ATTAR TEST REPORT NUMBER: 15/8948.3

15 May 2015

Total Pages: 2

DRY FLOOR FRICTION SLIP RESISTANCE

Job No: M15/8948

Prepared for:	Whittle Waxes Factory 13, 25 Quanda Road COOLUM BEACH QLD 4573		
Attention:	Giles Whittle - Herbert		
Test Site:	ATTAR, Unit 1, 64 Bridge Road, Keysborough.		
Test Date:	11 May 2015		
Test Specimens, Size and Quantity:	Whittle Waxes Anti Slip, 565x1000 mm, 1 off supplied.		
Sampling and Direction of Test:	Sampling conducted by client. Test direction parallel with grain of timber. Refer to Figure 1.		
Test Personnel:	Douglas Lehne		
Preparation:	Washed with water and pH neutral detergent, rinsed with water, then dried.		
Fixed/Unfixed:	Unfixed		
Air Temperature:	23°C		
Test Equipment:	Tortus Floor Friction Tester; Tortus Model Mk III (with integral printer), Serial No: 183.		
Test Standard:	AS 4586: 2013 Slip resistance classification of new pedestrian surface materials – Appendix B.		
Slider Rubber:	Slider 96 Batch No. 54		
Classification Criteria:	Refer to Classification Criteria, attached as Appendix 1.		
Dynamic Coefficient of Friction	**Run 1**	**Run 2**	**Mean** Rounded to 0.05
	0.62	0.57	0.60
Classification:	**D1**		

These results apply only to the specimens tested and it is recommended that before selection of flooring or paving materials the effect of service conditions, including maintenance procedures and wear on their slip-resistance be checked.

NOTE: Any specimens supplied will be disposed of in two (2) months time, unless otherwise instructed.

ATTAR

Douglas Lehne
Slip Testing Technician
Approved Signatory

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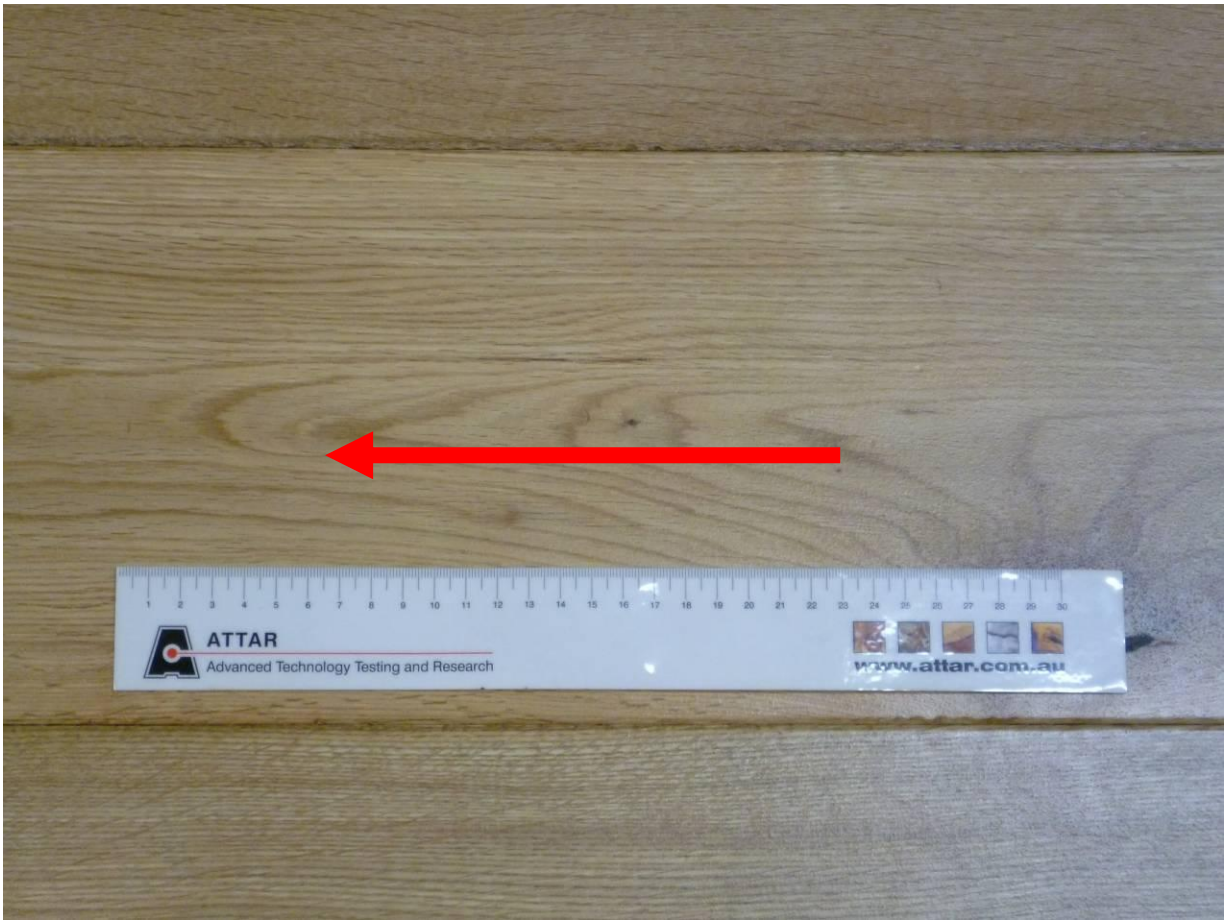

