

Wessex

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Monday, 18 June 2007

Mr. M Bekin
 ECO CHOICE
 18 Charlton Lodge
 Temple Fortune Lane
 LONDON
 NW11 7TY

Dear Sirs,

Reference: Slip Resistance Measurements – Wooden Decking

We have completed our slip resistance measurement testing of the two samples sent to us.

Measurements have been taken both in the dry and under water wet condition each sample tested with a hard rubber slider (# 96) and a soft rubber slider (~55) the summary results for which are as follows: -

Pendulum Test Values (PTV)

Sample	Slider 96 Average PTV		Slider 55 PTV Average PTV	
	Dry	Wet	Dry	Wet
	Single groove insert anti slip material	81	63	94
Twin groove insert anti slip material	83	69	90	77

Potential For Slip

Potential For Slip	PTV
High Slip Potential	0-24
Moderate Slip Potential	25-35
Low Slip Potential	36+

Notes:

- Each sample has been tested in three directions across the surface, comprising North-South, East-West and diagonally and a total of forty-eight test results obtained.
- The North-South direction is longitudinally along the sample i.e. running with the grooves
- #96 – Slider 96 is representative of the average shoe rubber hardness

Wessex Engineering ISO 9001:2000 registered company
 Certificate number 1030/02



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 Certificate number 1030/02

4. ~55 - Slider 55 is representative of a trainer type shoe or in a wet barefoot area
5. Samples are tested as new. Results in situ may over time affect the new values i.e. ageing, algae growth, and soiling.
6. Testing of samples has been carried out in accordance with the Assessment of Floor Slip Resistance The UK Slip Resistance Group Guidelines issue 3 2005
7. Potential for slip values are as a result of work carried out over 40 years by the Building Research Station supported by investigators and other bodies
8. The work suggested that for unreasonably active persons aged between 18 & 60 a PTV level of 36 or above represented an acceptably low risk of slipping when walking in a straight line on a level surface.

Extra and above

Although not in our remit we tested for one sample just on the grooved wooden decking only i.e. in between the applied anti slip material and longitudinally using TRL slider (slider 55) results obtained thus are: -

PTV Wet 91

PTV Wet 37.

Yours faithfully



D O'Brien

For & on behalf of:

Wessex Engineering Ltd.

Wessex Engineering Ltd

Slip Resistance Test-Results Sheet

Test Certificate Number	A 1 22 16/A
Date of Test	11 June 2007
Test Operator	K Palmer
Calibration room temperature	19 deg C
Instrument used	Pendulum
Serial Number	SK 1386
Calibration certificate Number	C 1682
Slider Rubber used in Test	4 "S" Slider 96 -19/07#18

Material

Timber Decking Grooved with double insert anti slip grit

Results

Table 1

Direction A	Readings								Median
DRY	82	80	80	78	78	78	77	77	78
WET	80	78	77	76	76	75	75	75	75
Direction B									
DRY	90	90	91	95	92	92	92	92	92
WET	59	58	60	61	60	61	61	61	61
Direction C									
DRY	78	78	80	78	78	78	77	77	78
WET	94	71	69	70	70	69	69	69	69

Average Four S (DRY) **83**

Average Four S (WET) **69**

Client Name **ECOCHOICE**

Wessex Engineering Ltd

Slip Resistance Test-Results Sheet

Test Certificate Number	A 1 22 16/B
Date of Test	11 June 2007
Test Operator	K Palmer
Calibration room temperature	19 deg C
Instrument used	Pendulum
Serial Number	SK 1386
Calibration certificate Number	C 1682
Slider Rubber used in Test	TRL Slider 55 12/07~37

Material

Timber Decking Grooved with double insert anti slip grit

Results

Table 1

Direction A	Readings								Median
DRY	82	83	83	83	81	81	82	81	81
WET	83	82	82	81	81	81	80	80	81
Direction B									
DRY	96	96	95	95	95	96	94	94	95
WET	75	77	77	76	76	74	75	75	75
Direction C									
DRY	92	92	92	92	93	93	92	92	92
WET	78	76	76	75	75	75	75	75	75

