

Customer: Ecotile LLP
Unit 15 North Luton Industrial Estate
Sedgwick Road
Luton
Bedfordshire
LU4 9DT

SATRA Ref: FLO0188472/1039/14

Report Date: 31st March 2011

Samples received: 28 September 2010

Contact: Michael Ollivere

TECHNICAL SERVICES REPORT

Subject: Assessment of a range of interlocking tiles in accordance with EN 14041:
2004 Incorporating corrigendua No. 1 and 2

Your reference:

Conditions of Issue:

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

Tests marked † fall outside the UKAS Accreditation Schedule for SATRA. All interpretations of results of such tests and the comments based upon them are outside the scope of UKAS accreditation and are based on current SATRA knowledge.

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.

Report signed by: Jacqueline Glasspool
Position: Department Head
Department: Furniture & Flooring

ASSESSMENT OF A RANGE OF INTERLOCKING TILES IN ACCORDANCE WITH EN 14041: 2004 INCORPORATING CORRIGENDA NO. 1 AND 2

As requested by Ecotile LLP, we have conducted an assessment of the samples of material as detailed below with respect to the requirements of EN 14041: 2004 Incorporating corrigenda No. 1 and 2.

SAMPLE SUBMITTED

Sample reference: Raised Disk, Smooth textured and Durbar floor tiles with open or hidden joints
See annex 1.0 for family details.

Description: PVC Homogeneous flooring

Colour: Yellow, Selfridges, Stone, White, Grey, Anthracite, Black, Blue, French Blue, Terracotta, Pink, Red, Lime Green, Lilac and Orange.

Intended application: Contract / Commercial use

Date received: 28th September 2010

REQUIREMENTS & RESULTS

Clause 4 Requirements

Clause	Requirement	Result
Clause 4.1 Reaction to fire		
4.1.1 Specimen preparation and conditioning	Specimens prepared and conditioned as required by EN ISO 11925, EN 9239:2010 and as per EN ISO 13501: 2007	SATRA Report FLO 0188056/1037/1 & FLO 0188056/1037/2
4.1.2 Application rules		
4.1.3 Durability aspects	Applicable to textile products	Not applicable
4.1.4 classification	If a claim for reaction to fire performance is made, the floor covering (except as provided below) shall be tested and classified according to the requirements for EN 13501 part 1: 2002 and the resulting class and sub class (as appropriate to the class itself) shall be declared.	SATRA Report FLO 0188056/1037/3.
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 requirements 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.	Products are manufactured from PVC verification is therefore not required – Not applicable.
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.	Customer confirmed that formaldehyde containing materials are not used in the production process – Not applicable.

Clause	Requirement	Result
Clause 4.4 Water - tightness	Where required, resilient floor coverings shall met the requirements of EN 13553	No claim made – Not applicable.
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 of ≥ 0.30 when tested ex factory under dry conditions in accordance with EN 13893 and shall be declared as technical class DS.	SATRA Report FLO 0191878/1106.
Clause 4.5.2 post installation care	The floor covering shall be treated, cleaned and maintained in accordance with the manufacturers instructions	Manufacturers instructions not supplied – not assessed
Clause 4.6 Electrical behaviour (static electricity)		
Clause 4.6.1 Applicability	For those floor coverings for which the manufacturer makes a claim for antistatic performance or electrical resistance	-
Clause 4.6.2 Requirements		
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 $10^6\Omega$	SATRA Report FLO 0188036/1037 and FLO 0191877/1106
Clause 4.6.3 Durability aspects	Applicable to textile floor coverings	Not applicable
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	Not applicable

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.	
Clause 5.2 Type testing		
Clause 5.2.1 Initial type testing	Initial type testing shall be performed to show conformity with this standard. Testes 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 mat affect the stated properties)	Initial type testing carried out by SATRA Technology Centre 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 SATRA .
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 labeling

Clause	Requirement	Result
Clause 6 Marking and labeling	<p>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:</p> <ul style="list-style-type: none"> a) The number and year of this European standard i.e EN 14041: 2004 b) The manufacturers or suppliers identification c) The product name and batch number (possibly in code form) 	Not supplied to SATRA – Not assessed.

