

# **TEST REPORT**

REPORT NUMBER: 161107004SHF-BP-2

ORIGINAL ISSUE DATE: 2017-01-18

#### **EVALUATION CENTER**

Intertek Testing Services Ltd., Shanghai Plant 7, No. 6958 Daye Road, Fengxian District, Shanghai, China

#### **RENDERED TO**

**SS Floor Company Limited** 

TANGQIAO, YAOGUAN, WUJIN, CHANGZHOU, JIANGSU PROV., P.R OF CHINA

### **PRODUCT EVALUATED**

**PVC FLOOR** 

#### **EVALUATION PROPERTY**

As requested by the applicant, for details refer to attached pages(s).

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Report Template Revision Date: 2016/9/1



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Applicant: SS Floor Company Limited

Applicant Address: TANGQIAO, YAOGUAN, WUJIN, CHANGZHOU,

JIANGSU PROV., P.R OF CHINA

**Sample information** 

Product: PVC FLOOR

Trade Mark: /

9"×48"×2.0mm/0.1mm Model and/or type reference:

9"×48"×6.0mm/1.0mm

Multi-layer composite (coating layer/wear layer/print

film/solid polymer layer)

Installation way: glueing laying

Classification of installation and use: The products are intended for use as floor coverings in a

building

Manufacturer: SS Floor Company Limited Sample ID: S161107004SHF-001~008

Date of receipt of test item: 2016-10-31

Date (s) of performance of tests: 2016-11-07~2017-01-18

**Testing information** 

Standard: EN 14041:2004/AC:2006

Rating(s): Reaction to fire Class B<sub>fl</sub>-s1, Formaldehyde emission Class E1

Possible Test Case Verdits

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)

The submitted samples were tested in accordance with specified standards, and listed the result

accordingly, refer to text for detail.



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	EN 14041:2004/AC:2006 Resilient, textile and laminate floor coverings-Essential Characteristics					
Clause	Requirement - Test	Result - Remark	Verdict			
4	Requirement					
4.1	Reaction to fire The floor covering shall be tested and classified according to the requirements of EN 13501-1 and the resulting class and subclass (as appropriate to the class itself) shall be declared.	$9"\times48"\times2.0$ mm/0.1mm Reaction to fire class $B_{fl}$ $-$ s1 $9"\times48"\times6.0$ mm/1.0mm Reaction to fire class $B_{fl}$ $-$ s1 Refer to test report in Appendix B (Issue by NB No. 1023)	Р			
4.3	Formaldehyde emission When formaldehyde-containing materials have been added to the product as a part of the production process, the product shall be tested and classified into one of two classes: E1 or E2.	9"×48"×6.0mm/1.0mm Class E1 Refer to test report in Appendix B (Issue by NB No. 1023)	Р			
4.5	Slip resistance If a claim for slip resistance is made, the floor covering intended to be used in dry and non-contaminated conditions shall have a dynamic coefficient of friction of ≥ 0.30 when tested exfactory under dry conditions in accordance with EN 13893 and shall be declared as technical class DS.	Class DS 9"×48"×2.0mm/0.1mm Dynamic coefficient of friction: 0.33 9"×48"×6.0mm/1.0mm Dynamic coefficient of friction: 0.32	Р			
5	Evaluation of conformity					
5.1	General The conformity of floor coverings with the requirements of this standard (including classes) shall be demonstrated by: Clause 5.2 and 5.3	Refer to clause 5.2 and 5.3	Р			
5.2	Initial type testing or assessment Shall be performed to demonstrate conformity with this standard.	Refer to clause 4	Р			
5.3	Factory production control (FPC) The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market conform to the stated performance requirements.	The manufacture has established a Quality management system according to ISO 9001. See Appendix A	Р			



