Textilní zkušební ústav, s.p.

TEXTILNÍ ZKUŠEBNÍ ÚSTAV, s.p.
(Textile Testing Institute)
Notified Body No. 1021
Cejl 480/12, Zábrdovice, 602 00 Brno, Czech Republic

issues

REPORT ON THE ASSESSMENT OF PERFORMANCE

In compliance with the Regulation (EU) No. 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products, in the valid wording (Construction Products Regulation – CPR) – Annex V, art. 1.4 (system 3 of AVCP)

No.: 1021 – CPR – 24/0830
(1021/24/234)

Product:	**SPC FLOORING** **Type: Treasure Lakes Collection** Composition: Polyvinyl chloride 30 - 35 %, Calcium Carbonate 60 - 65 %, Stabilizer 3.5 – 4.8 %, Lubricant 1 – 1.2 % Thickness: 5.0 - 7.0 mm; Mass: 3.9 - 16.9 kg/m^2
Manufacturer:	**HUZHOU LUCKY WOOD TRADING Co., Ltd.** Room 1301-2, Building A, Milan Business Building, No. 788 Baiyutan Road, Longquan Street, Wuxing District, Huzhou City, Zhejiang Province, China
Technical specification:	**EN 14041:2004/ AC:2006 Resilient, textile and laminate floor coverings – Essential characteristics** (art. 4.1 Reaction to fire, art. 4.3 Formaldehyde emission, art. 4.5 Slip resistance)
Test method:	• EN 13501-1:2018 Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests (EN ISO 11925-2, EN ISO 9239-1) • EN 717-1:2004 Wood-based panels – Determination of formaldehyde release – Part 1: Formaldehyde release by the chamber method • EN 13893:2002 Resilient, laminate and textile floor coverings – Measurement of dynamic coefficient of friction on dry floor surfaces
Classification:	**Reaction to fire** **class B_{fl} – s1** **Formaldehyde emission** **class E1** **Slip resistance** **class DS**
Terms of report application:	This report applies to the product mentioned above and can be used only for this product. The report must only be published in unshortened form. The Manufacturer can publish a part of the report only if approved by the Notified Body 1021. The report remains in force as long as the conditions remain the same. This document does not replace type approval or certificate.

Contract No. of Inspection Activity: 1021/24/52
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Validity till: 22.08.2029

RNDr. Pavel Malčík
Managing Director

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1. Information about the manufacturer and about the assessed product

1.1 Manufacturer

HUZHOU LUCKY WOOD TRADING Co., Ltd.
Room 1301-2, Building A, Milan Business Building, No. 788 Baiyutan Road, Longquan Street, Wuxing District, Huzhou City, Zhejiang Province, China

1.2 Product description (according to the manufacturer declaration)

Product Name: SPC FLOORING
Type: Treasure Lakes Collection
Composition: Polyvinyl chloride 30 - 35 %, Calcium Carbonate 60 - 65 %, Stabilizer 3.5 – 4.8 %, Lubricant 1 – 1.2 %
Thickness: 5.0 - 7.0 mm; **Mass:** 3.9 - 16.9 kg/m^2; **Color:** Black/White/Grey
Tested samples: A) 5.0 mm
B) 7.0 mm
Sampling was carried out by manufacturer. Manufacturer declares no fire retardants or a limiting organic material were used.

1.3 End use application of the product

The classification applies to the following end use application of the product:
- product for full-area covering of floor,
- declared for installation without use of adhesive,
- declared for non-combustible standard substrate represented by fibre cement board.

Testing was performed on sample without use of adhesive, with use of non-combustible standard substrate.

2. Information about the initial testing

2.1 Technical specification

Testing and the assessment of the product are performed to show conformity assessment with the harmonized standard requirements (*system 3 of assessment and verification of constancy of performance – Regulation No. 305/2011, Annex V, Art. 1.4*).

EN 14041:2004/AC Resilient, textile and laminate floor coverings – Essential characteristics (art. 4.1 Reaction to fire, art. 4.3 Formaldehyde emission, art. 4.5 Slip resistance, art. 5.2 Type testing, Annex ZA).

2.2 Testing methods

Testing of the product was performed according to test methods:

- **EN 13501-1:**
  - **EN ISO 11925-2** Reaction to fire tests – Ignitability of building products subjected to direct impingement of flame – Part 2: Single-flame source test
  - **EN ISO 9239-1** Reaction to fire tests for floorings – Part 1: Determination of the burning behaviour using a radiant heat source
- **EN 717-1, EN 13893**

2.3 Testing results

Testing and assessment of slip resistance was performed on a voluntary basis, by a request of the manufacturer.

