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Customer: Ecotile LLP SATRA Ref: FLO0188056/1037/3

Unit 15 North Luton Industrial Estate

Sedgwick Road

Luton

Bedfordshire

LU4 9DT

Report Date:

9 February 2011

Samples received:

29 November 2010

Contact: Michael Ollivere

TECHNICAL SERVICES REPORT

Subject: Testing of a product's referenced 'Smooth Textured 10mm – Open Joint',

'Smooth Textured 6mm – Hidden Joint', 'Raised Disk 10mm – Open Joint',

'Raised Disk 6mm – Open Joint' and 'Durbar 6mm – Open Joint',

to EN 13501-1:2007.

Your reference:

Conditions of Issue:

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

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

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1. Introduction

This classification report defines the classification assigned to reference's 'Smooth Textured 10mm – Open Joint', 'Smooth Textured 6mm – Hidden Joint', 'Raised Disk 10mm – Open Joint', 'Raised Disk 6mm – Open Joint' and 'Durbar 6mm – Open Joint', in accordance with the procedures given in EN 13501-1: 2007. Testing and certification has been conducted and completed by SATRA Technology Centre Ltd at the request of Ecotile LLP. All SATRA Reports are held in the relevant file associated with this report and this classification report is issued under the SATRA agreement.

2. Details of Classified Products

2.1 General

The products referenced 'Smooth Textured 10mm – Open Joint', 'Smooth Textured 6mm – Hidden Joint', 'Raised Disk 10mm – Open Joint', 'Raised Disk 6mm – Open Joint' and 'Durbar 6mm – Open Joint', are defined as being suitable for floor covering applications.

2.2 Comment

The samples submitted for testing are constructed from the same raw materials using the same injection moulding techniques. Differences between the products relate only to thickness, colour and surface profile design.

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2.3 Product Description

The products tested are fully described below and in the test reports provided in support of classification listed in clause 3.1.

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		
Overa	all weight per unit a	rea (kg/m ²)	7.9 – 11.3		
	all Thickness		6mm, 7mm and 10mm		
Produ	act Configuration	Fig. 4. St. Nov. of Section 1			
		Product Reference			
		Generic Type	THE PROPERTY AND IN		
		Name of Manufacturer	Not applicable		
	Layer 1 (Silicon	Application Rate			
	/ Quartz Particulate)	Application method			
		Specific gravity			
		Colour reference			
		Flame Retardant Details			
		Product Reference	500/6, 500/7 & 500/10		
		Generic Type	Homogenous loose lay PVC interlocking floor tiles		
	W 5000	Name of Manufacturer	Ecotile LLP		
	1 2 (11)	% Composition	Note 2		
	Layer 2 (Wear	Weight per unit area (kg/m ²⁾	7.9 – 11.3		
	Layer)	Thickness	6 – 10mm		
		Trade name of flame retardant	Not applicable		
		Generic form of flame retardant	Not applicable		
		Amount of flame retardant	Not applicable		
	V -211	Product Reference	ARCV 2/14 The let be be be because		
50	-	Generic Type			
Ė		Name of Manufacturer			
) A	I 2 (Duints 1	% Composition	Not applicable		
Floor covering	Layer 3 (Printed film)	Weight per unit area	ECDNUART ZUI		
9	111111)	Thickness			
Ē	Y 20	Flame Retardant details	FIGUREAU FERR		
		Generic form of flame retardant			
		Amount of flame retardant	THE LANGE TO SERVICE T		
		Product Reference			
		Generic Type			
	Class Charaches	Name of Manufacturer			
	Glass fibre sheet incorporated in backing layer	Thickness	Not applicable		
		Weight per unit area	the my north property		
		Flame Retardant details	THE POINT OF LED		
FIR		Generic form of flame retardant			
		Amount of flame retardant			
	Backing Material (Calendared Layer)	Product Reference			
		Generic Type	Not applicable		
		Name of Manufacturer			
		Thickness			
		Weight per unit area			
		Flame Retardant details			
		Generic form of flame retardant			
		Amount of flame retardant			

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Below are the details for the test substrate that was used with the submitted test specimens.

Test Substrate			
	Product Reference		
	Generic Type		
Adhesive	Name of Manufacturer	Not applicable	
	Density (20°C)		
	Colour		
	Generic type	"NT D4 604"	
Commission	Trade name	Fibre cement board	
Substrate	Manufacturer	Scheerders van de Kerkhove (SVK)	
	Thickness	6 ± 1mm	
HAI EVI	Density	$1800 \pm 200 \text{ kg/m}^3$	
Brief description of manu	facturing process of the floor covering	Injection moulded.	

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.

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

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3. Test reports/extended application reports & test results in support of classification

3.1 Test Reports/extended application reports

Testing Laboratory	Name of Sponsor	Test Reports / extended application reports	Test method / extended application rules & date
SATRA Technology Centre Ltd	Ecotile LLP	FLO 0188056/1037/1	EN ISO 9239-1:2010
SATRA Technology Centre Ltd	Ecotile LLP	FLO 0188056/1037/2	EN ISO 11925-2:2002

3.2 Test Results

	Parameter	No. tests	Results	
Test method & test number			Continuous parameter – mean	Compliance with Bfl-s1 parameters
EN ISO 9239-1	Critical flux (kW/m²)	3	8.50 8.30 8.50 Mean = 8.43	Compliant
EN 130 9239-1	Smoke (%.min)		388.88 369.43 351.90 Mean = 370.07	Compliant
EN ISO 11925-2 (15s exposure -	F _S (mm)	6	61	Compliant
surface)	Flaming Droplets / particles		None	Compliant

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4. Classification and field of application

4.1 Reference of application

This classification has been carried out in accordance with clause 11 of EN 13501-1: 2007

4.2 Classification

The product's referenced 'Smooth Textured 10mm – Open Joint', 'Smooth Textured 6mm – Hidden Joint', 'Raised Disk 10mm – Open Joint', 'Raised Disk 6mm – Open Joint' and 'Durbar 6mm – Open Joint' in relation to its reaction to fire behaviour is classified as:

$\mathbf{B}_{\mathbf{fl}}$

The additional classification in relation to smoke production is:

S₁

The format of the reaction to fire classification for flooring is:

Fire Behaviour		Smoke Production		
B _{fl}		S	1	

i.e $B_{fl} - s1$

Reaction to Fire classification: $B_{fl} - s1$

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4.3 Field of application

This classification is valid for the following end use applications:

- i) Flooring applications, used over and above any substrate with a density equal to or greater than 1800 Kg/m³, having a minimum thickness of 6 mm and a fire performance of A2 or better.
- ii) Installed with or without adhesive

This classification is also valid for the following product parameters:

Products: 500/6, 500/7 & 500/10Product thickness: 6.0 mm - 10.0 mmProduct weight per unit area: $7.9 \text{kg/m}^3 - 11.3 \text{kg/m}^3$ Colour: Any variation allowed

Composition: No variation from the described product

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Signed:

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TERMS AND CONDITIONS OF BUSINESS

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.

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

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