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EN 14041:2004/AC:2006  Resilient, textile and laminate floor coverings-Essential Characteristics				
Clause	Requirement - Test	Result - Remark	Verdict	
6	Marking and labeling Product which conform to the requirements of this document shall be clearly and indelibly marked by the manufacturer either on their package or on an adhesive label with following information:  a) the number and the year of this European Standard b) the manufacturer's or supplier's identification c) the product name and batch number	See Appendix C 'Copy of marking plate'	Р	



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Appendix A: ISO 9001 Certificate



Certificate No.: 053714Q Certified that

### SS FLOOR COMPANY LIMITED

TANGQIAO, YAOGUAN, WUJIN, CHANGZHOU, JIANGSU

Organization Code: 579483143

Has established a Quality Management System which is in Accordance with the Requirements of the Standard (Exclude Clause 7.3):

GB/T19001-2008/ISO9001:2008

SCOPE OF CERTIFICATION

### Production and Sale of PVC Plastic Floor

Validity of Certification: Feb. 27, 2015 to Feb. 26, 2018

Issue Date: Feb. 27, 2015

The effectiveness of this Certificate shall be validated by periodic surveillance audit of EWC for maintenance. This Certificate will not be in force unless qualified identification is stuck thereunder by EWC within appropriate time limit

> Feb. 2016 To Stuck Jan. 2017

Feb. 2017 To Stuck Feb. 26, 2018

Conditions on effectiveness of certificate see http://www.ewqcc.org The information about this certificate can be found on the official website of Certification and Accreditation Administration of People's Republic of China (www.cnca.gov.cn)





Ever Win Quality Certification Center, No.4, Chegongzhuang St, Xicheng District, Beijing



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**Appendix B: NB Report** 

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### INSTITUTE FOR TESTING AND CERTIFICATION

třída Tomáše Bati 299, Louky, 763 02 Zlín. Czech Republic

### **TEST REPORT**

Reference No. 75 35 01397/ 2016

Applicant:

SS Floor Company Limited

TANGQIAO, YAOGUAN, WUJIN, CHANGZHOU,

JIANGSU PROV., P.R. OF CHINA

Product:

PVC Floor - heterogeneous PVC floor covering

tiles, types: 2.0 mm, 6.0 mm

Manufacturer: SS Floor Company Limited

TANGQIAO, YAOGUAN, WUJIN, CHANGZHOU,

JIANGSU PROV., P.R. OF CHINA

Elaborated by: Milan Kovář

Issued on:

21st December 2016

NOTIFIED BOOF TO STAND OF THE STRING AND CLEAR

RNDr. Radomír Čevelík Representative of Notified Body No. 1023



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### INSTITUTE FOR TESTING AND CERTIFICATION

Notified Body 1023 763 02 Zlín, Czech Republic

Notified Body No. 1023 \* State Authorized Body No. 224 \* Product and Management Systems Certification Bodies \* Accredited Laboratory

Reference No. 75 35 01397

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#### 1. Introduction

This report was elaborated on the basis of the application *No.* 753501397, registered on 10/11/2016 and tests results carried out by the notified testing laboratory in accordance with the procedure mentioned in the article 1.4 of the Annex V to the Regulation (EU) No. 305/2011 of the European Parliament and of the Council of 9 March 2011, as amended, laying down harmonised conditions for the marketing of construction products ("CPR").

# 2. Assessment and verification of constancy of performance according to Regulation (EU) No 305/2011 of the European Parliament and of the Council, as amended

Floor coverings as construction products are assessed on the basis of relevant clauses of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9th March 2011 laying down harmonised conditions for marketing of construction products and repealing Council Directive 89/106/EEC as amended (called "CPR")

#### 2.1 System of assessment and verification of constancy of performance (AVCP)

The submitted product is assessed pursuant to system of AVCP 3 of the CPR (Annex V). The type testing was carried out according to Annex ZA of the standard ČSN EN 14041 (EN 14041:2004/AC:2006).

