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Your reference:

Date of report: 3 June 2015

Samples received: 1 May 2015

TECHNICAL REPORT

Subject:

**EXTENDED MARTINDALE TESTING TO BS EN 15618 ON ORANGE PVC COATED
FABRIC REF BOLTAFLEX**

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 It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.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

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.

Please note uncertainty of measurement has not been applied to the results in this report. SATRA uncertainty of measurement values are available on request.

Report signed by: Verity Rainbow
Position: Footwear Technologist
Department: Footwear Testing

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EXTENDED MARTINDALE TESTING TO BS EN 15618 ON ORANGE PVC COATED FABRIC REF BOLTAFLEX

Sample Submitted

Orange PVC Coated fabric ref BOLTAFLEX

Testing Required

Abrasion Resistance (Martindale) to BS EN 15618:2009+A1

Extended to 300,000 revs as requested by your email of 14.5.15

Method

Samples were conditioned in an atmosphere of 23°C and 50%rh for at least 16 hours.

Samples were abraded against wool abradant fabric at an applied pressure of 12kPa.

The samples were assessed against the following Damage Rating Scale (Table 4 EN ISO 5470-2)

0	None	No change
1	Very Slight	Modification of brightness. Printing (if any) shows no wear. No attack of top coat
2	Slight	Change in brightness. Printing (if any) is partially or totally worn. Top coat not attacked, or only very superficially.
3	Moderate	Top coat attacked.
4	Severe	Top coat worn through and intermediate or foam layer attacked.
5	Complete	Base fabric appears.

Results

Test method	Condition	Damage Rating at 102,400 revs	Performance Level As BS EN 15618+A1 2012 at 102,400 revs	Damage Rating at 300,000 revs
EN ISO 5470-2 Method 1 :2003 (As required in BS EN 15618)	Dry	1 Very slight	A	2 Slight
	Wet	0 No Change	A	1 Very Slight

As can be seen from the above table the results give a performance rating of A. (Minimum damage rating of 3 at 102,400 revs) as defined in BS EN 15618+A1 Table 1

The performance at 300,000 revs is not covered in this standard. However, the performance of the samples would still be considered satisfactory as the minimum damage rating is 2. Further the damage was only to the very thin top finish and not into the coating itself. Accordingly this finish damage was not visible to the naked eye apart from some increase in gloss.

The test pieces will be returned for your own assessment.

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Issue Date: 1st October 2009