with respect to the validity of such claim within FIFTEEN (15) days. If YONGSHENG confirmed this claim valid. YONGSHENG’s sole responsibility shall be, at its option, to either replace the defective products or refund the portion of the purchase price paid by PURCHASER for such defective products.

**Other Costs:** This warranty shall not cover and YONGSHENG shall not be responsible for costs and expenses incurred with respect to the removal of defective YONGSHENG products or the installation of replacement materials, including but not limited to labor and freight. And YONGSHENG shall have no further liability of obligation expect as expressly stated herein. Under no circumstances will YONGSHENG be reliable for special, incidental or consequential damages, whether such damages are sought in contract, in tort (including but not limited to negligence



and strict liability) or otherwise, and YONGSHENG's liability with respect to defective YONGSHENG products shall in no event exceed the replacement of such products or refund of the purchase price, as described above.

**Replacement Proportion:** After the original purchase date, the PURCHASER's recovery shall be prorated in the following manner:

YONGSHENG WPC 20 YEAR LIMITED WARRANTY FOR SOLID DECKING 15 YEAR LIMITED WARRANTY FOR HOLLOW DECKING		
Decking Type	Year of Claim	Replacement Ratio (%)
SOLID DECKING	1-3	100%
	4-5	90%
	6-7	70%
	8-10	50%
	11-15	30%
	16-20	10%
HOLLOW DECKING	1-2	100%
	3-4	85%
	5-6	70%
	7-8	50%
	9-10	30%
	11-15	10%

#### **Exclusions from Warranty Coverage**

YONGSHENG does not warrant against and is not responsible for, and no implied warranty shall be deemed to cover, any condition attributable to:

- (1) Improper installation of YONGSHENG products and/or failure to abide by YONGSHENG's installation guidelines, including but not limited to improper gapping;
- (2) Use of YONGSHENG products beyond normal use and service conditions, or in an application not recommended by YONGSHENG's guidelines and local building codes;
- (3) Movement, distortion, collapse or settling of the ground or the supporting structure on which YONGSHENG products are installed;
- (4) Any act of God (such as flooding, hurricane, earthquake, thunder and lightning, etc.) environmental condition (such as air pollution, mold, mildew, etc.), staining from foreign substances (such as dirt, grease, oil, etc.) or normal weathering (defined as exposure to sunlight, weather and atmosphere which will cause any colored surface to gradually fade, chalk, or accumulate dirt or stains);
- (5) Slight variations or changes in color of YONGSHENG products;
- (6) Improper handling, storage, abuse or neglect of YONGSHENG products by PURCHASER;
- (7) Decay caused by fasteners;

- (8) Wood grain disappearing and scratches on surface in daily use.
- (9) Ordinary wear and tear.

This warranty may not be altered or amended except in a written instrument signed by YONGSHENG and PURCHASER. No person or entity is authorized by YONGSHENG to make and YONGSHENG shall not be bound by any statement or representation as to the quality or performance of YONGSHENG products other than contained in this warranty.

Shaoxing Yongsheng New Material Co., Ltd  
Shangyu Economic Technical Development Area, Hangzhou Bay  
312300 Zhejiang  
China

绍兴永昇新材料有限公司  
SHAOXING YONGSHENG NEW MATERIAL CO., LTD



Date: Oct 20th ,2020

**Shaoxing Yongsheng New Material Co.Ltd  
No.1 Huijing Road Shangyu Industrial Zone, Hangzhou  
Bay, Shaoxing, Zhejiang, China  
tel:086-575-82001678 fax;086-575-82001680  
mobile:0086-13567652552  
www.youngsunwpc.com**

**To: Mr Giannis,  
M.KANATSIPOULOS NEWPLAN S.A.  
17th KLM O.N.R. THESSALONIKIS-  
KAVALAS  
PC57200 POB19  
THESSALONIKI GREECE  
TEL :0030 23940  
52420,52518  
FAX:0030 23940 52519**

