Test Report

Report Number: 160524006SHF-BP-1R1

Applicant Name:	**Wuhu Haoxuan Wood Plastic Composite Co.,Ltd**	**Report Date: July 18, 2016** **Revised Date: July 19, 2016**
Applicant Address:	**No. 12, Fushan Rd, Sanshan Economic Development Zone, Wuhu City, Anhui**	
Attn: Yuchun Yang		

Sample Description:

Product:	WPC decking
Model:	FW148K25(148mm*25mm)
Sample Quantity:	57 pieces
Sample ID:	S160524006SHF-001~057
Date Received:	2016-05-20
Date Test Conducetd:	2016-05-24~2016-07-12

Tests Conducted:

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

Conclusion:

For details refer to attached page(s). Supersede or Amendment to Report No. 160524006SHF-BP-1 (Model of test sample was modified).
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 item	Test Method	Test Results	Test Requirements	Verdict
Appearance	EN 15534-1 6.1	No visible colour difference compared to the control sample, no crack, blister and some other visible defects	/	/
Linear mass	EN 15534-1 6.5	Mean value: 2870 g/m Minimum value: 2866 g/m	Individual values ⩾ 95% declared value by the manufacturer No declared value	/
Thickness,width and length	EN 15534-1 6.6.2	Thickness: 24.28 mm Width: 148.08 mm Length: 1005 mm	No declared value	/
Deviation from straightness	EN 15534-1 6.6.3	Flatwise Max value: 0.30 mm edgewise Max value: 0.45 mm	No declared value	/
Cupping	EN 15534-1 6.6.4	Max value: 0.30 mm	No declared value	/
Pendulum test	EN 15534-1 6.4.2	fig.2 Longitudinal Mean value: 78 Min. value: 74 Horizontal Mean value: 94 Min. value: 92	Pendulum test: Pendulum value ⩾ 36	Pass

Falling mass impact resistance	EN 15534-1 7.1.2.1	Hollow profiles fig.2 Depth of residual indentation: Max Value: 0.20 mm No crack	Hollow profiles None of 10 test specimens shall show a failure with a crack length ⩾ 10 mm or a depth of residual indentation ⩾ 0,5 mm. In case of one failure, 10 additional test specimens shall be tested and no failure with a cracklength ⩾ 10 mm or a depth of residual indentation ⩾ 0,5	Pass
Flexural properties	EN 15534-1:2014 ANNEX A	Bending Strength: 20.3 MPa Modulus of elasticity: 2129 MPa Mean value of maximum load: 4048 N Minimum value of maximum load: 3644 N Deflection at 500 N Mean value: 0.93 mm Maximum value: 1.03 mm	Flexural properties - F'max ⩾ 3300 N (arithmetic mean value) - F'max ⩾ 3000 N (individual values) - Deflection under a load of 500 N ⩽ 2,0 mm (arithmetic mean value) - Deflection under a load of 500 N ⩽ 2,5 mm (individual values)	Pass
Resistance to artificial weathering	EN 15534-1 8.1 ISO 4892-2	After 1000 hours exposure EN ISO 4892-2, No declared value	Value Range: △E*=5.57 Grey Scale 2~3	/
Boiliing test	EN 15534-1 8.3.3	Water absorption Mean value: 2.98% Max. value: 3.07%	1) Mean value of water absorption ⩽ 7 % in weight 2) Individual values of water absorption ⩽ 9 % in weight	Pass
Linear thermal expansion coefficient (-20° C~80°C) [2]	EN 15534-1 9.2 ISO 11359-2	Mean value: $37.0\times10^{-6}\,K^{-1}$	⩽ $50\times10^{-6}\,K^{-1}$	Pass
Heat reversion	EN 15534-1 9.3	Mean value: 0.42%	/	/

Creep behaviour [1]	EN 15534-1 7.4.1	Mean value: ΔS=1.58 mm ΔSr=1.58 mm Max value: ΔS=1.74 mm	Known span in use ΔS ⩽ 10 mm for arithmetic mean value ΔS ⩽ 13 mm for individual values ΔSr ⩽ 5 mm for arithmetic mean value	Pass
Moisture resistance under cyclic test coditions [1]	EN 15534-1 8.3.2 and 7.3.2	Bending strength Original sample: 20.3 MPa After moisture condition: 18.5 MPa Mean decrease: 9% Max. individual decrease: 15%	Mean of decrease of bending strength ⩽ 20 % - Individual decrease of bending strength ⩽ 30 %	Pass
Swelling and water absorption(28 days immersion)	EN 15534-1 8.3.1	Means swelling 1.55% in thickness 0.02% in width 0.02% in length Max. value 1.85% in thickness 0.02% in width 0.02% in length Water absorption Mean value: 3.51% Max. value: 3.59%	1) Means swelling ⩽ 4 % in thickness ⩽ 0,8 % in width ⩽ 0,4 % in length 2) Individual swelling ⩽ 5 % in thickness ⩽ 1,2 % in width ⩽ 0,6 % in length 3) Mean water absorption ⩽ 7 % in weight 4) Individual water absorption ⩽ 9 % in weight	Pass
Heat build-up	EN 15534-1 9.4	Black specimen: 50.3°C Composite: 47.0°C Gap: -3.3°C	/	/
Resistance to indentation	EN 15534-1 7.5	Brinell hardness: 82 HB Rate of elastic recovery: 58%	/	/