Figure 1: Whittle Waxes Anti Slip.
Arrow indicates direction of test.

ATTAR TEST REPORT NUMBER: 15/8948.4

15 May 2015 **Total Pages: 2**

WET PENDULUM SLIP RESISTANCE

Job No: M15/8948

Prepared for:	Whittle Waxes Factory 13, 25 Quanda Road COOLUM BEACH QLD 4573					
Attention:	Giles Whittle - Herbert					
Test Site:	ATTAR, Unit 1, 64 Bridge Road, Keysborough.					
Test Date:	11 May 2015					
Test Specimens, Size & Quantity:	Whittle Waxes Anti Slip, 300x200 mm, 5 off supplied.					
Sampling & Direction of Testing:	Sampling conducted by client. Test direction parallel with grain of timber Refer to Figure 1.					
Test Personnel:	Douglas Lehne					
Preparation:	Washed with water and pH neutral detergent, rinsed with water, then dried.					
Fixed/Unfixed:	Unfixed.					
Air Temperature:	23°C					
Test Equipment:	Munro Stanley Skid Resistance Tester (Pendulum) Serial Number 0320, Calibrated 16/10/2013.					
Test Standard:	AS 4586: 2013 Slip resistance classification of new pedestrian surface materials – Appendix A.					
Slider Rubber:	Slider 96 Batch No. #58 prepared on P400 & 3µm lapping film.					
Classification Criteria:	Refer to Classification Criteria, attached as Appendix 1.					
British Pendulum Number	**Specimen Number**					**SRV***
	1	**2**	**3**	**4**	**5**	
	56	56	55	57	55	56
Classification:	**P5**					

These results apply only to the specimens tested and it is recommended that before selection of flooring or paving materials the effect of service conditions, including maintenance procedures and wear on their slip-resistance be checked.

* Slip Resistance Value.

NOTE: Any specimens supplied will be disposed of in two (2) months time, unless otherwise instructed.

ATTAR

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Figure 1: Whittle Waxes Anti Slip.
Arrow indicates direction of test.

APPENDIX 1

CLASSIFICATION CRITERIA – AS 4586 - 2013

Slip resistance

Pedestrian surfaces shall be classified using at least one of the combinations given in Table 1 and shall be reported as noted.

When this Standard is used for the testing and classification of the slip resistance of carpets (or carpet-like products) in potentially wet locations, the carpet shall be tested using the wet pendulum test method set out in Appendix A, and shall be reported as such.