### 2.2 Indicators specifying basic requirements for construction works

The initial type testing was carried out by the notified body (the notified test laboratory) in the following range of relevant properties according to Table ZA.4 (of the ČSN EN 14041):

- Reaction to fire
- ignitability surface exposure according to ČSN EN ISO 11925-2 (exposure time: 15s)
- burning behaviour using a radiant heat source according to ČSN EN ISO 9239-1 /test samples were glued to the standard substrate/
- classification according to ČSN EN 13501-1+A1
- Formaldehyde emission according to ČSN EN 717-1 (only type: 6.0 mm)



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#### 2.3 Product specification

PVC heterogeneous floor covering tiles. Laying way: glueing

Dimensions: 228.6 mm x 1219.2 mm

Composition: Multi-layer composite (coating layer/wear layer/print film/solid polymer layer)

Total thickness (wear layer thickness):

- Type 2.0 mm:2.0 mm (0.1 mm)
- Type 6.0 mm:6.0 mm (1.0 mm)

### 2.4 Sampling place and number of samples taken

The test samples were sent by the manufacturer. The number of the test samples sent was as follows:

- . PVC heterogeneous floor covering tiles, type: 2.0 mm in the amount of 18 pcs tiles
- PVC heterogeneous floor covering tiles, type: 6.0 mm in the amount of 18 pcs tiles and 4 pcs tiles (packed into foil)

The test samples were registered under the registration numbers 75 35 01397/1 and 75 35 01397/2 on 15/11/2016.

### Sample photo:





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#### 2.5 Place and date of testing

- Institut pro testování a certifikaci (ITC), a.s., NB 1023, accredited laboratory No. 1004 Zlín (November 2016)
- Centrum stavebního inženýrství (CSI), a.s. Prague, Fire Technical Laboratory, Accredited test laboratory No.1007.4, NB 1390 (December 2016)
- Výzkumný a vývojový ústav dřevařský, Praha, s.p., NB 1393, accredited laboratory No. 1031, Prague (November-December 2016)

#### 2.6 Test results

### 2.6.1 Ignitability results

Table 1 - Ignitability test results - type: 2.0 mm

Characteristic	Surface exposure test – lengthwise direction (characteristic for individual test specimens)	Surface exposure test – crosswise direction (characteristic for individual test specimens)
Ignition of the test specimen Yes/No	No, No, No, No, No	No, No, No, No, No
Flame reaching of a mark in distance of 150 mm Yes/No	No, No, No, No, No	No, No, No, No, No
Burning time to reach 150 mm (s)	20000	5555
Ignition of the filter paper	No, No, No, No, No	No, No, No, No, No

Table 2 - Ignitability test results - type: 6.0 mm

Characteristic	Surface exposure test – lengthwise direction (characteristic for individual test specimens)	Surface exposure test – crosswise direction (characteristic for individual test specimens)
Ignition of the test specimen Yes/No	No, No, No, No, No	No, No, No, No, No
Flame reaching of a mark in distance of 150 mm Yes/No	No, No, No, No, No	No, No, No, No, No
Burning time to reach 150 mm (s)	33337	55555
Ignition of the filter paper	No, No, No, No, No	No, No, No, No, No



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#### 2.6.2 Results of burning behaviour using a radiant heat source

Table 3 - Results of burning behaviour using a radiant heat source - type: 2.0 mm

Characteristic	Measuring unit	Crosswise direction measurement	Lengthwise direction measurement (mean value)
Maximum distance of flame spread	mm	200	216.7
Critical heat flux (CHF)	kW/m <sup>2</sup>	9.1	8.8
Distance of flame spread at 10th min.	mm	180	113.3
HF-10	kW/m <sup>2</sup>	9.5	8.8
Distance of flame spread at 20th min.	mm	(-)	(-)
HF-20	kW/m <sup>2</sup>	(-)	(-)
Distance of flame spread at 30th min.	mm	(-)	(-)
HF-30	kW/m <sup>2</sup>	(-)	(-)
Maximum light attenuation	%	35.1	47.2
Integrated smoke value	% x min	115.3	138.8