2.3.1 Reaction to fire – results

Table No.1a - testing results - reaction to fire (art. 4.1) sample A) 5.0 mm

Testing method	Characteristic	Value identified (transverse direction)	Value identified (longitudinal direction)			Results	
						Average continual parameter (m)	Parameter of fulfilment
EN ISO 11925-2 exposure – 15 s	Flame spread: $F_S \leq 150$ mm	yes	yes	yes	yes	(-)	yes
EN ISO 9239-1	Critical heat flux CF ($kW.m^{-2}$)	9.6	9.2	9.4	9.4	**9.3**	(-)
	Smoke (% .minute)	289.2	245.5	387.3	233.5	**288.7**	

Table No.1b - testing results - reaction to fire (art. 4.1) sample B) 7.0 mm

Testing method	Characteristic	Value identified (transverse direction)	Value identified (longitudinal direction)			Results	
						Average continual parameter (m)	Parameter of fulfilment
EN ISO 9239-1	Critical heat flux CF ($kW.m^{-2}$)	9.6	9.6	-	-	-	(-)
	Smoke (% .minute)	243.8	135.7	-	-	-	

Notice: Notice: If a floor covering is produced with a range of different nominal thickness this needs to be considered when testing. The minimum and maximum thickness (one test each) is tested and complete set of tests for the worst case is carried out. The worst case determines the classification.

For tested scope – sample A) is considered as the worst case. Result is valid for whole scope.

2.3.2 Formaldehyde emission - results

Table No.2 - testing results - formaldehyde emission (art. 4.3)

Testing method	Characteristic	Requirement	Value identified	Evaluation
EN 717-1	Release of formaldehyde	class E1 … ≤ 0.124 mg/m^3 E2 … > 0.124 mg/m^3	**0.006 mg HCHO/m^3**	S (E1) -

Legend: S – satisfy

2.3.3 Slip resistance - results

Table No.3 - testing result – slip resistance (art. 4.5)

Testing method	Characteristic	Requirement	Value identified	Evaluation
EN 13893	Dynamic coefficient of friction - μ	class DS … ≥ 0.30	**0.54**	S

Legend: S – satisfy

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3. Classification of construction product and area of direct application

3.1 Reaction to fire

Classification has been performed in compliance with the following articles of EN 13501-1:

- article 12.6 (requirements - class B_{fl}), article 12.9.2 (requirements – s1) and with articles of EN 14041: article 4.1.4 (classification), Annex ZA, article ZA.4

Table No. 4 Classification of construction product

Testing method	Characteristic	Requirement	Value identified	Evaluation
EN ISO 11925-2 exposure – 15 s	Flame spread F_S	class B_{fl} $F_S \leq 150$ mm	Flame didn't spread more than 150 mm	S
EN ISO 9239-1	Critical heat flux ($kW.m^{-2}$)	class B_{fl} ≥ 8 $kW.m^{-2}$	**9.3**	S
	Smoke (% .minute)	class s1 ≤ 750 %.minute	**288.7**	S

Legend: S - satisfy

Behaviour during burning	Smoke generation	
B_{fl}	s	1

Modification of floor covering classification according to reaction to fire: B_{fl} – s1

3.1.1 Area of application

The present classification applies only for the assessed product with the above specified parameters (see art. 1 of this protocol). The classification applies for the following end use application of the product:

- underlying layer: the type testing results can be used if the density of practical underlying layer is min. 0.75 multiple of density of standard substrate (according to EN 13238, art. 5.1)
- method of laying: laying with use of adhesive or without use of adhesive.

3.2 Formaldehyde emission

The classification has been performed in compliance with the art. 4.3 of the standard EN 14041.

On the basis of testing result the product shall be declared as formaldehyde **class E1.**

3.3 Slip resistance

The classification has been performed in compliance with the art. 4.5 of the standard EN 14041. Testing and assessment has been performed by a request of the manufacturer in compliance with EN 14041, table ZA.1. The classification is applicable for floor coverings that are used in dry and

non-contaminated conditions.

On the basis of testing result the product shall be declared as technical **class DS.**

4. Regulations of usability

4.1 Limitation

The results of tests and performance assessment apply as long as the conditions remain the same. If the change occurs in the product, the raw material or supplier of the components, or the production process, which would change significantly one or more of the characteristics the tests shall be repeated for the appropriate characteristic.
This Performance assessment protocol is valid till **22.08.2029** provided the technical parameters of product are not changed.

4.2 Usability

The manufacturer can use this protocol for drawing up a Declaration of Performance according to requirements CPR and annex ZA - art. ZA.2.2.2 of the harmonized standard EN 14041. This Declaration of Performance entitles to affix CE marking on the product (according to annex ZA - art. ZA.3 of the standard EN 14041). This protocol issued by Notified Body is only a part of the complete performance assessment.

5. List of documentation for the protocol elaboration

1. Application for testing and classification of the product No. 0830/24 of 11.07.2024.
2. Technical documentation of manufacturer (product description).
3. Test protocol No. AZL 24/0830 (of 23.08.2024), issued by the accredited testing laboratory of TZÚ Brno.
4. Test report No. MVZ-A-2024-003285 (of 30.07.2024), issued by the accredited testing laboratory of VVÚD Prague.

Protocol issued by:

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