



TEST REPORT

Report Reference No.....: AU10124005-1

Prepared by: Daniel Zhang

Approved by.....: Jodie Zhou

Date of issue.....: January 28, 2011

Contents: Total test report 7 pages including:
Report text: 5 pages
Appendix A for product photos and UV test photo: 2 pages

Testing Laboratory name: Intertek Testing Services Building Products
Address.....: Building T52-8, No.1201 Gui Qiao Road, Jinqiao Development Area, Pudong District, Shanghai , China

Testing location: Same as above

Applicant's name: Shantou Wallong Technology Co., Ltd.
Address.....: Qian'gou Industrial Park, Longdu, Anheng Road, Chenghai District, Shantou, Guangzhou Province, China

Test specification:
Standard: CEN/TS 15534-1:2007

Test item description: Wood Plastic Composite Board
Trade Mark: Wallong
Model and/or type reference.....: WL-DK14623(WL-LG4030, WL-LG4530, WL-DT9832, WL-FS8545,WL-S7111, WL-DK14826, WL-BB2008, WL-QB15621, WL-KB18026, WL-LZ120, WL-FZ080, WL-LZ100, WL-FZ0945, WL-FZ100, WL-FZ0945, WL-FZ15045, WL-GJ3838, WL-GJ0808)
Manufacturer: Shantou Wallong Technology Co., Ltd.
Rating(s): Not specified

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

Test item particulars	
Classification of installation and use	: Not specified
Supply Connection.....	: Not specified
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)
Testing	
Date of receipt of test item	: December 3, 2010
Date (s) of performance of tests	: December 3, 2010 — January 28, 2011
General remarks:	
<p>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.</p> <p>Throughout this report a comma (point) is used as the decimal separator.</p> <p>When determining the test result, measurement uncertainty has been considered.</p>	

General product information:
The nominal dimensions of samples: 146 mm wide × 23 mm thick × 500mm length.
The photographs of the samples can be referenced in Appendix A.
The sample ID Number was S1012014.001.
The test sample was one type. All the types listed were identical in cosmetics, material, mechanical, confirmed by the applicant.

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Report Template Revision Date: 3rd Feb. 2009

CEN/TS 15534-1:2007																																
Clause	Test	Result																														
1	<p>Coefficient of friction</p> <p>The dynamic coefficient of friction was tested on dry floor surfaces in accordance with EN 13893.</p> <p>The horizontal force was recorded. The coefficient of friction was calculated by the following equation:</p> $\mu = F/M.$ <p>μ was the dynamic coefficient of friction; F was the average horizontal force (in Newton); M was the total vertical load on the sliders (in Newton).</p>	$\mu = 0.25$																														
2	<p>Falling mass impact</p> <p>The resistance to impact of WPC products was tested in accordance with CEN/TS 15534 -1.</p> <p>Ten specimens (300mm long) were tested. The span was 200mm and the drop height was 1000mm. The total mass was adjustable with relevant additional masses to the following masses: 100 g, 200 g, 300 g, 400 g, 500 g, 1000 g, 1500 g, 2000 g or $m \times 100$ g where m is an integer. Failure occurred when the impacted surface of the specimen split or cracked.</p> <p>Energy levels and codes according to the striker total mass</p> <table border="1"> <thead> <tr> <th>Striker total mass g</th> <th>Energy level J</th> <th>code</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>1</td> <td>(23,01)</td> </tr> <tr> <td>200</td> <td>2</td> <td>(23,02)</td> </tr> <tr> <td>300</td> <td>3</td> <td>(23,03)</td> </tr> <tr> <td>400</td> <td>4</td> <td>(23,04)</td> </tr> <tr> <td>500</td> <td>5</td> <td>(23,05)</td> </tr> <tr> <td>1000</td> <td>10</td> <td>(23,10)</td> </tr> <tr> <td>1500</td> <td>15</td> <td>(23,15)</td> </tr> <tr> <td>2000</td> <td>20</td> <td>(23,20)</td> </tr> <tr> <td>$m \times 500$</td> <td>$5 \times m$</td> <td>(23,5 \times m)</td> </tr> </tbody> </table>	Striker total mass g	Energy level J	code	100	1	(23,01)	200	2	(23,02)	300	3	(23,03)	400	4	(23,04)	500	5	(23,05)	1000	10	(23,10)	1500	15	(23,15)	2000	20	(23,20)	$m \times 500$	$5 \times m$	(23,5 \times m)	<p>Energy Level: 15 J</p> <p>Code: (23,15)</p>
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CEN/TS 15534-1:2007		
Clause	Test	Result
3	<p>Flexural properties (Non-load bearing products)</p> <p>The flexural properties of material were tested in accordance with EN 310.</p> <p>The specimens were full size product. The specimens were deflected at a constant rate 10mm/min at the midspan until the specimen fractures. The maximum load was recorded. Then the flexural strength and modulus of elasticity were calculated.</p>	<p>Flexural strength: 22.3N/mm²</p> <p>Modulus of elasticity: 3021 N/mm²</p>
4	<p>Creep factor</p> <p>The creep factor in bending was determined in according with ENV 1156. The specimens were applied a constant moment over the central region in a constant climate. The applied stress was 25% of the flexural strength determined according to EN 310. The duration time was 300 hours.</p>	<p>$k_{c,300h,SC1,25\%}$: 0.92</p> <p>(300 hours creep factor)</p>
5	<p>Xenon artificial weathering</p> <p>The resistance to artificial weathering was tested in accordance with EN ISO 4892-2, Method A.</p> <p>The specimens were exposed to filtered xenon-arc light under controlled environmental conditions. The irradiance was 0.51W/m²nm at 300~400nm. The weathering cycle consisted of a humidification period of 18 minutes and a drying period of 102 minutes at a black-standard temperature of 63°C.</p> <p>Test cycles were repeated continuously until the total time 1000 hours (required by the applicant) was finished. Then the color change was compared between the non-exposed and exposed specimens.</p>	<p>After 1000 hours exposure,</p> <p>Gray scale 2-3,</p> <p>The surface showed visible color change. There was no other surface damage.</p>