When this Standard is used for the testing and classification of the slip resistance of carpets in dry locations, the test shall be carried out in the dry condition using the pendulum test method set out in Appendix A modified in accordance with Paragraph A2, and shall be reported as such.

The 'dry floor friction' test method in Appendix B is not suitable for heavily profiled surfaces or carpets.

Compliance

The surface shall comply with the stated classification for the test method and test rubber that is nominated and declared by the manufacturer or supplier.

The testing and classification of new pedestrian surface materials shall be in accordance with one or more of Tables 2, 3, 4 or 5.

TABLE 1

TEST AND CLASSIFICATIONS COMBINATIONS

Test conditions	Test method	Classification table to be used
Wet pendulum	Appendix A	Table 2
Wet pendulum and dry floor friction	Appendices A and B	Tables 2 and 3
Dry floor friction	Appendix B	Table 3
Wet-barefoot inclining platform	Appendix C	Table 4
Oil-wet inclining platform	Appendix D	Table 5

TABLE 2

CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS ACCORDING TO THE AS 4586 WET PENDULUM TEST

Class	Pendulum SRV (see Note 1)	
	Slider 96	Slider 55
P5	>54	>44
P4	45-54	40-44
P3	35-44	35-39
P2	25-34	20-34
P1	12-24	<20
P0	<12	

NOTES:
1 While Slider 96 or Slider 55 rubbers may be used, the test report shall specify the rubber that was used.
2 It is expected that these surfaces will have greater slip resistance when dry.
3 SDV may be calculated by using the tables that are given in Appendix F, and the minimum SRV that is considered appropriate for a level surface (see examples given in Appendix F).

TABLE 3

CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS ACCORDING TO THE DRY FLOOR FRICTION TEST

Classification	Floor friction tester mean value
D1	≥0.40
D0	<0.40

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TABLE 4

CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS ACCORDING TO THE WET-BAREFOOT INCLINING PLATFORM TEST

Classification	Angle, degrees
No Classification	$<\alpha_{barefoot}$ Verification Surface A
A	$>\alpha_{barefoot}$ Verification Surface A $<\alpha_{barefoot}$ Verification Surface B
B	$\geq\alpha_{barefoot}$ Verification Surface B $<\alpha_{barefoot}$ Verification Surface C
C	$\geq\alpha_{barefoot}$ Verification Surface C

TABLE 5

CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS ACCORDINGTO THE OIL-WET INCLINING PLATFORM TEST

Classification	Angle, degrees
No Classification	<6
R9	≥6 <10
R10	≥10 <19
R11	≥19 <27
R12	≥27 <35
R13	≥35

Means of demonstrating compliance

Pedestrian surfaces that are classified in accordance with Table 2 and, where appropriate, Table 3 shall meet the following criteria:

(a) The mean test results shall be as follows:

(i) For the classifications in Table 2, the mean of the test results shall be—
(A) within the relevant criteria set out in the table; and
(B) each individual result shall be equal to or above the lower limit for the classification or, if below the classification, within the mean of the result minus 20%.

If either criteria is not met, the lot shall be considered to be of lower classification.

(ii) For Classification D1 in Table 3—
(A) the mean of the test results shall be equal to or greater than 0.4; and
(B) each individual slope corrected result shall be equal to or greater than 0.35.

If either of these criteria is not met, the lot shall be considered to be Classification D0.

(b) The classification in accordance with Table 2 or 3 shall be determined by—

(i) selecting and testing at least five specimens at random as specified in Appendices A and B; or

(ii) carrying out continuous testing and process control in accordance with AS 3942.

(c) When testing individual lots, if a particular test fails to produce the expected classification it shall be permissible to—

(i) disregard the first sample, resample a minimum of 10 specimens from the whole lot, retest and apply the criteria to the new sample; or

(ii) subdivide the lot into smaller lots of different quality, resample, retest and reclassify each of the smaller lots.