

TECHNICAL REPORT

IVC bv Nijverheidslaan 29 8580 Avelgem Belgium	SATRA reference:	FLO2002963
		2413
		1
	Report ID/Issue number:	37964/1
	Your reference:	2001796338
	Date samples received:	
	Date(s) work carried out:	26/03/2024 to 27/03/2024
	Date of report:	09/04/2024

Testing Requirements

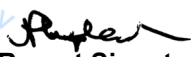
Conformity assessment of a range of resilient flooring described by the customer as
"Unilin LVT Flex Looselay 4.5mm - 0.7mm", in accordance with
EN 14041:2004/AC:2006, AVCP System 3.
Conducted by SATRA Technology Centre Limited, Approved Body Number 0321.

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Report Signed by:

Philip Weal


Report Signatory

**ASSESSMENT BY SATRA TECHNOLOGY CENTRE LIMITED,
APPROVED BODY NUMBER 0321, OF A RANGE OF RESILIENT FLOORING IN
ACCORDANCE WITH EN 14041:2004/AC:2006.**

As requested by Unilin B.V, SATRA have assessed the samples of material as detailed below with respect to the requirements of EN 14041:2004/AC:2006, in accordance with AVCP System 3 of its Annex ZA.

The formaldehyde emission; content of PCP; electrical resistance; thermal resistance and some of the slip resistance testing has been undertaken by Entwicklungs- und Prueflabor Holztechnologie GmbH (EPH), notified body no. 0766, as documented in their test report 2723614. SATRA have a subcontract agreement in place with EPH, which allows us to accept their test reports.

Additional slip testing results, where testing was conducted by Wessexlab, were provided by the customer for inclusion in this report. These have been included for information only, SATRA have not considered the capability of Wessexlab.

Note: Testing in accordance with EN ISO 11925-2, EN ISO 9239-1, and EN 13501-1 was conducted using the most recent versions of these standards, rather than the dated versions as listed in EN 14041:2004/AC:2006. However, a gap analysis conducted between these versions has shown there to be no significant difference between these and the dated versions listed and as such are considered as being equivalent.

SAMPLE SUBMITTED

Sample reference:	"Unilin LVT Flex Looselay 4.5 mm – 0.7 mm".
Description:	"LVT Floorcoverings to EN ISO 10582"
Colour:	Various
Intended application:	Internal floor covering.
Date samples received:	28 March and 30 June 2022; and 15 December 2023
UKCA application received:	26 March 2024

REQUIREMENTS & RESULTS

Clause 4 Requirements

Clause 4.1 Reaction to fire		
Clause	Requirement	Result
4.1.1 Specimen preparation and conditioning	Specimens prepared as defined in the appropriate fire test standard, in the case of this product, as required by EN ISO 11925-2:2020, EN ISO 9239-1:2010 and EN 13501-1:2018.	SATRA Reports: FLO8972P0Z0 1-3 FLO8972P0Z0 4-6
	Specimens shall be tested on one of the two standard substrates specified for floorings in EN 13238:2010, according to the intended end use.	All products tested over the standard combustible substrate.
	The composition of the product including the presence of any fire-retardant additive (if applicable) shall be declared by the manufacturer prior to type testing.	Full description of the product as provided by the customer, included in Annex 1.0
4.1.2 Application rules	If specimens are tested using an adhesive, the test result is valid for the tested floor covering with that adhesive, or the generic adhesive type, in end use conditions. If the specimens are tested without using an adhesive, the test result is valid for the tested floor covering with and without using adhesives in end use conditions.	FLO8972P0Z0 4-6 Products tested without using an adhesive. FLO8972P0Z0 1-3 Products tested without using an adhesive, in combination with "Xtrafloor™ Flexpro Underlay"
4.1.3 Durability aspects	Where required, textile floor covering specimens to be tested shall be subjected to the laboratory spray extraction cleaning procedure according to ISO 11379 with the modifications defined in EN 14041:2004/AC:2006.	Not applicable

