

TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 1 of 13

CUSTOMER NAME:

ADDRESS:

Sample Name : WPC
Product Specification : Co-extruded round hole decking: 138mm×23mm
Co-extruded solid decking: 138mm×23mm
WPC Round hole decking: 140mm×25mm
WPC square hollow decking: 140mm×25mm
WPC Solid decking: 140mm×25mm WPC fence panel: 180mm×21mm
WPC wall panel: 148mm×21mm WPC post: 150mm×150mm
WPC handrail: 90mm×40mm

Other Information :

Logo: 

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

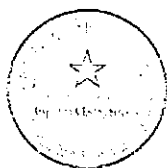
Date of Receipt : Oct 10, 2018
Testing Start Date : Oct 10, 2018
Testing End Date : Nov 27, 2018
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Services Co., Ltd. GZ Branch Testing
Center

Salon

Salon Liu

Authorized signatory



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic formal documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

18 Huan Road, Science Park, Economic & Technological Development District, Guangzhou City 510663 (86-20) 82155555 (86-20) 82075060 www.sgs.com
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 (86-20) 82155555 (86-20) 82075060 e: sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

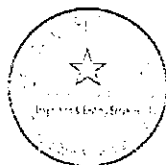
No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 2 of 13

Summary of Results:

No.	Test Item	Test Method	Result	Conclusion
1	Slipperiness	EN 15534-1-2014 Section 6.4.2 & CEN/TS 15676-2007	Mean pendulum value (Dry): 60 Mean pendulum value (Wet): 39	/
2	Deflection Temperature under Load	EN 15534-1:2014 Section 9.1 & EN ISO 75-1:2013 & EN ISO 75-2:2013 Method A	89℃	/
3	Density	EN 15534-1-2014 Section 6.2 & EN ISO 1183-1:2012 Method A	1.22g/cm ³	/
4	Moisture Content	EN 15534-1-2014 Section 6.3 & EN 322:1993	1.04%	/
5	Moisture Resistance-Boiling Test	EN 15534-1-2014 Section 8.3.3	Mean value of water absorption: 1.49% Max individual values of water absorption: 1.52%	/
6	Withdrawal Capacity	EN 15534-1-2014 Section 7.6 & EN 13446:2002	Withdrawal parameter for panel: 54.5MPa	/
7	Swelling and Water Absorption	EN 15534-1:2014 Section 8.3.1	See test item 7	/
8	Thickness, Width and Length	EN 15534-1:2014 Section 6.6.2	See test item 8	/



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic formal documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

18 Hefei Road, Science Park, Economic & Technological Development Zone, Guangzhou City 510663 (86-20) 82155555 / (86-20) 82075080 www.sgs.com
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 (86-20) 82155555 / (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

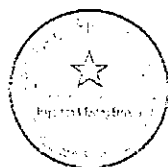
No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 3 of 13

No.	Test Item	Test Method	Result		Conclusion
9	Falling Mass Impact Resistance	EN 15534-1:2014 Section 7.1.2.1 & EN 477:1995	No crack, Max depth of residual indentation: 0.4mm		Pass
10	Flexural Properties	EN 15534-1:2014 Annex A	Flexural strength: 31.4MPa Flexural modulus: 2145Mpa		/
11	Resistance to Indentation	EN 15534-1:2014 Section 7.5	Brinell hardness: 57.7MPa Rec: 71.3%		/
12	Light Ageing Test- Xenon-arc Exposure	EN 15534-1:2014 Section 8.1.1 & EN ISO 4892-2:2013 Cycle 1 & EN 20105-A02:1994 & ISO 7724/1-1984 & ISO 7724/2-1984 & ISO 7724/3-1984	Grey scale	4-5	/
			ΔE^*_{ab}	1.1	

Note: Pass : Meet the requirements;
Fail : Does not meet the requirements;
/ : Not Apply to the judgment.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed and available on request at <http://www.rsg.com/termsandconditions.asp>, for electronic formal documents, and subject to Terms and Conditions for Electronic Documents at <http://www.rsg.com/en/Terms-Conditions/Terms-a-Documents.asp>. Attention is drawn to the limitation of liability, indemnification and jurisdiction provisions herein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of the scope of the intervention. The Company does not assume any liability for the accuracy of the information or for any loss or transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or signature, is strictly prohibited. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

