

Customer: Mats Direct  
Unit 2  
Bolholt Industrial Park  
Walshaw Road  
Bury  
Lancashire  
BL8 1PY

Attention of: Chris Bleakley

# Technical Report

Subject: SATRA TM144 slip assessment  
Your ref: Diamond  
Our ref: FLO 0167717/0838/2/DS/SLM/Issue 1  
Date: 3<sup>rd</sup> October 2008

## Conditions of Issue:

This report may be forwarded to other parties concerned 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 It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.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: S L Morris  
Floorcoverings Technologist  
Floorcoverings Evaluation Centre  
On behalf of SATRA Technology Centre Ltd



## EVALUATION OF SLIP RESISTANCE TO ACCORDING TO SATRA TM 144

As requested by Mats Direct, we have conducted an assessment of the slip resistance of the rubber entrance mat submitted, as detailed below:

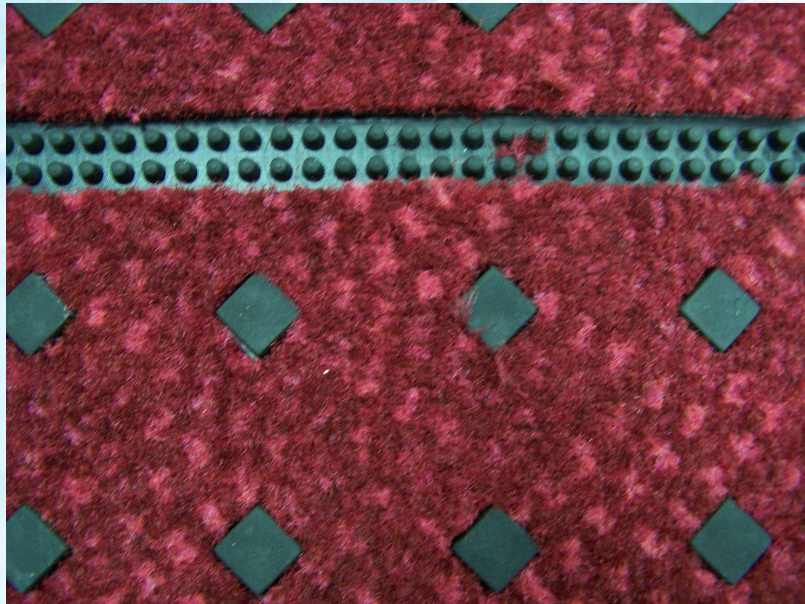
### SUMMARY

With regard to coefficient of friction in dry surface conditions the sample submitted referenced 'Diamond' demonstrates a low potential for slip.

When assessed under wet conditions the sample also demonstrates a low potential.

### SAMPLE SUBMITTED

|                   |  |
|-------------------|--|
| References:       | Diamond  |
| Description:      | Profiled rubber entrance matting system with textile inserts |
| Colour (Rubber):  | Black  |
| Colour (textile): | Red  |
| Appearance:       |  |



|                         |                                 |
|-------------------------|---------------------------------|
| Intended application:   | Contract flooring               |
| Date received:          | 15 <sup>th</sup> September 2008 |
| Conditioning commenced: | 15 <sup>th</sup> September 2008 |
| Testing commenced:      | 17 <sup>th</sup> September 2008 |
| Testing completed:      | 17 <sup>th</sup> September 2008 |
| Testing conducted by:   | Dave Smith                      |

### TESTS CARRIED OUT

- SATRA TM144: 1999 Dynamic coefficient of Friction (Slip resistance) of footwear and floorings.

## RESULTS

### SATRA TM 144: 1999 – Slip resistance test on floor coverings

| Sample  | Condition | Direction of test |      |      | Average     |
|---------|-----------|-------------------|------|------|-------------|
|         |           | A                 | B    | C    |             |
| Diamond | Dry       | 0.83              | 0.79 | 0.83 | <b>0.82</b> |
|         | Wet       | 0.83              | 0.57 | 0.74 | <b>0.71</b> |

### Direction of Test



## COMMENTS

The method of test is intended to assess the potential of slipping for people walking on a flooring material. It determines the coefficient of friction (CoF) between footwear outsoles and flooring surfaces under conditions simulating those experienced at the most critical parts of a typical walking step. In this instance a Four S Rubber slider of diameter 76mm set at a 5° contact angle, is used to simulate a male shoe heel at the critical angle to the floor.

SATRA recommends that a floor covering material must achieve a minimum coefficient of friction of 0.40 in both wet and dry conditions to demonstrate a low risk in terms of slipping under the same conditions.

The sample submitted under the reference ‘Diamond’ has satisfied these requirements when tested under dry surface conditions achieving a coefficient of friction of 0.83, representing a low potential for slip.

When assessed under wet conditions the coefficient of friction is 0.71. The risk should therefore be classified as a low potential of slip under wet conditions.

## 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 we 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 or its subsidiaries (hereafter called The Centre) 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 your credit account. Should the customer become subject to an administration order, or becomes bankrupt or goes into liquidation, The Centre has a right to cancel any contract and discontinue any work. The Centre 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 The Centre 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 The Centre. Payment of invoices in full will entitle the customer to use the software under licence until (a) they cease to be a member of The Centre or (b) they cease trading. In both instances, the licence shall then revert to The Centre.
8. **GUARANTEE**  
All goods manufactured by us 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 our option free of charge. We admit no liability for loss, damage or delay consequent on any defect in any goods supplied by us. Any goods supplied but not made by The Centre carry only the maker's guarantee.
9. **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 we shall not be liable for any error therein. The Centre 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. The Centre 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 The Centre or its servants or agents.
10. **CONFIDENTIALITY**  
Unless specifically excluded in the terms of an individual contract between The Centre and its client, 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 The Centre.
  - ii. Where The Centre has given consent to disclosure, the client shall draw the attention of the third party to these terms of business and the basis on which The Centre undertakes test, reporting and advising. The client shall indemnify The Centre for any failure to do so.
  - iii. The above items are submitted to the client 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.
11. **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.