Clause 4 Requirements Continued

Clause 4.1 Reaction to fire – Continued.		
Clause	Requirement	Result
4.1.4 Classification	If a claim for reaction to fire performance is made, the floor covering (except where no claim is made, or the product and end use are classified without further testing in accordance with Table 1,2 and 3 of EN 14041:2004/AC:2006), shall be tested and classified according to the requirements of EN 13501-1:2002 and the resulting class and subclass (as appropriate to the class itself) shall be declared.	SATRA Reports: FLO8972P0Z0 4-6 Classification: B_{fl}-s1 (With/without adhesive, over end use substrates of wood and of class A1 and A2-s1,d0) FLO8972P0Z0 1-3 Classification: B_{fl}-s1 (With/without adhesive, in combination with "Xtrafloor™ Flexpro Underlay" over end use substrates of wood and of class A1 and A2-s1,d0)
	The classification assigned to the product in this report is appropriate to a declaration of performance by the manufacturer within the context of System 3 of assessment and verification of constancy of performance and UKCA marking under the Construction Products Regulation. The manufacturer has made a declaration, which is held on file. This confirms that the product's design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence, the manufacturer has concluded that system 3 attestation is appropriate. The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.	

Clause 4 Requirements Continued

Clause	Requirement	Result
Clause 4.2 Content of pentachlorophenol (PCP)	Resilient, textile and laminate floor coverings shall not contain PCP or a derivative thereof as a component in the production process of the product or of its raw materials. In cases where verification is required, if the content is less than 5ppm in the parts of the product affected by treatment, this requirement shall be considered to be met. For laminate floor coverings the method CEN/TR 14823, for textile floor coverings the method CEN/TS 14494 shall be used. For resilient floor coverings verification is not required.	Verification is not required for resilient floor coverings. EPH Report: 2723614 (CEN/TR 14823) PCP < 5 ppm.
Clause 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, as specified in Table 4 and Table 5.	EPH Report: 2723614 (EN 717-1) Classification: E1
Clause 4.4 Water-tightness	Where required, resilient floor coverings shall meet the requirements of EN 13553	No performance declared – NPD.
Clause 4.5 Slip resistance		
Clause 4.5.1 Classification	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, μ , of ≥ 0.30 when tested ex-factory under dry conditions in accordance with EN 13893 and shall be declared as technical class DS. Although such floors may be subjected to occasional spillage and wet cleaning, the manufacturer does not guarantee performance under these conditions. If no claim is made, the floor coverings for which no performance has been determined shall be declared as technical class NPD.	Emboss references: 20; 22; 24; 28; 36; 40; 46; 51; 52; 54; 55; 56; 58; 59; 61; 62; 70; 71; 80; 81; 82; 83; 84; 85; 86; 87; 88; 89 Tested by SATRA, EPH and Wessexlab under report references as listed in Annex 2.0. All meet requirements for Technical Class: DS
Clause 4.5.2 Post-installation care	The floor covering shall be treated, cleaned, and maintained in accordance with the manufacturer's instructions	Manufacturer's instructions not supplied – not assessed

Clause 4 Requirements Continued

Clause 4.6 Electrical behaviour (static electricity)		
Clause	Requirement	Result
Clause 4.6.1 Applicability	For those floor coverings for which the manufacturer makes a claim for antistatic performance or electrical resistance.	See below.
Clause 4.6.2 Requirements		
Clause 4.6.2.1 Antistatic floor coverings	The body voltage (B.V), measured in accordance with EN 1815 for resilient and laminate floor coverings, or ISO 6356 for textile floor coverings, shall not exceed 2.0 kV, when tested at $(23 \pm 1)^\circ\text{C}$ and $(25 \pm 2)\%$ relative humidity, after conditioning the test specimens in the same atmosphere for seven days.	EPH Report: 2723614 B.V (EN 1815): 0.7 kV Antistatic floor covering
Clause 4.6.2.2 Electrical resistance	Static dissipative floor coverings: The vertical resistance, measured in accordance with EN 1081 for resilient and laminate floor coverings or ISO 10965 for textile floor coverings, shall not exceed $10^9 \Omega$. Conductive floor coverings: The vertical resistance, measured in accordance with EN 1081 for resilient and laminate floor coverings or ISO 10965 for textile floor coverings shall not exceed $10^6 \Omega$.	No claim made – Not applicable.
Clause 4.6.3 Durability aspects	For textile anti-static floor coverings, a washing and cleaning procedure similar to that used in practice is required where applicable to verify the durability of surface antistatic treatments.	Not applicable
Clause 4.7 Thermal conductivity		
Clause 4.7 Thermal conductivity	When floor coverings are to be installed over an under-floor heating system the design thermal conductivity values given in EN 12524 shall be assumed for design calculation purposes. Alternatively, the thermal resistance measured in accordance with EN 12667 may be used.	EPH Report: 2723614 Thermal resistance: $R_{23/50}^{23}: 0.01 (\text{m}^2\text{K})/\text{W}$

