

For the attention of: Chris

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Customer details: The Solid Wood Flooring Company

Unit 1 Helena Court

Tetbury

Gloucestershire

GL8 8JN

SATRA

FLO0244873/1615/4

reference:

Your reference:

Date of report: 27 April 2016

Samples

15 April 2016

received:

Date(s) work

15 April 2016 -

carried out:

25 April 2016

# **TECHNICAL REPORT**

Subject: Testing of one sample described by the customer as 'TW-E716/TW-E720' to

BS 7976-2:2002+A1:2013 using slider 55 with RZ measurements. Assessed in

accordance with the UKSRG Guidelines Issue 4:2011.

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 It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.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

The uncertainty of the results (UoM) in this report is based on a standard uncertainty multiplied by a coverage factor k=2, which provides for a confidence level of approximately 95%.

Report signed by: Philip Weal Position: Senior Technician

Department: Furniture and Floor Coverings

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TESTING OF ONE SAMPLE DESCRIBED BY THE CUSTOMER AS 'TW-E716/TW-E720' TO BS 7976-2:2002+A1:2013 USING SLIDER 55 WITH RZ MEASUREMENTS. ASSESSED IN ACCORDANCE WITH THE UKSRG GUIDELINES ISSUE 4:2011.

As requested by The Solid Wood Flooring Company, SATRA has conducted an assessment of the slip resistance of a sample of flooring as detailed below.

#### CONCLUSION

The sample referenced 'TW-E716/TW-E720' has demonstrated a moderate slip potential under wet test conditions and a low slip potential under dry test conditions, when tested using BS 7976-2:2002+A1:2013 and assessed in accordance with the UK Slip Resistance Group guidelines, Issue 4:2011.

### **SAMPLE SUBMITTED**

Sample reference: 'TW-E716/TW-E720' (1)

Appearance:



Date received: 15 April 2016
Date conditioning started: 15 April 2016
Testing commenced: 25 April 2016
Testing completed: 25 April 2016
Testing conducted by: Philip Weal

### **TESTS CARRIED OUT**

- BS 7976-2:2002+A1:2013 Pendulum Testers, method of operation (2)
- Surface Roughness measurements (Rz) ≠ <sup>(2)(3)</sup>

### Note(s):

(1) The Information supplied by the customer. Not verified by SATRA.

(2) Conditioning and Testing has been conducted at 20°C/65%rh. Results have been assessed in accordance with the UK Slip Resistance Group Guidelines –Issue 4:2011.

(3) The surface roughness values have been taken from an area of 75mm x 75mm with the meter oriented in three directions, to obtain an average roughness reading.

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### **RESULTS**

Table 1. BS 7976-2:2002+A1:2013 Pendulum Testers, method of operation (Using Slider 55)

Sample	Condition	Di	rection of Te	Overall average slip		
Sample	Condition	А	В	С	measurement (PTV's)	
	Dry	86	90	90	89	
'TW-E716/TW-E720'	Wet (water)	29	30	30	30	

### **Direction of Test**



The following table contains guidelines recommended by the UK Slip resistance group – Issue 4: 2011.

Table 2. UK Slip Resistance Group Guidelines.

Slip potential	PTV			
High slip potential	0-24			
Moderate slip potential	25-35			
Low slip potential	36+			

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## **Surface Roughness Measurements (Rz)**

## Table 3. Surface Roughness measurements (Rz)(3)

Roughness measurement	1	2	3	4	5	6	7	8	9	10	Ave
RZ value	40.2	10.4	7.6	32.0	25.8	30.8	38.0	34.9	14.5	23.4	25.8

The values achieved for surface roughness would suggest that the floor covering submitted for testing has a low slip potential in the wet conditions, as detailed in table 4 below.

Table 4. Surface Roughness Criterion. These values apply to water wet situations.

Slip potential	Rz value
High slip potential	Below 10 µm
Moderate slip potential	10 - 20 μm
Low slip potential	20 + μm

It is important to understand that the measurements undertaken should not be taken in isolation and that the pendulum test results take precedence when assessing slip potential.

'In any complaint involving slip, the floor surface, the footwear and other environmental factors will all have an important bearing on slip resistance. It will be impossible to make either footwear or floorings slip resistant under all conditions which may be encountered in wear'.

### Information on Uncertainty of measurement

Angle ± 0.17° Slider length gauge ± 0.02mm

The reported expanded uncertainty is based on a standard of uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

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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.

Prices are based on current material and production costs, exchange rates, duty and freight and are subject to change without notice.

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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.

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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 Customer as a result of information supplied in a test report.

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- The above shall not be disclosed to third parties or used in litigation without the consent of SATRA.
- 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.

  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.

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#### 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

Issue Date: 1st October 2009

The Solid Wood Flooring Company

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WEAL