**Dear Giannis,**

**Your decking profile with 120\*20mm .  
Weight per meter 1.93KG + -5% ,  
weight per SQM 16.08KG + -5%.  
Dimension :120mm + - 1mm  
20mm + -0.5mm  
Loading test with gap 35cm and 2300N + -10%  
flexure strength 25.12 MPA + -10%.  
flexural modulus 4527MPA + -10%.  
deflection test 6.8mm + -10%.  
Limited Warranty for this product with 5 years .**

**Yours sincerely  
Kobe Tao – Managing Partner**





Date: Oct 20th ,2020

**Shaoxing Yongsheng New Material Co.Ltd  
No.1 Huijing Road Shangyu Industrial Zone, Hangzhou  
Bay, Shaoxing, Zhejiang, China  
tel: 086-575-82001678 fax; 086-575-82001680  
mobile: 0086-13567652552  
www.youngsunwpc.com**

**To: Mr Giannis,  
M.KANATSIPOULOS NEWPLAN S.A.  
17th KLM O.N.R. THESSALONIKIS-  
KAVALAS  
PC57200 POB19  
THESSALONIKI GREECE  
TEL : 0030 23940  
52420, 52518  
FAX: 0030 23940 52519**

**Dear Giannis,**

**Your decking profile with 146\*23mm .  
Weight per meter 2.75KG + -5% ,  
weight per SQM 18.84KG + -5%.  
Dimension : 146mm + - 1mm  
23mm + -0.5mm  
Loading test with gap 35cm and 3203N + -10%  
flexure strength 21.077 MPA + -10%.  
flexural modulus 3613MPA + -10%.  
deflection test 7.7mm + -10%.  
Limited Warranty for this product with 5 years .**

**Yours sincerely  
Kobe Tao – Managing Partner**

# TEST REPORT

**REPORT NUMBER: 161129002SHF-BP-2**

ORIGINAL ISSUE DATE: 2016-12-29

## **EVALUATION CENTER**

Intertek Testing Services Ltd., Shanghai  
Plant 7, No. 6958 Daye Road, Fengxian District, Shanghai, China

## **RENDERED TO**

**TIMCO Wood UK Ltd.**

**Unit 4 Senate Place, Whitworth Road Stevenage, Herts, SG1 4QS, UK.**

## **PRODUCT EVALUATED**

WPC Fencing

## **EVALUATION PROPERTY**

As requested by the applicant, for details refer to attached pages(s).

*"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."*

Report Template Revision Date: 2016/9/1



## Test Report

Report Number: 161129002SHF-BP-2

Report Date: 2016-12-29

<b>Applicant:</b>	<b>TIMCO Wood UK Ltd.</b>
<b>Applicant Address:</b>	<b>Unit 4 Senate Place, Whitworth Road Stevenage, Herts, SG1 4QS, UK.</b>
<b>Attn:</b>	<b>David Liu</b>

<b>Sample information:</b>	
Product:	WPC Fencing
Model:	/
Specification:	1.8x1.8m
Sample Quantity:	One set of fence system
Sample ID:	S161129002SHF.001
Date Received:	2016/11/28
Date Test Conducted:	2016/11/29~2016/12/05

<b>Conclusion:</b>
For details refer to attached page(s).
The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

## Test Report

Report Number: 161129002SHF-BP-2

Report Date: 2016-12-29

### Test Items, Method and Results:

Test Item	Test Method	Test Result	Requirement	Verdict
Wind resistance test	In house method	There was no failure, nor any evidence of disengagement of any component, nor visible cracks in any component.	The fencing system shall resist a maximum horizontal quarter point load of 372,1 N/m <sup>2</sup> x effective area of system (as 9 Beaufort scale or 9 wind level)	Pass

Note:

1. The effective area is 3.11 m<sup>2</sup> (1.73m wide x 1.80m height)
2. Wind level 9, the test load is 1160 N
3. The test method was offered by Applicant