191 Kailash Road, Science Park, Economic & Technical Development District, Guangzhou, China 510663 | (86-20) 82155555 | (86-20) 82075080 www.sgsgroup.com.cn
中国·广州·经济技术开发区科学城科韵路191号 邮编: 510663 | (86-20) 82155555 | (86-20) 82075080 e.sgsgroup@sgsgroup.com

Member of the SGS Group (SGS SA)

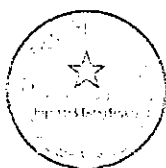
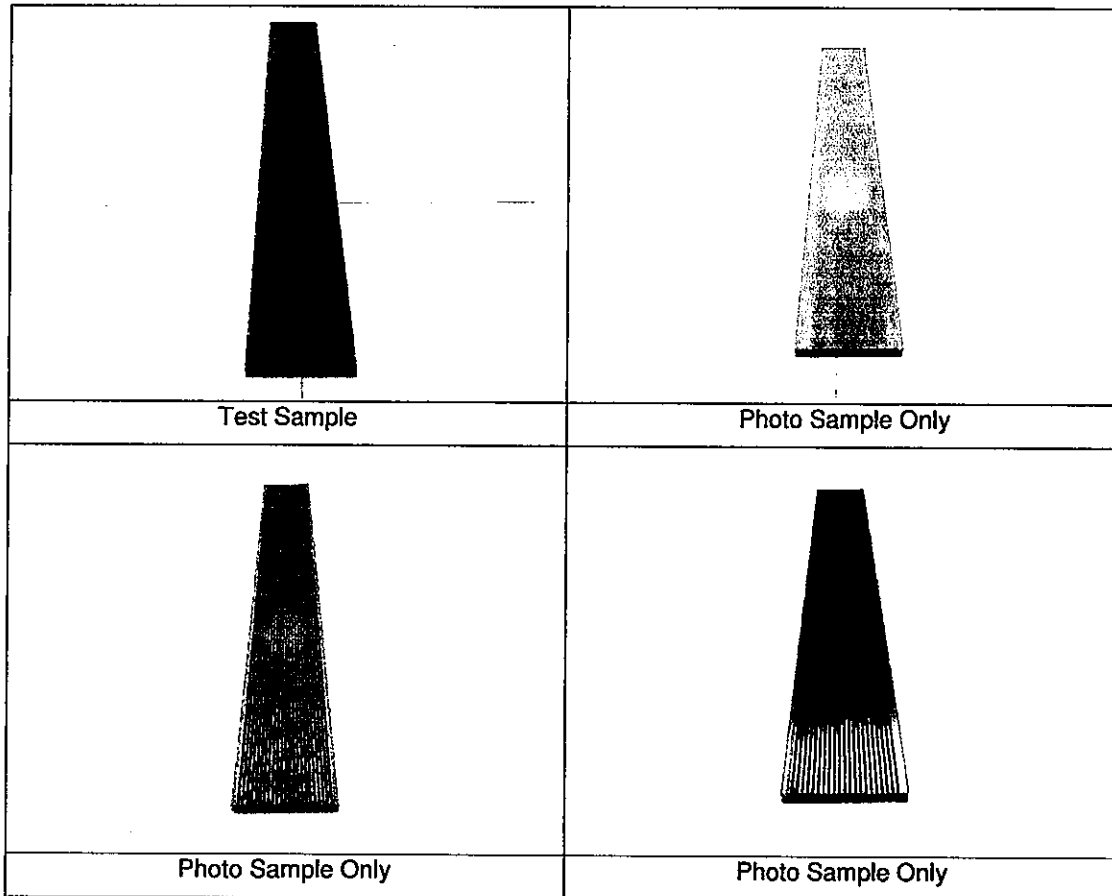
TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 4 of 13

Original Sample Photo:



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

18 Kowloon, Sunning Park, Economic & Technical Development Zone, Guangzhou City 510663 1 (86-20) 82155555 1 (86-20) 82075080 www.sgs.com
 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 1 (86-20) 82155555 1 (86-20) 82075080 e sgs.china@sgs.com

