

Test Report

Report Number:150518001SHF-BP-1

**Applicant Name: Anhui Red Forest New Material
Technology Co.,Ltd****Original Report Date: July 13, 2015****Applicant Address: JAC Auto Parts Industrial Park in
Gangji Town, Hefei City, Anhui, China****Attn: JIANGUO LIN****Sample Description:**

Product: Wood/Bamboo Plastic Composit
Model: B25-150
Samples Quantity: 30 pieces
Sample ID: S150510001SHF-001~061
Date Received: 2015-05-15
Date Test Conducted: 2015-05-18-2015-07-13

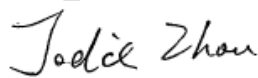
Tests Conducted:

Test Methods: Please see the next page(s)

Conclusion:

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.

Should you have any queries about the test report, please contact:

Approved by: Checked by: Prepared by:

Sun Sun Jodie Zhou Sally Xie
Assistant Manager Senior Technical Supervisor Technical Supervisor

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Test Items, Method and Results: EN 15534-4:2014

Test Item	Test Method	Test Result	Requirement	Verdict
Appearance	EN 15534-1 6.1	No visible colour difference compared to the control sample, no crack, blister or any other visible defects	/	N/A
Cupping	EN 15534-1 6.6.4	Max value: 0.3mm	Declared value: $\leq 0.5\text{mm}$	P
Slipperiness (Pendulum test)	EN 15534-1 6.4.2	Longitudinal Mean value: 68 Min. value: 66 Horizontal Mean value: 84 Min. value: 82	Pendulum value ≥ 36	P
Falling mass impact resistance	EN 15534-1 7.1.2.1	Depth of residual indentation: Max value: 0.30mm No crack	Solid profiles None of 10 test specimens shall show a failure with a depth of residual indentation $\geq 0.5\text{mm}$.	P
Flexural properties ¹	EN 15534-1 Annex A	Mean F'max=4807N Minimum F'max=4681N Deflection at 500N Mean value: 0.82mm Maximum value: 1.05mm	-Mean F'max $\geq 3300\text{N}$ -Individual F'max $\geq 3000\text{N}$ Deflection at 500N -Mean $\leq 2.0\text{mm}$ -Individual $\leq 2.5\text{mm}$	P
Creep behaviour ¹	EN 15534-1 7.4.1	Mean $\Delta S=1.34\text{mm}$ Max. $\Delta S=1.08\text{mm}$ Mean $\Delta S_r=1.20\text{mm}$	Mean $\Delta S \leq 10\text{mm}$ Individual $\Delta S \leq 13\text{mm}$ Mean $\Delta S_r \leq 5\text{mm}$	P
Resistance to artificial weathering	EN 15534-1 8.1 EN ISO 4892-2	$\Delta L^*=0.92$, $\Delta a^*=1.19$, $\Delta b^*=-0.37$ $\Delta E^*=1.58$ Grey scale: 4	After 300h EN ISO 4892-2, Declare the value of ΔL^* , Δa^* , Δb^*	P
Moisture resistance under cyclic test conditions ¹	EN 15534-1 8.3.2 and 7.3.2	Original bending strength: 24.9MPa After moisture condition: 21.2MPa Mean decrease: 15% Max. individual decrease: 18%	- Mean of decrease of bending strength $\leq 20\%$ - Individual decrease of bending strength $\leq 30\%$	P