Note:

1. The test span was 300 mm offered by applicant.
2. This test was conducted at the external approved facility, located at Shanghai.

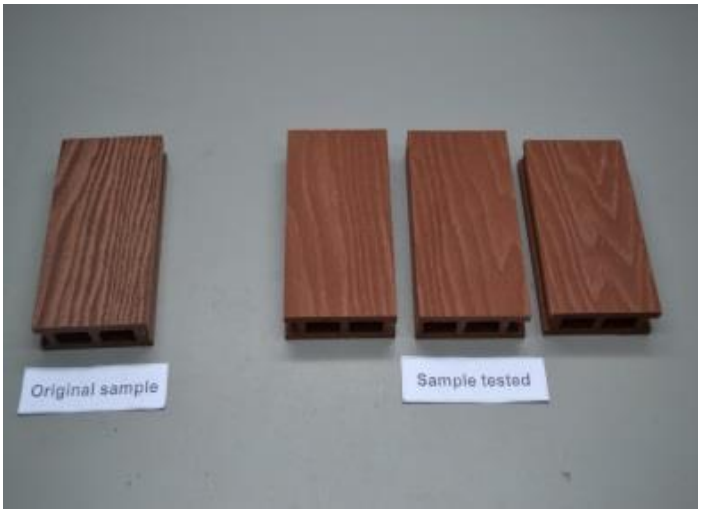

Fig.1 After 1000 hours exposure

Appendix A: Sample received photo

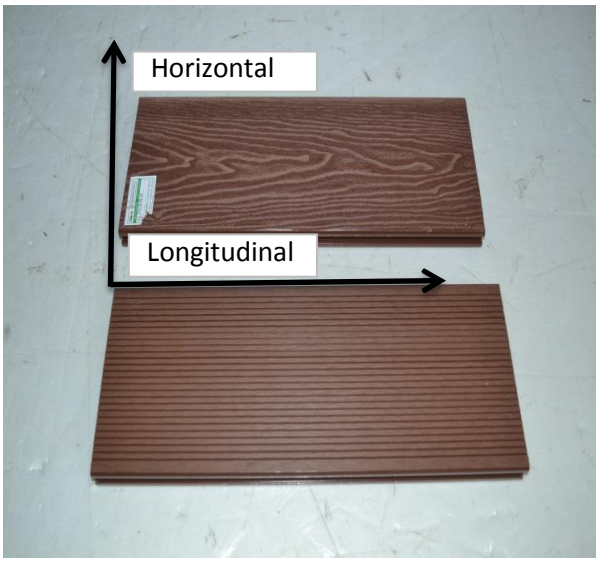

Fig.2 Front and Back view

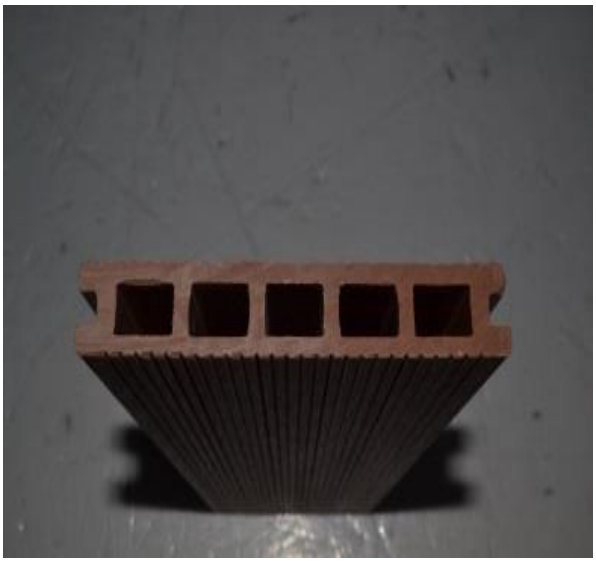

Fig.3 Section view

Approved by:

Name: Sun Sun	Name: Daniel Zhang	Name: Tod Qian
Title：Approver	Title：Reviewer	Title：Project Engineer

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The End of Report