Clause 5 Evaluation of conformity

Clause	Requirement	Result
Clause 5.1 General	The conformity of floor coverings with the requirements of this standard (including classes) shall be demonstrated by: - Initial type testing - Factory production control by the manufacturer, including product assessment. For the purposes of testing, floor coverings may be grouped into families, where it is considered that the results for a given characteristic from any one product within the family are valid for all other floor coverings within that family.	
Clause 5.2 Type testing		
Clause 5.2.1 Initial type testing	Initial type testing shall be performed to show conformity with this standard. Tests previously performed in accordance with the provisions of this standard (same product, same characteristics), test method, sampling procedure, system of attestation of conformity, etc.) may be taken into account. In addition, initial type testing shall be performed at the beginning of the production of a new product type (unless a member of the same family) or at the beginning of a new method of production (where this may affect the stated properties). Whenever a 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 type tests shall be repeated for the appropriate characteristics.	Initial type testing carried out by SATRA; EPH and Wessexlab. See Clause 4 for individual report references.
Clause 5.2.2 Sampling, testing and compliance criteria	The sample taken for testing shall be representative of the available material. Compliance criteria are specified in Clause 4.	Samples supplied by customer to EPH; SATRA and Wessexlab

Clause 5 Evaluation of conformity

Clause	Requirement	Result
Clause 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 FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product. Elements needed for the methods of FPC are given in Annex D	FPC undertaken by manufacturer – not assessed by SATRA.

Clause 6 Marking and labelling

Clause	Requirement	Result
Clause 6 Marking and labeling	Products 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 the following information: - The number and the year of this European standard i.e. EN 14041:2004/AC:2006; - The manufacturer's or supplier's identification; - The product name and batch number (possibly in code form).	Not supplied to SATRA – Not assessed. Labeling should include the minimum information stated in Article 9 of Regulation (EU) No. 305/2011 as amended by the UK legislation and the relevant parts of EN 14041:2004/AC:2006 Annex ZA.3 Except UKCA marking is used in place of CE marking, and the identification of the UK Conformity Assessment Body used in place of the Notified Body.

Product description

The description of the specimens given below has been prepared from information provided by the sponsor of the test. All values quoted are nominal, unless tolerances are given.

General description of flooring system			LVT Floorcovering according to ISO 10582
Product reference of flooring system			Unilin LVT Flex Looselay, Moduleo Intoo
Colour reference			Note 1
Name of Manufacturer			Unilin BV Division Flooring
Overall weight per unit area			Note 2
Overall Thickness			4.5 mm
Product Configuration			
Floor covering	Layer 1 (Lacquer)	Product Reference	Note 1
		Generic Type	Note 2
		Name of Manufacturer	Unilin BV Division Flooring
		% Composition	Note 3
		Weight per unit area	Note 2
		Thickness	Note 2
		Trade name of flame retardant	Note 1
		Generic form of flame retardant	Note 1
		Amount of flame retardant	Note 1
	Layer 2 (Wear layer)	Product Reference	Note 2
		Generic Type	Note 2
		Name of Manufacturer	Unilin BV Division Flooring
		% Composition	Note 2
		Weight per unit area	Note 2
		Thickness	Note 2
		Flame Retardant details	Note 1
		Generic form of flame retardant	Note 1
		Amount of flame retardant	Note 1
	Layer 3 (Printed film)	Product Reference	Note 2
		Generic Type	Note 2
		Name of Manufacturer	Unilin BV Division Flooring
		Thickness	Note 2
		Weight per unit area	Note 2
		Flame Retardant details	Note 1
Generic form of flame retardant		Note 1	
Amount of flame retardant	Note 1		

Product description continued.