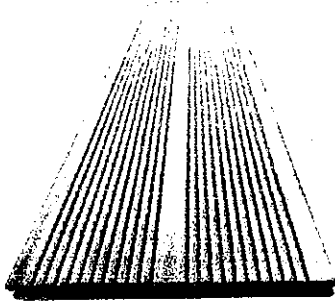
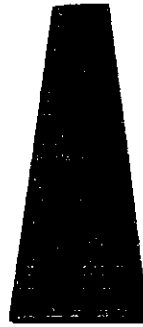


Member of the SGS Group (SGS SA)

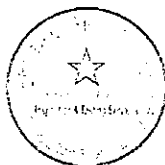
TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 5 of 13

	
Photo Sample Only	Photo Sample Only
	
Photo Sample Only	Photo Sample Only



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic formal documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report are for only the sample(s) tested and such sample(s) are retained for 30 days only.

180 Kailu Road, Sarnish Park, Economic & Technical Development District, Guangzhou City 510663 | (86-20) 82155555 | (86-20) 82075080 | www.sgs.com.cn
 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 | (86-20) 82155555 | (86-20) 82075080 | sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 6 of 13

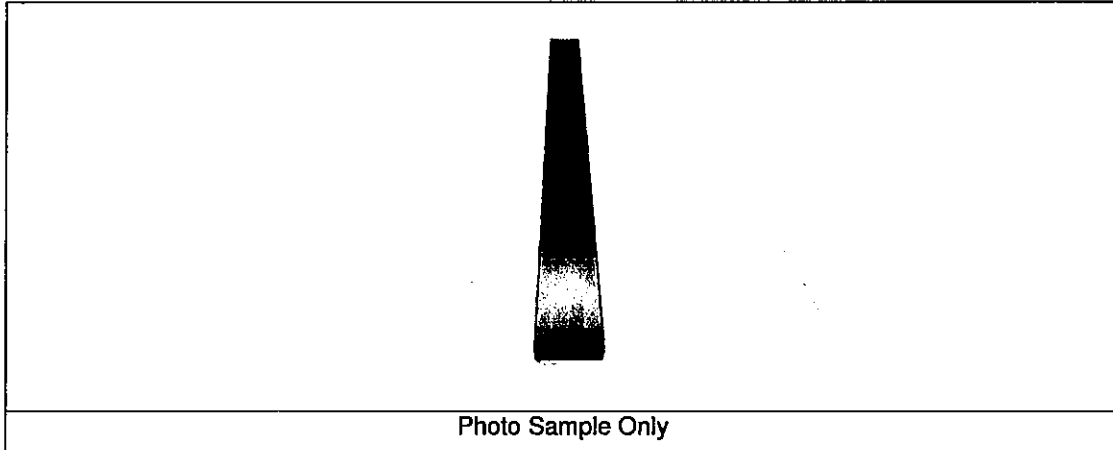


Photo Sample Only



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic formal documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

18 Kexu Road, Science Park, Electronic Technology Development District, Guangzhou City 510663 (86-20) 82155555 f (86-20) 82075080 www.sgsgroup.com.cn
中国·广州·经济技术开发区科学城科韵路198号 邮编: 510663 (86-20) 82155555 f (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 7 of 13

Test Item 1: Slipperiness

Sample Description: See Photo

Test Method: EN 15534-1:2014 Section 6.4.2 & CEN/TS 15676-2007

Test Condition:

Specimens: 300mm×136.76mm×22.75mm

Test Result:

Mean pendulum value (Dry): 60

Mean pendulum value (Wet): 39

Test Item 2: Deflection Temperature under Load

Sample Description: See photo

Test Method: EN 15534-1:2014 Section 9.1 & EN ISO 75-1:2013 & EN ISO 75-2:2013 Method A

Test Condition:

Specimen: 80mm×9.85mm×4.44mm

Heat-transfer media: Silicone oil

T₁1.8

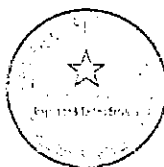
Rate of temperature:120℃/h

Span: 64mm

Lab Environmental Condition: (23±2)℃, (50±5)%RH

Test Result:

Test Item	Test Result
Deflection Temperature under Load	89℃



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/sgs/Terms-and-Conditions.aspx> and, for electronic formal documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/sgs/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

