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FLO0191877/1106/

22 March 2011

9 February 2011

Versatile Flooring Co Limited Customer:

1 Devonshire Business Centre

Cranborne Industrial Estate

Potters Bar

Hertfordshire

EN63JR Samples received:

Contact: Michael Ollivere

TECHNICAL SERVICES REPORT

Subject: Testing of two samples referenced 'Anti Static Tile' and 'ESD Tile' to BS EN

1081: 1998 Resilient floor coverings - Determination of electrical resistance,

SATRA Ref:

Report Date:

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 It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.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: Mandy de Wet

Position: Flooring Technologist

Department: Flooring

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Technical Services Report



TESTING OF TWO SAMPLES REFERENCED 'ANTI STATIC TILE' AND 'ESD TILE' TO BS EN 1081: 1998 RESILIENT FLOOR COVERINGS - DETERMINATION OF ELECTRICAL RESISTANCE, METHOD A.

As requested by Ecotile LLP, we have assessed the floor covering submitted for electrical resistance, as detailed below:

SUMMARY

With regard to the sample referenced 'Anti Static Tile Smooth Textured Interlock Floor Tile' submitted for determination of electrical resistance, the sample has achieved an average vertical resistance of $0.15 \times 10^9 \Omega$, therefore satisfying the requirements set out in BS EN 14041: 2004 to be classed as a conductive floor covering – in terms of vertical resistance.

The following symbol (BS EN 1081: 1998) can therefore be applied:



BS EN 1081:1998 Electrical resistance

With regard to the sample referenced 'ESD Tile Smooth Textured Interlock Floor Tile' submitted for determination of electrical resistance, the sample has achieved an average vertical resistance of $1.8 \times 10^3 \Omega$, therefore satisfying the requirements set out in BS EN 14041: 2004 to be classed as a static dissipative floor covering – in terms of vertical resistance.

The following symbol (BS EN 1081: 1998) can therefore be applied:



Job:

BS EN 1081:1998 Electrical resistance

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Technical Services Report



SAMPLE SUBMITTED

'Anti Static Tile Smooth Textured Floor Tile' and 'ESD Tile Smooth Textured Sample references:

Floor Tile'

Appearance:





ESD Tile Smooth Textured Floor Tile

Anti Static Tile Smooth Textured Floor Tile

Intended application: Contract / Commercial use

9th February 2011 Date received: 14th February 2011 4th March 2011 Date conditioned: Testing commenced: 11th March 2011 Testing completed:

Testing conducted by: Mandy De Wet, Phil Weal.

TESTS CARRIED OUT

BS EN 1081: 1998 Resilient floor coverings – Determination of electrical resistance, Method A (1)

Notes:

(1)- The results have been assessed in accordance with BS EN 14041: 2004 Resilient, textile and laminate floor covering - Essential characteristics.

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RESULTS

Table 1. (BS EN 1081) Method A: Vertical Resistance Measurements.

Sample Reference	Test Method	EN 14041: 2004 Requirements	Average Results (Ω)
Anti Static Tile Smooth Textured Floor Tile	BS EN 1081	$ \begin{array}{c} \text{Static dissipative floor coverings} \\ \leq 10^9 \ \Omega \\ \\ \text{Conductive floor coverings} \leq 10^6 \\ \\ \Omega \\ \end{array} $	0.15x10 ⁹

Table 1. (BS EN 1081) Method A: Vertical Resistance Measurements.

Sample Reference	Test Method	EN 14041: 2004 Requirements	Average Results (Ω)
ESD Tile Smooth Textured Floor Tile	BS EN 1081	$\begin{array}{l} \text{Static dissipative floor coverings} \\ \leq 10^9 \ \Omega \\ \\ \text{Conductive floor coverings} \leq 10^6 \\ \\ \Omega \end{array}$	1.8x10 ³

COMMENTS

BS EN 1081: 1998, Resilient and textile floor coverings – Determination of electrical resistance

The test is intended to evaluate the electrical resistance of a floor covering under standard laboratory conditions. Prior to carrying out the testing the underside of the floor covering is coated in a graphite solution and allowed to dry in an oven for a minimum period of 96 hours.

The tests were conducted by placing the floor covering onto a metal plate and placing a tripod electrode with a minimum load exerting a force of 300N on to the surface of the floor covering. The resistance is measured between a surface tripod electrode and an electrode attached to the underside of the floor covering, using a defined voltage and resistance.

After 15 seconds a reading is taken, the tripod is then repositioned for a further measurement. Three test specimens are used during the assessment.

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Technical Services Report



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.

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.

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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