# Test Report

Report Number: 161129002SHF-BP-2

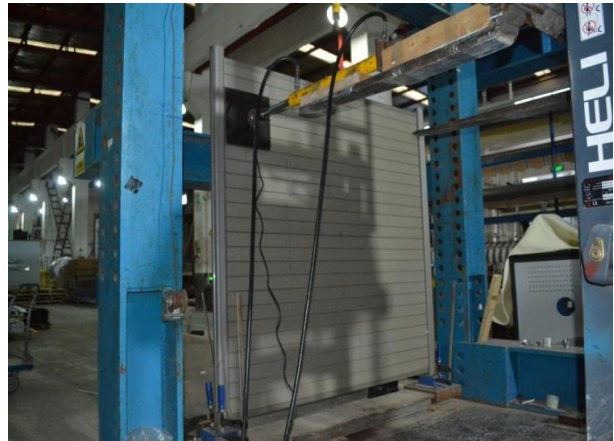
Report Date: 2016-12-29

### Test Items, Method and Results:

Test Item	Test Method	Test Result	Requirement	Verdict
In fill load	Reference to ASTM D7032:2015	There was no failure, nor any evidence of disengagement of any component, nor visible cracks in any component.	The test specimens shall be capable of satisfactorily resisting a load of 556N applied over a one-square foot area normal to the in-fill	Pass

Note:

1. Load positions were refer to the following pictures



# Test Report

Report Number: 161129002SHF-BP-2  
Report Date: 2016-12-29

### Test Items, Method and Results:

Test Item	Test Method	Test Result	Requirement	Verdict
Uniform load test	Reference to ASTM D7032:2015	There was no failure, nor any evidence of disengagement of any component, nor visible cracks in any component.	The top of the guard system test specimen shall be separately subjected to a maximum uniform load of 1825 N/m applied vertically	Pass

Note:

1. The effective length of the top rail is 1.73 m
2. The test load is 3160 N
3. The test method was offered by Applicant





# Test Report

**Report Number: 161129002SHF-BP-2**  
**Report Date: 2016-12-29**

**Test Items, Method and Results:**

Test Item	Test Method	Test Result	Requirement	Verdict
Concentrated load on top rail	Reference to ASTM D7032:2015	There was no failure, nor any evidence of disengagement of any component, nor visible cracks in any component at the load of 2224N	A 2224N load shall be applied at the midspan of the top rail in a outward position. The completed handrail and supporting structure shall be capable of withstanding a load at least 2,22 kN	Pass

Note:

1. The test method was offered by Applicant



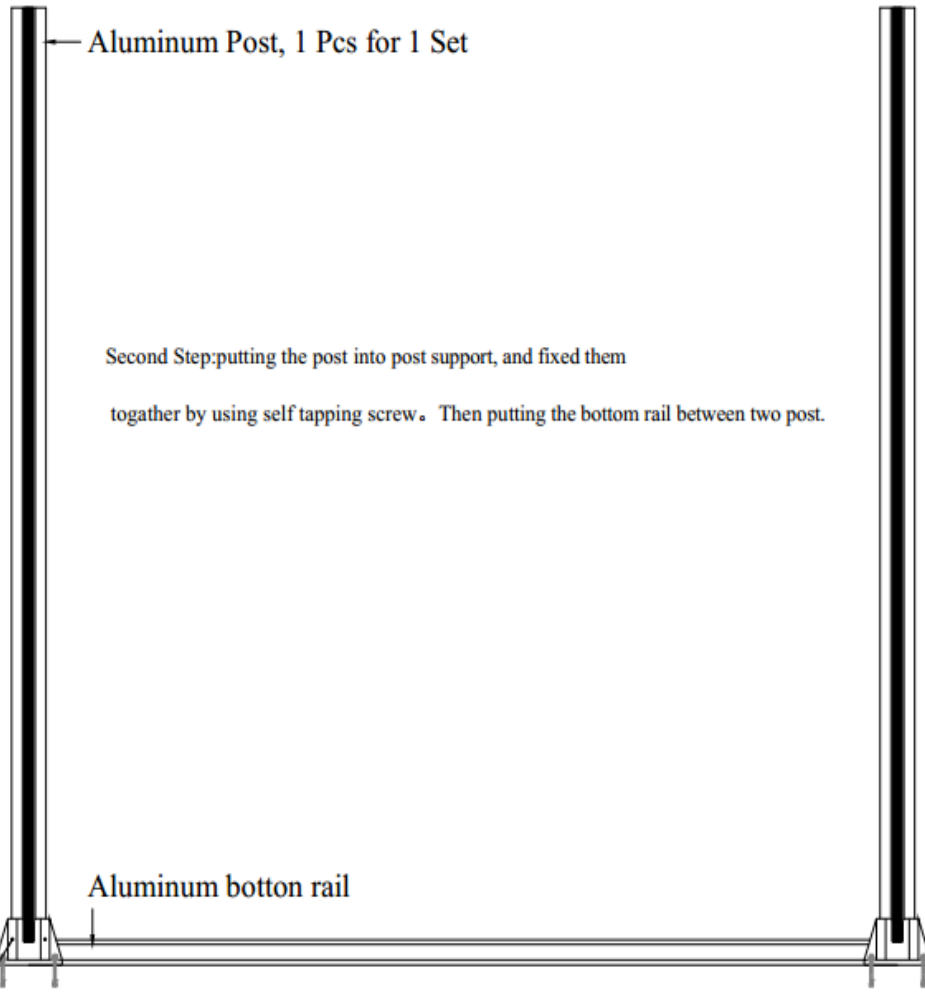
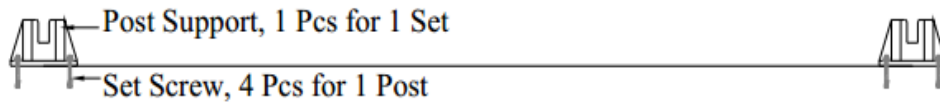
**Test Report**

