



## TEST REPORT

No. : GZIN160701294-01CCM

Date : Aug. 05, 2016

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CLIENT NAME: SHANDONG LVSEN WOOD-PLASTIC COMPOSITE CO.,LTD.  
ADDRESS: GAOQIAO INDUSTRIAL PARK, YISHUI COUNTY, SHANDONG PROVINCE, CHINA.

The following sample(s) was/ were submitted and identified on behalf of the client as:

Sample Name : Wood-plastic composite  
SGS Ref. No. : GZIN160701294-01CCM  
Test Performed : Selected test(s) as requested by applicant  
Date of Receipt : Jul. 21, 2016  
Test Period : Jul. 21, 2016 to Aug. 04, 2016

Test result(s) : Please refer to the following page(s)

\*\*\*\*\*To be continued\*\*\*\*\*

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co.,Ltd  
Guangzhou Branch

Jay Xue  
Authorized signatory

\*\* Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. The report should not be reproduced except in full without written approval from the Company



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Guangzhou Branch

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## Summary of test results

No.	Test items	Test methods	Test results		Conclusion
1	Flexural properties	EN 15534-1:2014 Section 7.3.2 and Annex A	Bending strength	20.0MPa	-
			Modulus of elasticity in bending	4413MPa	
2	Falling mass impact resistance	EN 15534-1:2014 Section 7.1.2 and client's requirement	No crack; Max depth of residual indentation: 0.5mm		-
3	Swelling and water absorption	EN 15534-1:2014 Section 8.3.1	See test item 4		-
4	Resistance to indentation	EN 15534-1:2014 Section 7.5	Brinell hardness	38.9MPa	-
			Rate of elastic recovery	44.2 %	
5	Mean Coefficient of Linear Thermal Expansion	EN 15534-1:2014 Section 9.2 & ISO 11359-1:2014 & ISO 11359-2:1999 Method A	$126 \times 10^{-6} K^{-1}$		-



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## Test Information:

Sample description: See photo

**Test item 1:** Flexural properties

**Test method:** EN 15534-1:2014 Section 7.3.2 and Annex A

### Test condition:

Specimen: 600×151×24.2mm

Testing speed: 18mm/min

Span: 490mm

### Test result:

Bending strength: 20.0MPa

Modulus of elasticity in bending: 4413MPa

**Test item 2:** Falling mass impact resistance

**Test method:** EN 15534-1:2014 Section 7.1.2 and client's requirement

### Test condition:

Specimen: 300×150×24.5mm

Weight of steel ball: 1000g

Diameter of steel ball: 50mm

Falling height: 700mm

Span: 200mm

### Test result:

No crack; Max depth of residual indentation: 0.5mm

**Test item 3:** Swelling and water absorption

**Test method:** EN 15534-1:2014 Section 8.3.1

### Test condition:

Specimen: 150×100×24.5mm

Immersion condition: Distilled water, 20±1℃, 24h



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## Test result:

Test item	Thickness	Width	Length
Mean swelling	0.35%	0.044%	0.031%
Max individual swelling	0.47%	0.060%	0.047%
Mean water absorption	0.70%		
Max individual water absorption	0.72%		

## Test item 4: Resistance to indentation

Test method: EN 15534-1:2014 Section 7.5

### Test condition:

Specimen: 50×50×24.5mm

Indenter diameter: 10mm

Loading procedure: Apply a preload of 20 N and increase the force to 2KN within 30±10s and maintain the force for 25s. Withdraw the indenter completely and recover for 24 h

### Test result:

Brinell hardness: 38.9MPa

Rate of elastic recovery: 44.2 %

Note: All test specimens were cut from the sample.