Average Four S (DRY) **90**

Average Four S (WET) **77**

Client Name ECOCHOICE

Wessex Engineering Ltd

Slip Resistance Test-Results Sheet

Test Certificate Number	A 1 22 16/D
Date of Test	11 June 2007
Test Operator	K Palmer
Calibration room temperature	19 deg C
Instrument used	Pendulum
Serial Number	SK 1386
Calibration certificate Number	C 1682
Slider Rubber used in Test	4 "S" Slider 96 -19/07#18

Material

Timber Decking Grooved with double insert anti slip grit

Results

Table 1

Direction A	Readings								Median
DRY	72	73	74	74	74	74	74	72	74
WET	74	72	72	70	69	68	69	75	69
Direction B									
DRY	91	105	97	98	97	94	98	99	98
WET	80	80	75	70	73	68	68	70	70
Direction C									
DRY	67	71	71	72	72	71	72	72	72
WET	53	50	50	49	48	48	48	47	48

Average Four S (DRY) **81**

Average Four S (WET) **63**

Client Name ECOCHOICE

Wessex Engineering Ltd

Slip Resistance Test-Results Sheet

Test Certificate Number	A 1 22 16/C
Date of Test	11 June 2007
Test Operator	K Palmer
Calibration room temperature	19 deg C
Instrument used	Pendulum
Serial Number	SK 1386
Calibration certificate Number	C 1682
Slider Rubber used in Test	TRL Slider 55 12/07~37

Material

Timber Decking Grooved with single insert anti slip grit

Results

Table 1

Direction A	Readings							Median	
DRY	86	84	84	84	84	84	83	84	84
WET	74	74	74	74	74	74	73	74	74
Direction B									
DRY	97	98	97	98	100	97	98	98	98
WET	73	75	74	73	76	68	74	74	74
Direction C									
DRY	90	95	87	101	102	103	100	100	101
WET	64	62	61	61	61	60	60	60	60

Average Four S (DRY) **94**

Average Four S (WET) **69**

Client Name ECOCHOICE

Continued

Interpretation of Test Results

Table 2

Four S Pendulum value	Potential for slip
0-24	High Slip Potential
25-35	Moderate Slip Potential
36+	Low Slip Potential

Notes

1. Directions A, B, C, (Table 1), are the directions of swing of the Pendulum Instrument relative to the specimen under test: -

Direction A- Parallel to the long edge

Direction B- Parallel to the shortest edge

Direction C- Diagonally across the sample

2. The first three readings in each set, (Table 1), are ignored. The median is calculated using the five readings remaining from each set. Average readings for both wet and dry sampling are obtained from the last five readings of each set.
3. The values in table 2 are as suggested by the UK Slip Resistance Group.
4. #3" Four S mounted slider prior to test conditioned using 3M™ 3μ Pink polishing paper.
5. The slip resistance testing of laboratory samples has been carried out in accordance with guidelines recommended by the UK Slip Resistance Group. The Assessment of Floor Slip Resistance The UK Slip Resistance Group Guidelines Issue 3 2005.

The method is similar to those described in BS 6677: Part 1 1986, BS 7044: section 2.2, BS 7188: 1989, BS 8204 and ASTM E 303: 93.

6. The UK Slip Resistance Group comprises members from flooring and associated industries and includes flooring manufacturers, representatives of the Health and Safety Executive, test houses, end users, instrument manufacturers, and forensic engineers. Significant proportions of members are also prominent on the relevant BSI and International Committees.
7. Wessex Engineering Ltd. is the manufacturer of the Wessex Pendulum type Skid resistance Tester and is accredited to ISO 9003, recognised by UKAS, for the in house calibration and re-calibration of Pendulum type skid resistance testers.