ATTAR
Advanced Technology Testing and Research

*Acoustic Emission * Slip Resistance Testing
*Materials Failure Analysis *Corrosion Monitoring
*Non-Destructive Testing Training

A Division of Engineering Materials Evaluation Pty. Ltd.
A.B.N. 14 006 554 785

ATTAR TEST REPORT NUMBER 04/6404.1

December 1, 2004 **Total Pages: 1**

DRY SLIP RESISTANCE

Job No: M04/4558

Prepared for:	Peerlessjal 10 – 12 Raglan Street PRESTON VIC 3072		
Attention:	Peter Leamey		
Test Site:	ATTAR, Unit 27, 134 Springvale Road, Springvale.		
Test Date:	December 1, 2004		
Test Specimens, Size and Quantity:	Timber flooring with 1 coat of Tung oil and 2 coats of Dual Coat sealed applied, 90 mm x 950 mm, 1 off.		
Sampling:	Conducted by client.		
Preparation:	Washed with water and dried.		
Fixed/Unfixed:	Unfixed.		
Air Temperature:	20°C		
Test Equipment:	Tortus Floor Friction Tester; Tortus Model Mk 2 (with integral printer), Serial No: 154.		
Test Standard:	AS/NZS 4586 - 2004 Slip resistance classification of new pedestrian surface materials – Appendix B.		
Slider Rubber:	Four S Batch No. (106-110)		
Classification Criteria:	Refer Appendix 1 – Classification Criteria, attached.		
Dynamic Coefficient of Friction	**Run 1**	**Run 2**	**Mean** Rounded to 0.05
	0.60	0.58	0.60
Classification:	**ZF**		

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

John Cacic B.Eng. (Mech/Elec)
Mechanical Engineer

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ATTAR TEST REPORT NUMBER: 04/6404.2

December 1, 2004 **Total Pages: 1**

WET SLIP RESISTANCE

Job No: M04/4558

Prepared for:	Peerlessjal 10 – 12 Raglan Street PRESTON VIC 3072					
Attention:	Peter Leamey					
Test Site:	ATTAR, Unit 27, 134 Springvale Road, Springvale.					
Test Date:	December 1, 2004					
Test Specimens, Size and Quantity:	Timber flooring with 1 coat of Tung oil and 2 coats of Dual Coat sealed applied, 90 mm x 950 mm, 1 off.					
Sampling:	Conducted by client.					
Preparation:	Washed with water and dried.					
Fixed/Unfixed:	Unfixed.					
Air Temperature:	20°C					
Test Equipment:	Stanley Skid Resistance Tester (Pendulum) Serial Number 0320, Calibrated 20/05/2003.					
Test Standard:	AS/NZS 4586 - 2004 Slip resistance classification of new pedestrian surface materials – Appendix A.					
Slider Rubber:	Four S Batch No. 8					
Classification Criteria:	Refer Appendix 1 – Classification Criteria, attached.					
British Pendulum Number	**Specimen Number**					**Mean**
	1	2	3	4	5	
	25	23	24	21	19	22
Classification:	**Z**					

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.

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APPENDIX 1

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CLASSIFICATION CRITERIA – AS/NZS 4586 - 2004

Compliance

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*

*Samples tested under dry conditions only are assumed to have a default wet classification of Z and shall be reported as classification ZF or ZG.

TABLE 2
CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS ACCORDING TO THE WET PENDULUM TEST

Class	Pendulum* mean BPN	
	Four S rubber	TRRL rubber
V	>54	>44
W	45-54	40-44
X	35-44	-
Y	25-34	-
Z	<25	-

*While either of these test methods may be used, the test report shall specify which method was used.
NOTE: It is expected that these surfaces will have greater slip resistance when dry.

TABLE 3
CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS ACCORDING TO THE DRY FLOOR FRICTION TEST

Classification	Floor friction tester mean value
F	≥0.4
G	<0.4

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 within the relevant criteria set out in the Table, and 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 of these criteria is not met, the lot shall be considered to be a lower classification.
  (ii) For Classification F in Table 3, the mean of the test results shall be equal to or greater than 0.4 and each individual 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 G.

(b) The classification in accordance with Table 2 or Table 3 shall be determined by –
  (i) selecting and testing at least five specimens at random as defined 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, re-sample 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, re-sample, retest and reclassify each of the smaller lots.

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