188 Kien Road, Science Park, Economic & Technical Development District, Guangzhou China 510663 1 (86-20) 82155555 1 (86-20) 82075080 www.sgs.com
中国·广州·经济技术开发区科学城科丰路188号 邮编: 510663 1 (86-20) 82155555 1 (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

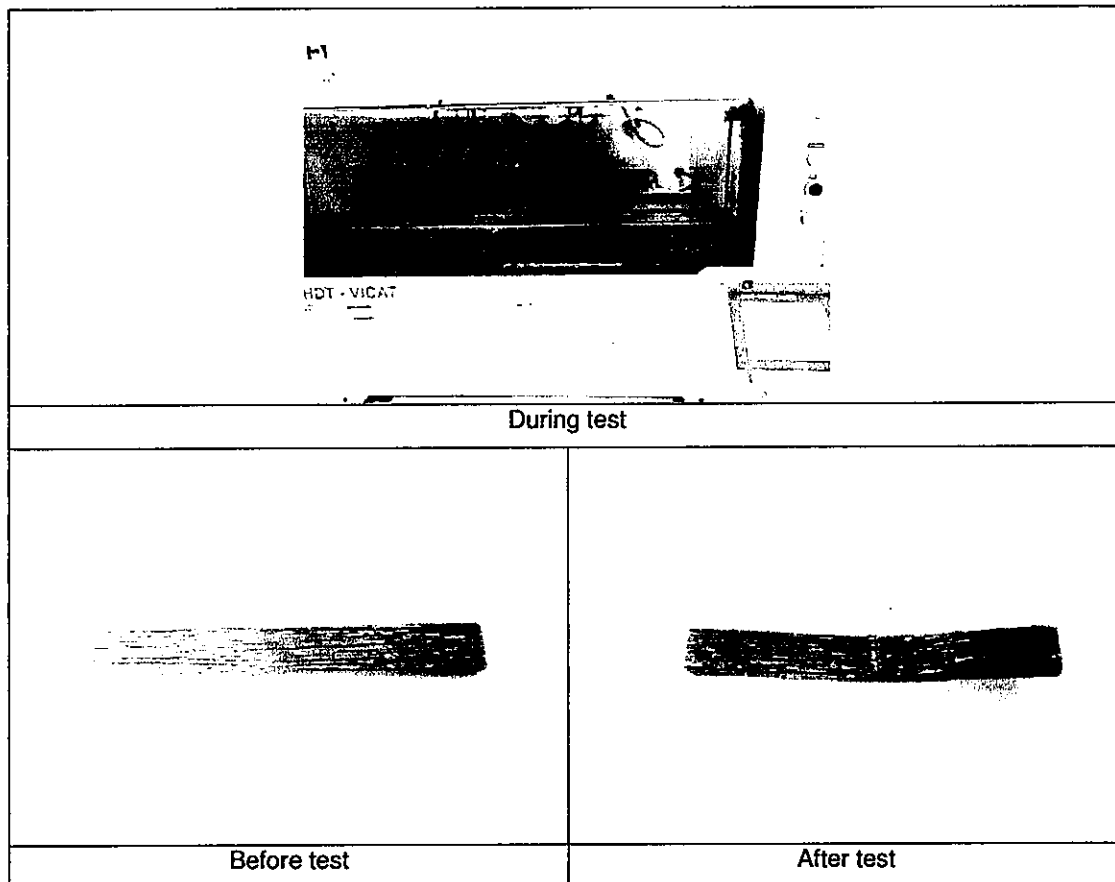
TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 8 of 13

Test Photo:



Test Item 3: Density

Sample Description: See photo

Test Method: EN 15534-1-2014 Section 6.2 & EN ISO 1183-1:2012 Method A

Test Condition:

Deionized water, $23 \pm 2^\circ\text{C}$

Lab Environmental Condition: $23 \pm 2^\circ\text{C}$, $50 \pm 5\% \text{RH}$

Test Result: 1.22g/cm^3



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/terms-and-conditions.aspx> and, for electronic formal documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/terms-and-conditions/terms-e-document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined herein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

199 Kowloon Road, Science Park, Economic & Technical Development District, Guangzhou, China 510663 | (86-20) 82155555 | (86-20) 82075000 | www.sgs.com
中国·广州·经济技术开发区科学城科西路199号 邮编: 510663 | (86-20) 82155555 | (86-20) 82075000 | e.sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 9 of 13