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CEN/TS 15534-1:2007		
Clause	Test	Result
6	<p>Swelling and water absorption</p> <p>The swelling in thickness of panels and water absorption were tested in accordance with EN 317.</p> <p>The thickness of the specimens was measured after a total immersion into water at a temperature of (20±2) °C during 28 days. The water absorption was calculated by differential weighing of the test specimens.</p>	<p>G_t (Swelling in thickness): 0.5%</p> <p>Water absorption: 2.9 %</p>
7	<p>Moisture resistance (Under cyclic conditions)</p> <p>The specimens were exposed to three cycles, each comprising immersion in water, freezing, and drying at elevated temperature according to EN 321. The swelling in thickness of the specimens after the cyclic test were determined according to EN 317. The residual bending strength was determined according to EN 310.</p>	<p>G_t (Swelling in thickness): 0.3 %</p> <p>Flexural strength: 19.7 N/mm², decrease 11.7%</p> <p>Modulus of elasticity: 2672 N/mm², decrease 11.6 %</p>
8	<p>Heat reversion</p> <p>The heat reversion at 100 °C of the profile is measured in accordance with EN 479.</p> <p>It consisted of placing a test piece of a specified length in an oven at 100 °C for 1 h. A marked length of this test piece was measured under identical condition, before and after heating in the oven. The heat reversion was calculated as the percentage change of the final length relative to the initial length per pair of marks.</p>	<p>R (Heat Reversion): 0.11%</p>

*****End of Page*****

Appendix A

Product photos



Fig.1 Front View



Fig.2 Back View

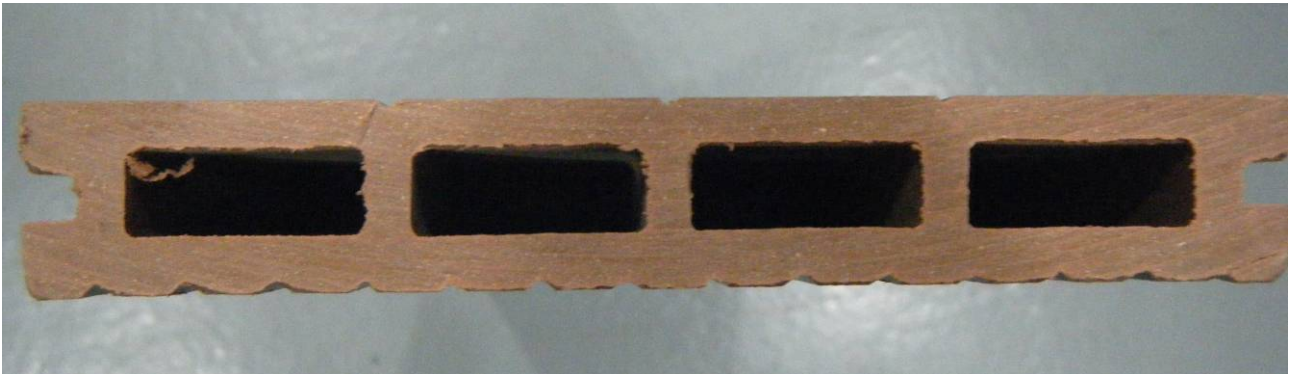


Fig.3 Cross Section

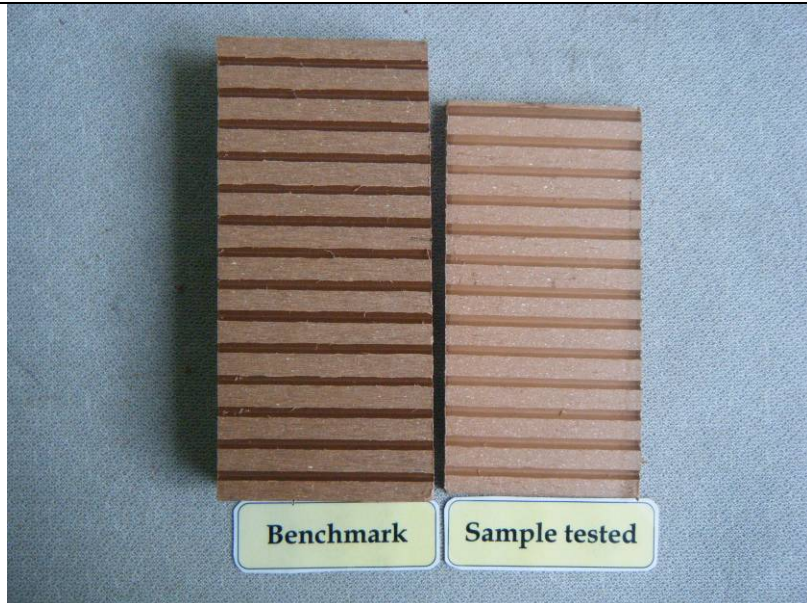


Fig.4 After UV test

*****End of Report*****