

Customer details: The Solid Wood Flooring Company  
Unit 1 Helena Court  
Tetbury  
Gloucestershire  
GL8 8JN

SATRA reference: FLO0251734/1646/2

Your reference:

Date of report: 18 November 2016

Samples received: 14 November 2016

For the attention of: Rob Eckersley

Date(s) work carried out: 14 November 2016

## TECHNICAL REPORT

Subject: Testing of one sample described by the customer as 'Black Oak Decking WPC-1425' to BS 7976-2:2002+A1:2013 using slider 55 with RZ measurements. Assessed in accordance with the UKSRG guidelines Issue 5:2016.

### Conditions of Issue:

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Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

Tests marked  $\neq$  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

**TESTING OF ONE SAMPLE DESCRIBED BY THE CUSTOMER AS 'BLACK OAK DECKING WPC-1425' TO BS 7976-2:2002+A1:2013 USING SLIDER 55 WITH RZ MEASUREMENTS. ASSESSED IN ACCORDANCE WITH THE UKSRG GUIDELINES ISSUE 5:2016.**

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 'Black Oak Decking WPC-1425' has demonstrated a low 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 5:2016.

### SAMPLE SUBMITTED

Sample reference 'Black Oak Decking WPC-1425' <sup>(1)</sup>  
Appearance:



Date received: 14 November 2016  
Date conditioning started: 14 November 2016  
Testing commenced: 14 November 2016  
Testing completed: 14 November 2016  
Testing conducted by: Callum Morgan

### TESTS CARRIED OUT

- BS 7976-2:2002+A1:2013 Pendulum Testers, method of operation <sup>(2)</sup>
- 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 23°C/50%rh. Results have been assessed in accordance with the UK Slip Resistance Group Guidelines – Issue 5:2016.

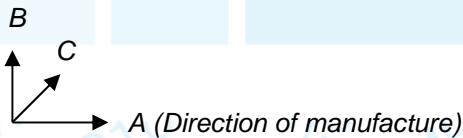
(3) The surface roughness values have been taken from an area of 75mm x 75mm with the meter oriented in three directions, to obtain an average roughness reading.

## RESULTS

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

Sample	Condition	Direction of Test			Overall average slip measurement (PTV's)
		A	B	C	
'Black Oak Decking WPC-1425'	Dry	77	86	83	<b>82</b>
	Wet (water)	47	45	52	<b>48</b>

### Direction of Test



The following table contains guidelines recommended by the UK Slip resistance group – Issue 5: 2016.

**Table 2. UK Slip Resistance Group Guidelines.**

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



## Surface Roughness Measurements (Rz)

**Table 3. Surface Roughness measurements (Rz)<sup>(3)</sup>**

Roughness measurement	1	2	3	4	5	6	7	8	9	10	Ave
RZ value	87.3	66.2	48.2	59.8	24.5	61.2	74.4	61.8	40.3	61.6	<b>58.5</b>

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.

## Annex 1.0

### BS 7976-2:2002+A1:2013 Pendulum Testers, method of operation (using Slider 55) Test Data

Test Conditions		Data/Readings					Average	
Dry	A	76	76	76	76	76	76	<b>81</b>
	B	86	85	84	84	84	85	
	C	81	82	83	83	83	82	
Wet	A	45	46	46	47	47	46	<b>47</b>
	B	44	44	44	43	44	44	
	C	51	51	51	51	50	51	

Test Temperature: **23°C**

Test Humidity: **50% RH**

### BS 7976-2:2002+A1:2013 (Slider 55) Test Temperature Correction Factor

Surface Temperature	Correction PTV
8 to 11	Subtract 3 units
12 to 15	Subtract 2 units
16 to 18	Subtract 1 unit
19 to 22	No correction
23 to 28	Add 1 unit
29 to 35	Add 2 units

### BS 7976-2:2002+A1:2013 Corrected results

Direction		Corrected Average PTV	Overall Average	Slip Potential
A	DRY	77	<b>82</b>	<b>Low</b>
B		86		
C		83		
A	WET	47	<b>48</b>	<b>Low</b>
B		45		
C		52		



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Issue Date: 1st October 2009