**Report Number: 161129002SHF-BP-2**

**Report Date: 2016-12-29**

**Drawings:**

First Step: Fixed post support via Set Screw



Self tapping screw

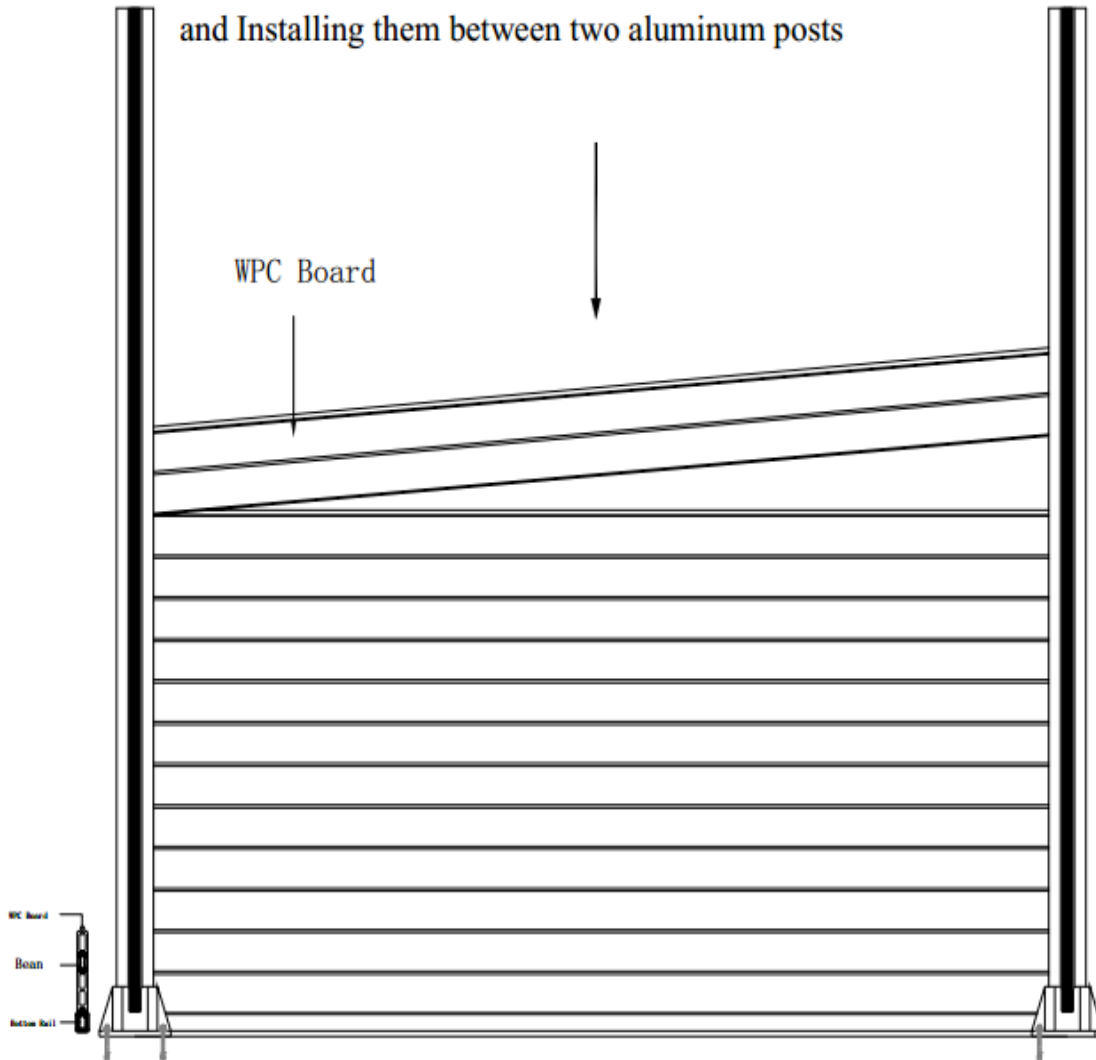