Annex 1.0 – Product Family

General description of flooring system		Loose Lay interlocking PVC floor tiles	
Product reference of flooring system		500/6, 500/7 & 500/10	
Colour reference		Yellow, Selfridges, Stone, White, Grey, Anthracite, Black, Blue, French Blue, Terracotta, Pink, Red, Lime Green and Green.	
Name of Manufacturer		Ecotile LLP	
Overall weight per unit area (kg/m ²)		7.9 – 11.3	
Overall Thickness		6mm , 7mm and 10mm	
Surface Profile		Various	
Product Configuration			
Floor covering	Layer 1 (Silicon / Quartz Particulate)	Product Reference	Not applicable
		Generic Type	
		Name of Manufacturer	
		Application Rate	
		Application method	
		Specific gravity	
		Colour reference	
	Flame Retardant Details		
	Layer 2 (Wear Layer)	Product Reference	500/6, 500/7 & 500/10
		Generic Type	Homogenous loose lay PVC interlocking floor tiles
		Name of Manufacturer	Ecotile LLP
		% Composition	Note 2
		Weight per unit area (kg/m ²)	7.9 – 11.3
		Thickness	6 – 10mm
		Trade name of flame retardant	Not applicable
Generic form of flame retardant		Not applicable	
Amount of flame retardant	Not applicable		
Brief Description of the manufacturing process		Injection moulding.	

Note 1: The sponsor of the test has failed to provided 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

TERMS AND CONDITIONS OF BUSINESS

1. **GENERAL**
Work done or services undertaken are subject to the terms and conditions detailed below and all other conditions, warranties and representations, expressed or implied are hereby excluded.
2. **PRICES**
Prices are based on current material and production costs, exchange rates, duty and freight and are subject to change without notice.
3. **DELIVERY ESTIMATES**
Delivery estimates are made in good faith and date from receipt of a written order and full information to enable us to proceed. While SATRA or its subsidiaries (hereafter referred to as "SATRA") make every effort to fulfil them, such estimates are subject to unforeseen events and if not maintained, cannot give rise to any claim. Offers "ex stock" are subject to prior sale.
4. **CANCELLATION AND RETURNS**
Cancellation of orders for goods, services, training or consultancy is only acceptable by prior agreement of SATRA and a charge will normally be made.
5. **CLAIMS**
Claims for errors, shortages etc should be notified within 10 days of date of receipt. In the event of goods damaged in transit, packing materials should be retained for examination; otherwise no liability can be accepted.
6. **PAYMENT TERMS**
Payment terms are net 21 days from date of invoice. Failure to comply with the terms of payment may result in delayed delivery of goods and services and a review of the Customer's credit account. Should the customer become subject to an administration order, or becomes bankrupt or goes into liquidation, SATRA has a right to cancel any contract and discontinue any work. SATRA reserves the right to adjust US Dollar and Euro sales price where customer exceeds credit terms and where the exchange rate has moved more than 10% since invoicing.
7. **RETENTION OF TITLE**
All goods remain the property of SATRA until paid in full. Under no circumstances will a customer's purchase order override our Retention of Title clause. In the case of software, the ownership of the software remains with SATRA. Payment of invoices in full will entitle the customer to use the software under licence until (a) they cease to be a member of SATRA or (b) they cease trading. In both instances, the licence shall then revert to SATRA.
8. **GUARANTEE**
All goods manufactured by SATRA are guaranteed both as regards material and workmanship. Any part returned carriage paid, within twelve months from date of supply and found defective, will be repaired or replaced at SATRA's option free of charge. SATRA admits no liability for loss, damage or delay consequent on any defect in any goods supplied by SATRA.
9. **TEST REPORTS**
Results given in test reports refer only to samples submitted for analysis and tested by SATRA. 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 a test report.
10. **TEST SAMPLES**
Unless otherwise agreed in advance, test samples will be disposed of 6 weeks after the date of the final report. If required, samples can be returned at the Customer's expense.
11. **RESPONSIBILITY**
Every effort is made to ensure accuracy in description, drawings and other information in correspondence, catalogues, etc but no warranty is given in this respect and SATRA shall not be liable for any error therein. SATRA carries out all tests and/or advises only on the basis that the same are carried out, made or given without any responsibility whether for negligence or otherwise. SATRA and its servants or agents will not be liable for any damage or loss direct or indirect of whatsoever kind, whether or not the same results directly or indirectly from negligence on the part of SATRA or its servants or agents.
12. **CONFIDENTIALITY**
Unless specifically excluded in the terms of an individual contract between SATRA and its Customer, the following shall apply to all reports, advice, drawings, photographs, specifications or data:
 - i. The above shall not be disclosed to third parties or used in litigation without the consent of SATRA.
 - ii. Where SATRA has given consent to disclosure, the Customer shall draw the attention of the third party to these terms of business and the basis on which SATRA undertakes test, reporting and advising. The Customer shall indemnify SATRA for any failure to do so.
 - iii. The above items are submitted to the Customer as confidential documents. Confidentiality shall continue to apply after completion of the business, but shall cease to apply to information or knowledge which may come into the public domain.
13. **CONSTRUCTION AND ARBITRATION**
The laws of England shall govern all contracts and the parties submit to exclusive jurisdiction of the courts of England, unless otherwise agreed.

Issue Date: 1st October 2009