Floor covering	Layer 4	Product Reference	Note 2
		Generic Type	Note 2
		Name of Manufacturer	Note 3
		Thickness	Note 2
		Weight per unit area	Note 2
		Flame Retardant details	Note 1
		Generic form of flame retardant	Note 1
		Amount of flame retardant	Note 1
	Layer 5	Product Reference	Note 2
		Generic Type	Note 2
		Name of Manufacturer	Unilin BV Division Flooring
		Thickness	Note 2
		Weight per unit area	Note 2
		Flame Retardant details	Note 1
		Generic form of flame retardant	Note 1
Amount of flame retardant		Note 1	
Brief Description of the manufacturing process		Note 2	

Note 1: The sponsor of the test has failed to provide the information

Note 2: The sponsor has provided the required information but at the request of the sponsor it has been omitted from the final report.

Note 3: The sponsor was unwilling to provide the required information

Annex 2.0 – Slip testing reports.

The below is a list of the embosses used across this product group, and the associated test report for EN 13893:2002 testing. Where a test report is listed, this emboss has been deemed to meet the minimum requirements for Technical Class DS, in accordance with EN 14041:2004/AC:2006. Any emboss which may be used outside of this list, is not covered by this report, and as such would fall under the Technical Class NPD.

Emboss reference	SATRA/EPH/Wessex report number
20	FLO0333735 2227 6
22	FLO0333735 2227 7
24	FLO0333735 2227 9
28	FLO0333735 2227 11
36	FLO0333735 2227 12
40	FLO0333735 2227 25
46	FLO0333735 2227 26
51	FLO0333735 2227 13
52	FLO0333735 2227 23
54	FLO0333735 2227 14
55	FLO0333735 2227 15
56	FLO0333735 2227 16
58	FLO0333735 2227 17
59	FLO0333735 2227 18
61	FLO0333735 2227 19
62	FLO0333735 2227 20
70	FLO0333735 2227 21
71	FLO0333735 2227 27
80	FLO0333735 2227 22
81	EPH: FLO-23-04-01 (2723133)
82	Wessexlab: 18493
83	Wessexlab: 18495
84	Wessexlab: 18497
85	Wessexlab: 18499
86	EPH: FLO-23-04-01 (2723133)
87	EPH: FLO-23-04-01 (2723133)
88	EPH: FLO-23-04-01 (2723133)
89	Wessexlab: 18861

Conditions of Use

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SATRA test reports may be forwarded to other parties provided that they are not changed in any way and are not marked as confidential. Test reports must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

Liability

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.

Accreditation

Where the UKAS logo is included on the test report then tests marked ≠ fall outside the UKAS Accreditation Schedule for SATRA. Where no UKAS logo is included on the test report then none of the tests reported are covered by SATRA's UKAS Accreditation.

Tests marked ¥ are performed under SATRA's Flexible UKAS Schedule.

Uncertainty of Measurement and Decision Rules

Where values for uncertainty of measurement are included within the report then the uncertainty of the corresponding results are based on a standard uncertainty multiplied by a coverage factor $k=2$, which provides a coverage probability of approximately 95%.

When reporting results against a conformance statement (Pass/Fail or the allocation of a class or level) then uncertainty of measurement is taken into account based on a non-binary acceptance which itself is based on the guard band being equal to the expanded uncertainty.

Where the result corrected for uncertainty falls within the tolerance of the conformance statement then the risk of the conformance statement being a false accept or false reject is up to 2.5% and SATRA will in this instance quote a Pass/Fail, class, or level.

Where the result corrected for uncertainty falls outside of the tolerance of the conformance statement then the risk of the conformance statement being a false accept or false reject is up to 50%. In this instance SATRA will not provide a Pass/Fail statement or a class or level but will include information in the notes in relation to the result obtained.

Where a report contains SATRA guidelines values then uncertainty of measurement values have been taken into account when determining the guideline values and as such are not considered when determining pass/ fail criteria.