# Test Report

Report Number: 161129002SHF-BP-2  
Report Date: 2016-12-29

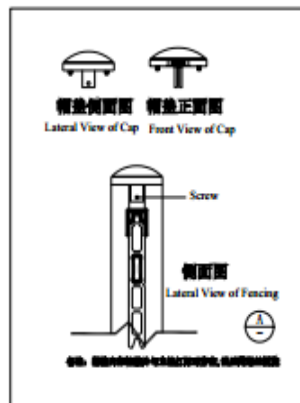
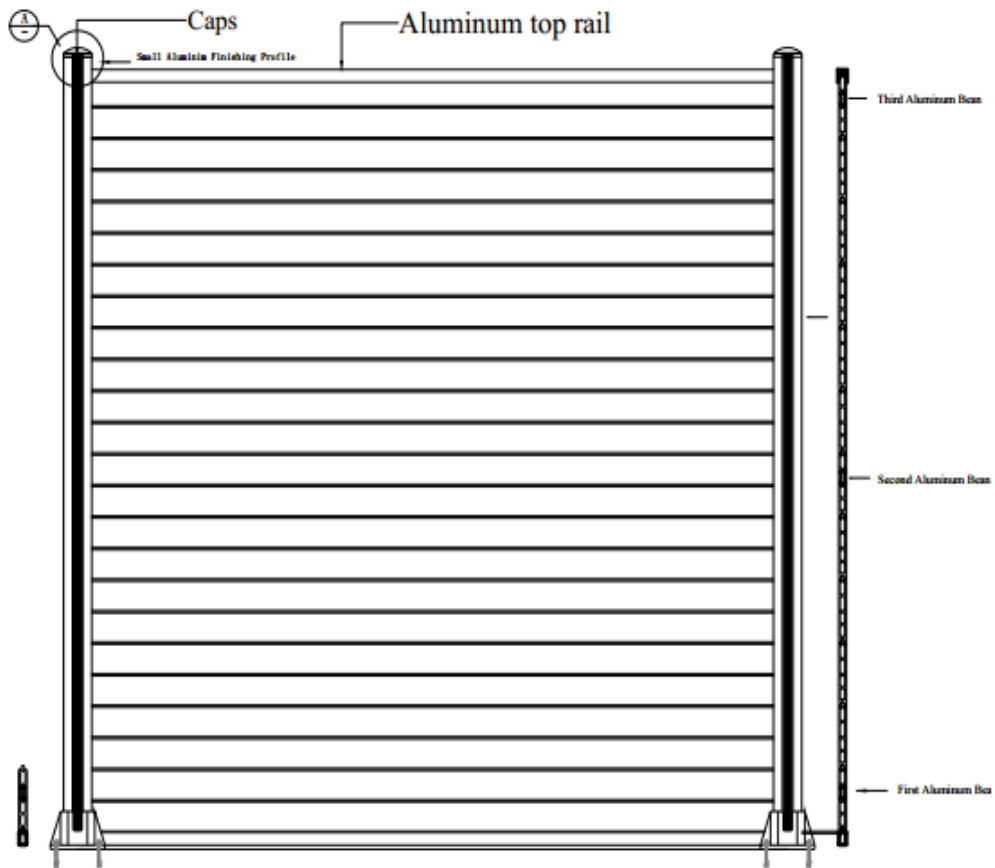
## Drawings:

Third Step: Putting the aluminum bean in the first, sixth and last board and installing them between two aluminum posts



**Drawings:**

Fourth Step: After the last board, Putting Top Rail on it  
and fixed caps on the top of aluminum post by screws



**Appendix A: Sample received photo**



Setup of Fencing system

**Approved by:**

		
_____ Name: Jodie Zhou	_____ Name: Daniel Zhang	_____ Name: Torres Qi
Title: Approver	Title: Reviewer	Title: Project Engineer

*(Note: A red circular stamp of Intertek Testing Services Ltd. is overlaid on the signatures.)*

\*\*\*\*\*

The End of Report

# TEST REPORT

**REPORT NUMBER: 170421002SHF-BP-1**

ORIGINAL ISSUE DATE: 2017/5/10

## EVALUATION CENTER

Intertek Testing Services Ltd., Shanghai  
Plant 7, No. 6958 Daye Road, Fengxian District, Shanghai, China

## RENDERED TO

**Shaoxing Yongsheng New Material Co., Ltd**  
**No.1 Huijing Road, East Area 2, Shangyu Industrial Zone, Hangzhou Bay,**  
**Zhejiang**

## PRODUCT EVALUATED

Wall cladding

## EVALUATION PROPERTY

As requested by the applicant, for details refer to attached page(s).

*"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."*

Report Template Revision Date: 2016/9/1



## Test Report

Report Number: 170421002SHF-BP-1

Report Date: 2017-05-10

<b>Applicant:</b>	<b>Shaoxing Yongsheng New Material Co., Ltd</b>
<b>Applicant Address:</b>	<b>No.1 Huijing Road, East Area 2, Shangyu Industrial Zone, Hangzhou Bay, Zhejiang</b>
<b>Attn:</b>	<b>Jin Yuan</b>

<b>Sample information:</b>	
Product:	Wall cladding
Model:	\
Specification:	150*20
Sample Quantity:	60 pieces
Sample ID:	S170421002SHF-001~060
Date Received:	2017/4/17
Date Test Conducted:	2017/4/28

<b>Conclusion:</b>
For details refer to attached page(s).
The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

# Test Report

**Report Number: 170421002SHF-BP-1**

**Report Date: 2017-05-10**

## Test Items, Method and Results:

### 1.1 SINGLE BURNING ITEM TEST

The test was conducted in accordance with EN 13823:2010. This test evaluates the potential contribution of a product to the development of a fire, under a fire situation simulating a single burning item near to the product.

### 1.2 IGNITABILITY TEST

The test was conducted in accordance with EN ISO 11925-2:2010. This test evaluates the ignitability of a product under exposure to a small flame.

### 1.3 CLASSIFICATION CRITERIA

The classification was determined in accordance with EN 13501-1: 2007+A1: 2009. The classes C with their corresponding fire performance are given in the table below.

Table- Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products.

Class	Test Method(s)	Classification criteria	Additional classifications
C	EN 13823	FIGRA $\leq$ 250 W/s and LFS < edge of specimen and THR <sub>600s</sub> $\leq$ 15 MJ	Smoke production <sup>a</sup> and Flaming droplets/particles <sup>b</sup>
	EN ISO 11925-2 <sup>c</sup>	F <sub>S</sub> $\leq$ 150 mm within 60 s	

#### Note:

a. In the last phase of the development of the test procedure, modifications of the smoke measurement system have been introduced, the effect of which needs further investigation. This may result in a modification of the limit values and/or parameters for the evaluation of the smoke production.

s1 = SMOGRA  $\leq$  30m<sup>2</sup>/s<sup>2</sup> and TSP<sub>600s</sub>  $\leq$  50m<sup>2</sup>; s2 = SMOGRA  $\leq$  180m<sup>2</sup>/s<sup>2</sup> and TSP<sub>600s</sub>  $\leq$  200m<sup>2</sup>; s3 = not s1 or s2

b. d0 = no flaming droplets/ particles in EN 13823 within 600 s;

d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600s;

d2 = not d0 or d1.

