THE TEST REPORT IS TO SUPERSEDE THE TEST REPORT NO.: SHHL1904015288BM, DATE: APR. 12, 2025, ORIGINAL REPORT SHALL BE INVALID.

Sample Description	: FLOOR LAMINATION FILM
SGS Ref. No.	: NBHL1904004760SD
	**********
Sample Receiving Date	: APR. 03, 2025
Testing Period	: APR. 03, 2025 TO APR. 16, 2025
Testing Location	: 3RD BUILDING, LANE 3999, XIUPU ROAD, PUDONG NEW AREA, SHANGHAI
Test Performed	: SELECTED TEST(S) AS REQUESTED BY APPLICANT
Test Requested	: SLIP RESISTANCE (DIN 51130:2014-02)
Test Result(s)	: SLIP ANGLE(α:11.3°) RATING: R10 FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S)
Conclusion	: THE SUBMITTED SAMPLE MET THE TEST REQUIREMENT.

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Yomoro Gu
Authorized Signatory

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Test Conducted:

Slip resistance (DIN 51130:2014-02)

Test Property	Test procedure/requirements	Rating/ Result
SLIP RESISTANCE	Prepare the test sample as the size of 100cm x 50cm, cleaning the surface before test. The temperature of the lab, shoes, lubricant and the decorative panels should be kept at (23 ± 5) ℃ Before test, apply a layer of lubricant on the surface of the decorative panels evenly with a brush, the density should be (200 ± 20) ml every square meter, the oute shoes should also be covered with lubricant.  **Illustration 1–bottom of the shoes for inspect** Inspector should maintain upright posture and walk forward and backward on the decorative panels while watch below, stride width should reach half the length of the shoes. Start from the horizontality; Increase the angle of inclination of the panels at a angular velocity of about one degree every second. Inspector will linger at critical areas many times to determine the reliable walk limit inclination angle he or she can reached, repeat the above procedure three times and start from the horizontality every time Before the second and the third time, reapply the lubricant on the surface as above with the brush **1.Calibration of the test person** 1. Each inspectors should walk on the every standard flooring for three times, then calculate the average angle respectively : ① α_{KST-Ij} ② $\alpha_{KST-IIj}$ ③ $\alpha_{KST-IIIj}$	Pass α:11.3° Rating: R10

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Test Property	Test procedure/requirements	Rating/ Result

2 The difference value will be calculated: $\Delta\alpha_{ST-Ij}$, $\Delta\alpha_{ST-IIj}$, $\Delta\alpha_{ST-IIIAj}$. If the difference value is out of range of CrD95 , the inspector should be eliminated See below table 1

Table 1

Standard flooring		
I	αS,I	CrD95
St-I	8.7°	3.0°
St-II	17.3°	3.0°
St-IIIA	27.3°	3.0°

2 . Test for sample

Two qualified inspector selected as above walk on the sample panels for three times respectively,, then calculate the mean value $\alpha_{0.1}$ and $\alpha_{0.2}$,, then calculate the corrected value Dj according to below table 2..

Table 2

Case	Corrected value Dj
$\alpha_{0,1} < \alpha_{K,St-I,1}$	$D_1 = \Delta\alpha_{St-I,1} \cdot \frac{1}{\sqrt{2}}$
$\alpha_{K,St-I,1} \le \alpha_{0,1} < \alpha_{K,St-II,1}$	$D_1 = \left[\Delta\alpha_{St-I,1} + (\Delta\alpha_{St-II,1} - \Delta\alpha_{St-I,1}) \cdot \frac{\alpha_{0,1} - \alpha_{K,St-I,1}}{\alpha_{K,St-II,1} - \alpha_{K,St-I,1}}\right] \cdot \frac{1}{\sqrt{2}}$
$\alpha_{K,St-II,1} \le \alpha_{0,1} < \alpha_{K,St-IIIA,1}$	$D_1 = \left[\Delta\alpha_{St-II,1} + (\Delta\alpha_{St-IIIA,1} - \Delta\alpha_{St-II,1}) \cdot \frac{\alpha_{0,1} - \alpha_{K,St-II,1}}{\alpha_{K,St-IIIA,1} - \alpha_{K,St-II,1}}\right] \cdot \frac{1}{\sqrt{2}}$
$\alpha_{K,St-IIIA,1} \le \alpha_{0,1}$	$D_1 = \Delta\alpha_{St-IIIA,1} \cdot \frac{1}{\sqrt{2}}$