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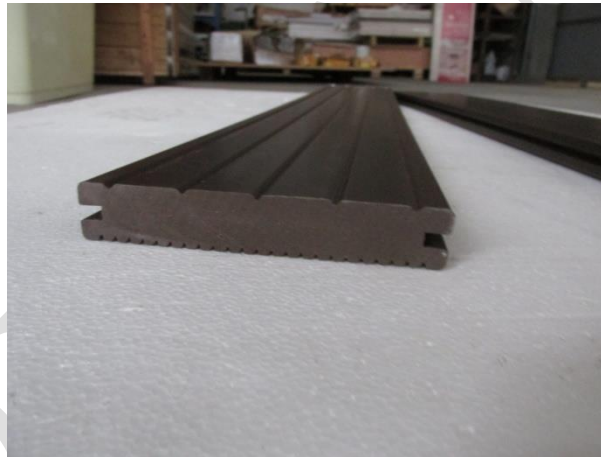
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Test Item	Test Method	Test Result	Requirement	Verdict
Swelling and water absorption (28 days immersion)	EN 15534-1 8.3.1	1) Means swelling: 3.52% in thickness 0.45% in width 0.35% in length 2) Max. swelling: 3.88% in thickness 0.52% in width 0.38% in length 3) Water absorption in weight: Mean value: 3.93% Max. value: 4.24%	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) Water absorption mean ≤ 7% in weight Individual ≤ 9% in weight	P
Boiling test	EN 15534-1 8.3.3	Water absorption in weight Mean value: 1.46% Max. value: 1.55%	Water absorption in weight Mean ≤ 7% in weight Individual ≤ 9%	P
Linear thermal expansion coefficient ²	EN 15534-1 9.2 ISO 11359-2 (-20°C-80°C)	Mean value: 47.4×10 ⁻⁶ K ⁻¹	≤50 · 10 ⁻⁶ K ⁻¹	P
Heat reversion	EN 15534-1 9.3	Mean value: 0.05%	/	N/A
Heat build-up	EN 15534-1 9.4	Mean value: 49.2°C	/	N/A
Resistance to indentation	EN 15534-1 7.5	Brinell hardness: 171 N/mm ² Rate of elastic recovery: 21%	/	N/A
Resistance against discolouring micro-fungi ³	EN 15534-1 8.5.5 ISO 16869	Rating 0, no growth The material is resistant to fungal attack	/	N/A

Note:

1. Test span was 300mm offered by the applicant.
2. Test was conducted at the external qualified facility, located at Shanghai.
3. Test was conducted at the external qualified facility, located at Guangzhou.
4. P=Pass, F=Fail, /= No detail requirement in the standard, N/A= Not Applicable

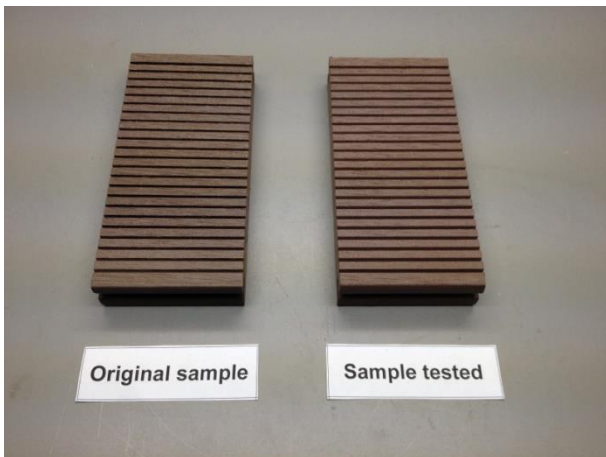
Appendix A: Sample photos



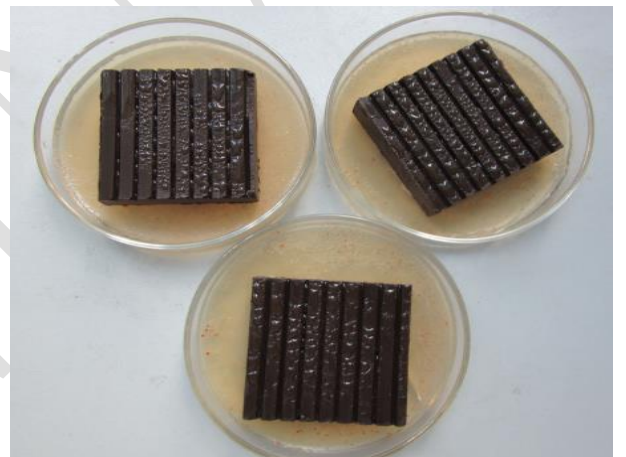
Sample as received



Sample for Slipperiness test



Sample after 300h aging test



Sample after fungi test

The End of Report

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