Ignition of the paper in EN ISO 11925-2 results in a d2 classification.

c. Under conditions of surface flame attack and, if appropriate to the end use application of the product, edge flame attack.

# Test Report

**Report Number: 170421002SHF-BP-1**  
**Report Date: 2017-05-10**

## Test Items, Method and Results:

### 2 RESULTS AND OBSERATIONS

Method	Parameter	Result
EN 13823: 2010	FIGRA , W/s	94
	THR <sub>600s</sub> , MJ	11.8
	LFS, m	<Edge of Specimen
	SMOGRA, m <sup>2</sup> /s <sup>2</sup>	5
	TSP <sub>600sr</sub> , m <sup>2</sup>	24
	Flaming Droplets/ Particles	No flaming droplets/particles occur within 600s
EN ISO 11925-2:2010 Exposure=30 s	Fs, mm	51
	Ignition of the paper	No ignition of the paper

#### Note

1. This test was conducted at the external approved facility, located at Guangzhou.
2. Per EN 13823, the samples were fixed mechanically to a 9 mm thick calcium silicate board. The density of the calcium silicate board was 900kg/m<sup>3</sup>.

### 3 CLASSIFICATION

The classification has been carried out in accordance with EN 13501-1:2007+A1:2009.

Fire behaviour	Smoke production			Flaming Droplets		
<i>C</i>	-	<i>s</i>	<i>1</i>	-	<i>d</i>	<i>0</i>

Reaction to fire classification: *C- s1, d0*

# Test Report

Report Number: 170421002SHF-BP-1  
Report Date: 2017-05-10

## 4 Test Photos



Long wing (Before test)



Short wing (Before test)



Long wing (After test)



Short wing (After test)



**Test Report**

**Report Number: 170421002SHF-BP-1**  
**Report Date: 2017-05-10**

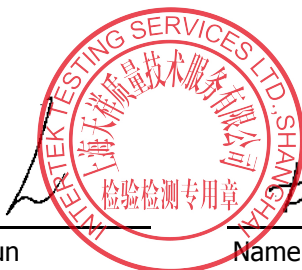
**Appendix A: Sample received photo**



**Approved by:**

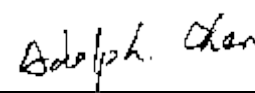


Name: Sun Sun  
Title: Approver





Name: Harrison Li  
Title: Reviewer



Name: Adolph Chen  
Title: Project Engineer

\*\*\*\*\*

The End of Report

# Shaoxing Yongsheng New Material Co., Ltd

## TEST REPORT

**REPORT NUMBER**

160225004SHF-BP-3

**ISSUE DATE**

2017-09-30

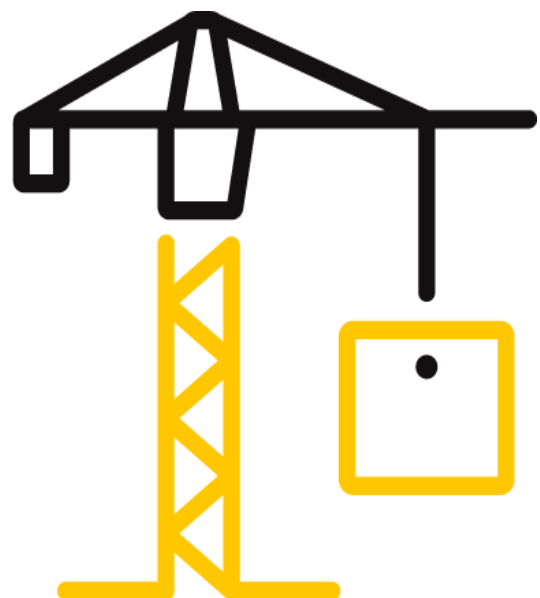
**PAGES**

4

**DOCUMENT CONTROL NUMBER**

LFT-APAC-SHF-OP-10a

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## Test Report

Issue Date: 2017-09-30 Intertek Report No. 160225004SHF-BP-3

Applicant: Shaoxing Yongsheng New Material Co., Ltd

Applicant Address: No. 1 Huijing Road, East Area 2, Shangyu Industrial Zone, Hangzhou Bay, Zhejiang

