



מרץ 2019

לכל מאן דבעי

מסמך זה מכיל 5 דפים סה"כ

הנדון : נתוני התנגדות החלקה לרצפות SPC מסוגים Stone ו- Solid Floor

מצ"ב בדיקות מעבדה המראות כי נתוני ההתנגדות להחלקה למוצרים הנ"ל,
לפי התקן הגרמני Din 51130 הינם :

R11 : במצב יבש

R12 : במצב רטוב

להלן טבלת ההמרה הרלבנטית :

Din 51130 Classification	R9	R10	R11	R12	R13
CoF	0.11-0.18	0.18-0.34	0.34-0.51	0.51-0.70	>0.70

בברכה,

ש.ב.א. שרותי בינוי ואדריכלות
סיטונאות (1990) בע"מ



TEST REPORT

No. : XMIN190200315CCM-01

Date : Mar.11, 2019

Page: 1 of 4

CUSTOMER NAME: CHANGZHOU DELAI WOOD CO., LTD
ADDRESS: 8-1 GONGQING INDUSTRY ZONE, HENGLIN TOWN, CHANGZHOU,
JIANGSU, CHINA

Sample Name : SPC FLOORING

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.

Test Required : Selected test(s) as requested by applicant
SGS Ref. No. : SHHL1902007500BM
Date of Receipt : Feb.22, 2019
Testing Start Date : Feb.22, 2019
Testing End Date : Mar.08, 2019
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)

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

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

Civi Huang Authorized Signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Xiamen Branch Testing Center, Construction Material Laboratory

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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8367 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.sgs.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 f (86-592) 5765380 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : XMIN190200315CCM-01

Date : Mar.11, 2019

Page: 2 of 4

Sample Information:

Flooring, See the photograph(s).

Test Result(s):

No.	Test item(s)	Test method(s)	Test condition	Test result(s)
1	Static Load Limit	ASTM F970-17	Specimen: 50mm×50mm×6.5mm, 3pcs Condition: 23±2℃, 50±5%RH, 24h Diameter of indenter: 28.6mm Applied load: 250 lb, 24h Recovery time: 24h	Residual Indentation: 0.02mm
2	Dimensional stability (see note 2)	ASTM F2199-18	Specimen: 229mm×228mm×6.5mm, 3pcs Condition: 23±2℃, 50±5%RH, 24h →80±2℃, 360min→ 23±2℃, 50±5%RH, 24h	Length Direction: -0.02% Width Direction: -0.03%
3	Wear resistance	EN 13329:2016 Annex E	Specimens: 100mm×100mm×6.5mm, 2pcs Type of wheel: CS-0 Load: 5.4±0.2N/wheel Abrasive paper: S-42	Average abrasion cycles: 5200 revolutions Abrasion class: AC4 (See Table 1)
4	Static Coefficient	ASTM D 2047-2011	See annex A	Static coefficient of friction: Dry condition: 0.41 Wet condition: 0.56

Note:

1. All test specimens were cut from the samples, see the photographs.
2. Dimensional stability, % = (The average final length – The average initial length)/ the average initial length ×100.
3. Test item 4 was carried out by SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Table 1: Abrasion Classes

Abrasion class	AC1	AC2	AC3	AC4	AC5	AC6
Average abrasion cycles	≥500	≥1000	≥2000	≥4000	≥6000	≥8500

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



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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Xiamen Branch Testing Center Construction Material Laboratory

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.ssgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 f (86-592) 5765380 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : XMIN190200315CCM-01

Date : Mar.11, 2019

Page: 3 of 4

Annex A

Static Coefficient of Friction

Test Conducted:

Determination of Static Coefficient Measured by James Machine (ASTM D 2047-2011)

Test Property	Test procedure/requirements	Rating/ Result
Static Coefficient of Friction	<p>Dry condition:</p> <ol style="list-style-type: none"> Place the panel on the test table in firm contact with the retaining bar. Lightly dust the test panel to remove any extraneous matter. Carefully place the leather-shoe into the strut yoke and gently lower the entire assembly into contact with the test panel. Disengage the small hand wheel. Release the recording pen, making sure it is on the zero line of the chart. Move the test table forward at a uniform rate of 60 in./min(1524mm.min),± 3 in./min(± 76mm/min), until the shoe slips and the vertical column drops. The table movement should be started within 5s after the contact in step2 has been made. Record as the static coefficient of friction the point at which the horizontal curve made on the chart by the recording pen changes to a vertical line. <p>Wet condition:</p> <p>Before test, wipe the surface of the sample with water, other produces are same to the test method of the dry condition.</p> <p>Note: Obtain four readings on each panel. Rotate the panels 90° between each of the four readings so that a fresh surface is tested each time and directional effects, if any, are cancelled.</p>	<p>Static coefficient of friction:</p> <p>Dry condition: 0.41</p> <p>Wet condition: 0.56</p>

The declaration of conformity is only based on the actual value of laboratory activity, measurement uncertainty of the results not take into account.

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



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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8397 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.sgs.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 f (86-592) 5765380 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

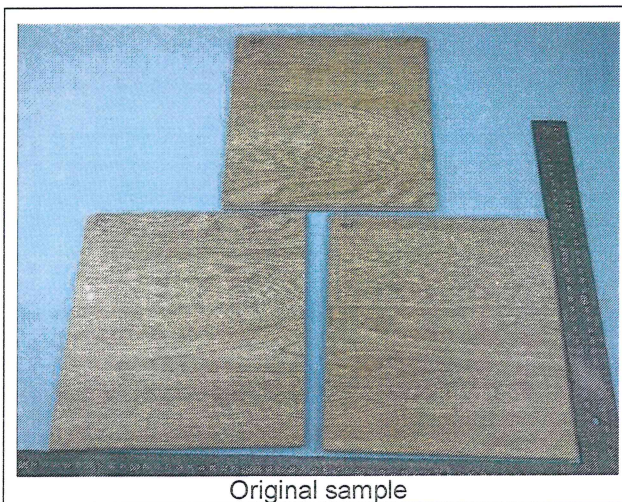
TEST REPORT

No. : XMIN190200315CCM-01

Date : Mar.11, 2019

Page: 4 of 4

Specimen photograph(s):



Original sample

SGS authenticate the photo(s) on original report only

Note: This report supersedes the Report No. XMIN190200315CCM dated: Mar.08, 2019. issued by SGS, original report will be invalid from today.

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



SGS-CSTC (Shanghai) Technical Services Co. Ltd.
Xiamen Branch Testing Center Construction Material Laboratory

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.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8367 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.sgs.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 f (86-592) 5765380 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)