## Test item 5: Mean Coefficient of Linear Thermal Expansion

Test method: EN 15534-1:2014 Section 9.2 & ISO 11359-1:2014 & ISO 11359-2:1999 Method A

### Test condition:

Specimen: 5.06 mm ×4.92 mm ×9.57 mm

Rate of temperature: 5 °C/min

Load: 4 kPa

Flow rate(N<sub>2</sub>): 50 ml/min

Test temperature: -20 °C~80 °C

Test mode: Compression

Test direction: Thickness



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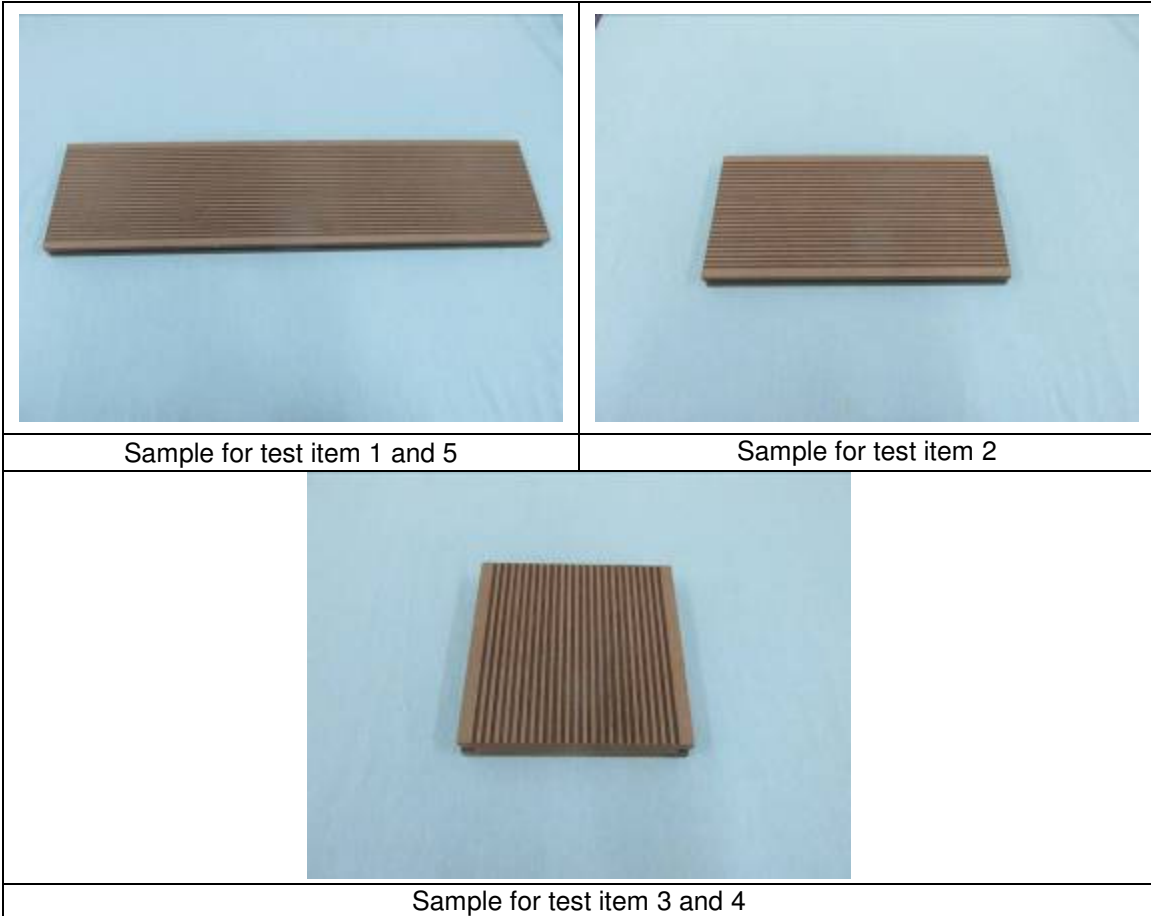
Lab Environmental Condition: 23 ± 2 °C, 50 ± 5 % RH

**Test result:**

126×10<sup>-6</sup> K<sup>-1</sup>

Note: Test specimens were cut from the sample.

**Photo:**



\*\*\*\*\*End of report\*\*\*\*\*



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