Attn: Jake Wang

**SUBJECT:** Performance testing  
WPC

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
S160225004SHF-055~067	/	Hollow
S160225004SHF-068~077		150 mm(width)×25 mm(thickness)

SAMPLE RECEIEVED: 2016-02-01; 2016-03-04  
TESTED FROM: 2016-02-25 TO 2016-08-31

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# Test Report

Issue Date: 2017-09-30

Intertek Report No. 160225004SHF-BP-3

### Test Items, Method and Results:

Test items	Test Methods	Test Results	Test Requirements	Verdict
Pendulum test	EN 15534-4:2014 Section 4.4	Test face see fig.1 Longitudinal direction: Mean: 54 Min.: 52 Horizontal direction: Mean: 76 Min.: 74	Pendulum value $\geq 36$	Pass
	EN 15534-1:2014 Section 6.4.2  CEN/TS 15676:2007	Test face see fig.2 Longitudinal direction: Mean: 62 Min.: 60 Horizontal direction: Mean: 72 Min.: 70		Pass
Falling mass impact resistance	EN 15534-4:2014 Section 4.5.1	Hollow profiles Test face see fig.1 Depth of residual indentation: Max.: 0.21 mm No crack	Hollow profiles  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
	EN 15534-1:2014 Section 7.1.2.1	Hollow profiles Test face see fig.2 Depth of residual indentation: Max.: 0.12 mm No crack		Pass
Flexural properties <sup>1</sup>	EN 15534-4:2014 Section 4.5.2  EN 15534-1:2014 Annex A	Bending Strength: 24.8 MPa Modulus of elasticity: 2927 MPa Maximum load: Mean: 5188 N Min.: 5062 N Deflection at 500N: Mean: 0.90 mm Max.: 1.00 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 300 mm offered by applicant.

## Test Report

Issue Date: 2017-09-30

Intertek Report No. 160225004SHF-BP-3

### APPENDIX: SAMPLE RECEIVED PHOTO

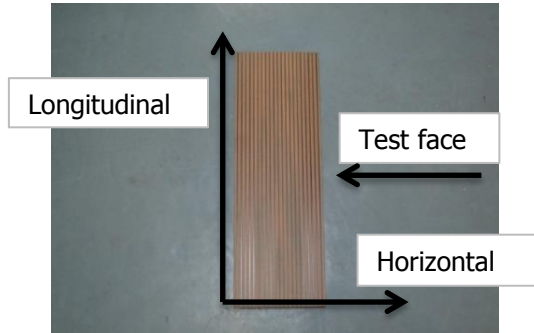


Fig 1. Front view

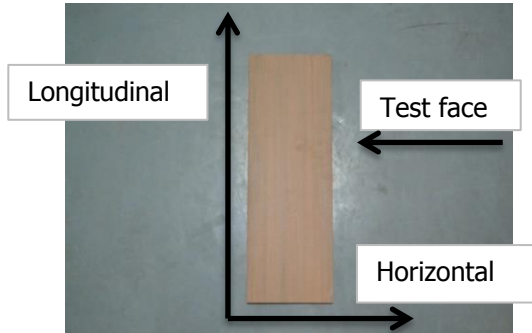


Fig 2. Back view



Fig 3. Section 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.

 <hr style="border: 0.5px solid black;"/> <p>Name: Sun Sun Title: Approver</p>	  <hr style="border: 0.5px solid black;"/> <p>Name: Sally Xie Title: Reviewer</p>	 <hr style="border: 0.5px solid black;"/> <p>Name: Tod Qian Title: Project Engineer</p>
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### Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
160225004SHF-BP-3	2017-09-30	Revised the applicant and address of 160225004SHF-BP-1	Tod Qian	Sally Xie