Test Item 4: Moisture Content

Sample Description: See photo

Test Method: EN 15534-1-2014 Section 6.3 & EN 322:1993

Test Condition:

Specimen: 50mm×50mm×22.71mm

Condition: Drying in 103±2°C to constant mass

Test result: 1.04%

Test item 5: Moisture resistance—Boiling test

Sample Description: See photo

Test method: EN 15534-1-2014 Section 8.3.3

Test condition:

Condition: Immersing in boiling water for 5h and Immersing in cold water at (20 ± 2) °C during 15 min. Remove from water and stored at a temperature of (23 ± 2) °C and a relative humidity of (50 ± 10) % RH.

Test result:

Mean value of water absorption: 1.49%

Max individual values of water absorption: 1.52%

Test Item 6: Withdrawal Capacity

Sample Description: See photo

Test Method: EN 15534-1-2014 Section 7.6 & EN 13446:2002

Test Condition:

Specimen: 50mm×50mm×22.71mm

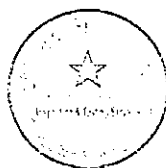
Testing speed: 1.5mm/min

Outside diameter of screw: 4.2 mm

Penetrate into depth: 22.71mm

Test Result:

Withdrawal parameter for panel: 54.5MPa



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/terms-and-conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/terms-and-conditions/terms-e-document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

中国广州·经济技术开发区科学城科珠路198号 邮编: 510663 1(86-20) 82155555 1(86-20) 82075080 www.sgs.com.cn
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 1(86-20) 82155555 1(86-20) 82075080 e.sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 10 of 13

Test Item 7: Swelling and water absorption

Sample Description: See photo

Test Method: EN 15534-1:2014 Section 8.3.1

Test Condition:

Specimen: 136.75mm×97.76mm×22.75mm

Immersion condition: Deionized water, PH: 7.0 ± 1, 20 ± 2 °C, 28 days

Test Result:

Test Item	Test Result
Swelling in Thickness	0.84%
Swelling in Length	0.05%
Swelling in Width	0.24%
Water Absorption	2.40%

Note:

1. Swelling in Thickness, %=(Thickness after immersion- Thickness before immersion) / Thickness before immersion×100
2. Water Absorption, %=(Mass after immersion- Mass before immersion)/ Mass before immersion×100

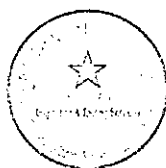
Test Item 8: Thickness, Width and Length

Sample Description: See photo

Test Method: EN 15534-1:2014 Section 6.6.2

Test result:

Test item	Length	Width	Thickness
Test result	Ave: 1222mm	Ave: 136.75mm	Ave: 22.75mm
	Max: 1222mm	Max: 136.90mm	Max: 22.85mm
	Min: 1222mm	Min: 136.60mm	Min: 22.65mm



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

181 Kowloon, Sze Kwan Park, Economic & Technological Development District, Guangzhou, China S10663 1 (86-20) 82155555 1 (86-20) 82075080 www.sgs.com
中国·广州·经济技术开发区科学城科城路188号 邮编: S10663 1 (86-20) 82155555 1 (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 11 of 13

Test Item 9: Falling Mass Impact Resistance

Sample Description: See photo

Test Method: EN 15534-1:2014 Section 7.1.2.1 & EN 477:1995

Test Condition:

Specimen: 300×136.76×22.71mm

Weight of steel ball: 1000g

Diameter of steel ball: 50mm

Falling height: 700mm

Span: 200mm

Test result: No crack, Max depth of residual indentation: 0.4mm

Test Item 10: Flexural Properties

Sample Description: See photo

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

Test Condition:

Specimen: 500mm×136.71mm×22.75mm

Testing speed: 16.9mm/min

Span: 456mm

Test result:

Flexural strength: 31.4MPa

Flexural modulus: 2145MPa

Test Item 11: Resistance to Indentation

Sample Description: See photo

Test Method: EN 15534-1:2014 Section 7.5

Test Condition:

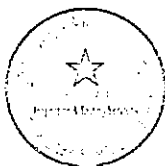
Specimen: 50mm×50mm×22.75mm

Indenter diameter: 10mm

Loading: 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 let recover for 24 h

Test result:

Brinell hardness: 57.7MPa Rec: 71.3%



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

115 Kowloon Road, Sarnoff Park, Economic & Technical Development District, Guangzhou City. 510663 1 (86-20) 82155555 1 (86-20) 82075080 www.sgs.com.cn
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 1 (86-20) 82155555 1 (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 12 of 13

Test Item 12: Light Ageing Test-Xenon-arc Exposure

Sample Description: Wood plastic composite panel

Test Method: EN 15534-1:2014 Section 8.1.1 & EN ISO 4892-2:2013 Cycle 1 & EN 20105-A02:1994
& ISO 7724/1-1984 & ISO 7724/2-1984 & ISO 7724/3-1984

Test Condition:

Exposure cycle:

EN ISO 4892-2:2013 Cycle 1

Irradiance: $(0.51 \pm 0.02) \text{ W}/(\text{m}^2 \cdot \text{nm}) @ 340 \text{ nm}$

102 min light at $(65 \pm 3)^\circ \text{C}$ BST, $(38 \pm 3)^\circ \text{C}$ CT, $(50 \pm 10)\% \text{RH}$

18 min light and water spray

Filter: Boro/Boro

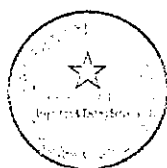
Exposure period: 300h

Test Result:

Sample	Grey scale	ΔL^*	Δa^*	Δb^*	ΔE^*_{ab}
A	4-5	-1.12	0.04	0.14	1.1

Note:

1. According to ISO 105-A02:1993/Cor.2:2005, the grey scale was determined under the D65 standard light, with scale 5 as the best and scale 1 as the worst.
2. ΔL^* , Δa^* , Δb^* , ΔE^*_{ab} was measured by sphere spectrophotometer under D65 standard light source and with 10° observer. The results include specular reflection condition, 25mm aperture.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/terms-and-conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/terms-and-conditions/terms-e-document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

12 Kien Ren, Science Park, Economic & Technical Development District, Guangzhou, China 510663 1 (86-20) 82155555 1 (86-20) 82075080 www.sgs.com.cn
中国·广州·经济技术开发区科学城科韵路198号 邮编: 510663 1 (86-20) 82155555 1 (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

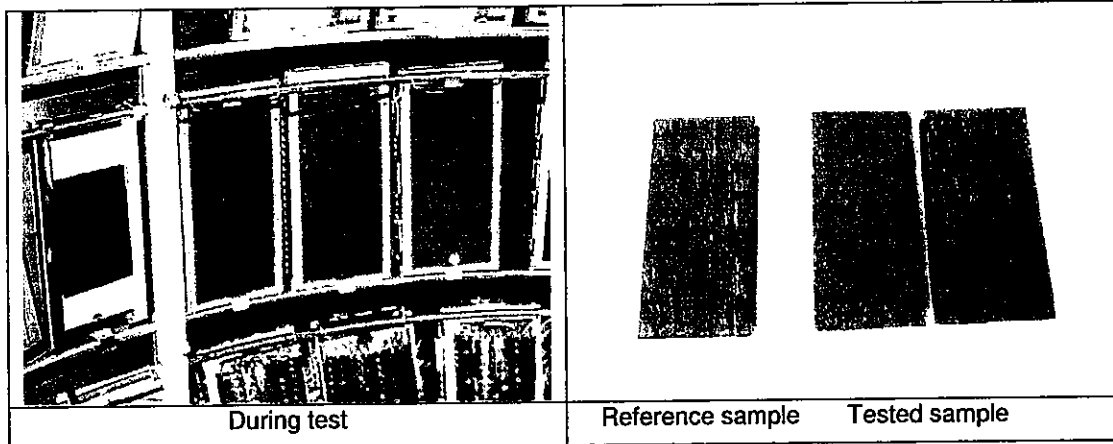
TEST REPORT

No. : GZIN1810052991CM-01

Date : Nov 27, 2018

Page: 13 of 13

Test Photo:



Note:

1. All test specimens were cut from the samples except for that of test item 8
2. This test report supersedes the test report GZIN1810052991CM date: 2018-11-22, the original test reports (paper and electronic) are void.

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic formal documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

198 Xinyi Road, Second Port, Economic & Technical Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075080 www.sgs.com.cn
中国·广州·经济技术开发区科学城科城路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)