The result for inspector j : αj=α0,j+Dj

The final result for the two inspectors: α= (α1+α2) /2,on this basis and according to table 3,give a final rating of slip resistance

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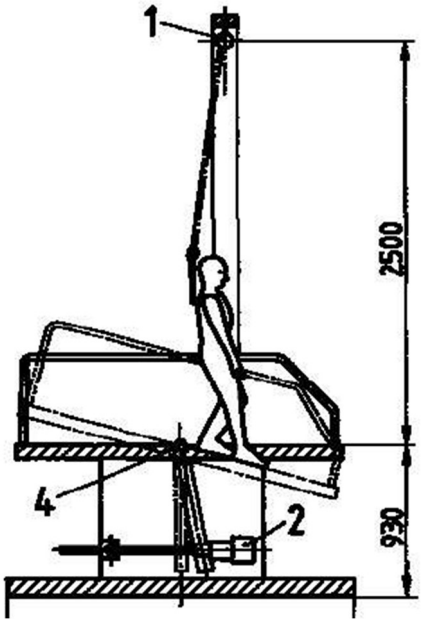
Test Property	Test procedure/requirements	Rating/ Result
	Table3 –The relation between the corrected overall angle and the rating of the slip resistance	

α	Rating
6°<α≤10°	R 9
10°<α≤19°	R 10
19°<α≤27°	R 11
27°<α≤35°	R 12
α>35°	R 13

Illustration 2 inspect device with safety mechanism (inclined plane)



Client's requirement: ≥R9

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Remark:

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2. The declaration of conformity is only based on the actual value of laboratory activity, measurement uncertainty of the results not take into account.
3. The test report was updated the photo.

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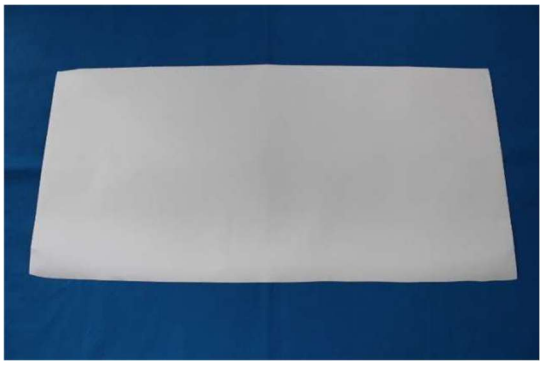
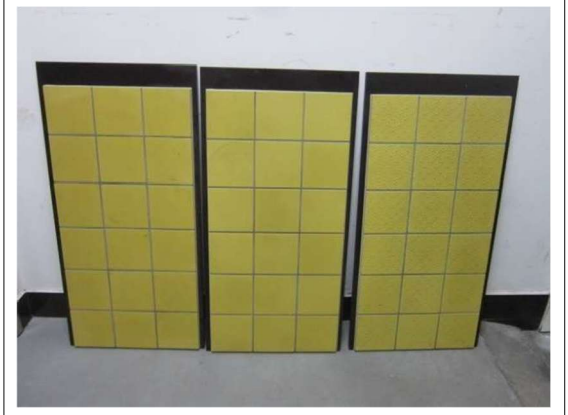
Sample Photo:

Test sample (test surface)



Standard flooring



Test shoes

SGS authenticate the photo on original report only

End of Report

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