Table 4 - Results of burning behaviour using a radiant heat source - type: 6.0 mm

Characteristic	Measuring unit	Crosswise direction measurement	Lengthwise direction measurement (mean value)
Maximum distance of flame spread	mm	210	223.3
Critical heat flux (CHF)	kW/m <sup>2</sup>	8.9	8.6
Distance of flame spread at 10th min.	mm	180	216.7
HF-10	kW/m²	9.5	8.5
Distance of flame spread at 20th min.	mm	(-)	(-)
HF-20	kW/m <sup>2</sup>	(-)	(-)
Distance of flame spread at 30th min.	mm	(-)	(-)
HF-30	kW/m <sup>2</sup>	(-)	(-)
Maximum light attenuation	%	48.7	54.5
Integrated smoke value	% x min	165.3	219.2



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#### 2.6.3 Results of the reaction to fire classification

Table 5 - Reaction to fire classification

Product	Reaction to fire class	Additional class for smoke production	Final class
PVC Floor – heterogeneous PVC floor covering tiles, types: 2.0 mm, 6.0 mm	B <sub>fl</sub>	s1	B <sub>fl</sub> – s1

#### 2.6.4 Formaldehyde emission result

Table 6 - Results of the formaldehyde emission

Product	Measuring unit	Test result (class)
PVC Floor – heterogeneous PVC floor covering tiles, type: 6.0 mm	mg.m <sup>-3</sup>	0.004 (E1)

Notified Body NB 1023 has carried out the testing in accordance with the paragraph 1.4 of Annex V to the Regulation (EU) No 305/2011, as amended for the product specified in the Art. 2.3 of this Report and concluded that

all requirements of this paragraph of the above Regulation and the relevant harmonized standard have been met and this report may be issued as a basis for affixing CE marking to these products.

This Report is applicable only to products identically marked and named, such as those which were the subject to testing, provided that the products characteristics have not been changed or no significant changes in their production (materials, technology, manufacturing equipment, etc.) have been done.

### 3. List of documents used to elaborate the Test Report

- Application No. 753501397 for assessment of CE-marked construction products
- ČSN EN 14041 (91 7883): Pružné textilní a laminátové podlahové krytiny Podstatné vlastnosti (Resilient, textile and laminate floor coverings - Essential characteristics)
- Test Report of accredited laboratory, reference No. 753501397/01, elaborated by ITC a.s., accredited laboratory No. 1004, in Zlín, on 02/12/2016



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- Test Reports, reference No. 16/887/P637, No. 16/888/P638, elaborated by Centrum stavebního inženýrství a.s., Fire Technical Laboratory, Prague, on 21/12/2016
- Test Report, reference No. MVZ-02/16/436, elaborated by Výzkumný a vývojový ústav dřevařský, Praha, s.p., NB 1393, accredited laboratory No. 1031, Prague, on 05/12/2016
- Classification Report using Results of Reaction to Fire No. 75 35 01397K/2016, elaborated by ITC, a.s. Zlín, on 21/12/2016



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### **Appendix C: Copy of Marking Plate**

CE

### **SS Floor Company Limited**

16

EN 14041:2004/AC:2006

**PVC FLOOR** 

Reaction to fire Class B<sub>fl</sub>-s1

Slipperiness DS Formaldehyde E1

#### Note:

- 1. If the CE marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.
- 2. The various components of the CE marking must have substantially the same vertical dimension, which may not be less than 5 mm.
- 3. CE marking and label shall be affixed visibly, legibly and indelibly.



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### **Appendix D: Sample received photo**



9"×48"×2.0mm/0.1mm



9"×48"×6.0mm/1.0mm

Approved by:

Name: Sun Sun

Title: Approver

Name: Sally Xie

Title: Reviewer

Name: Tod Qian Title: Project Engineer

The End of Report

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