

**ATTAR TEST REPORT NUMBER 06/1178.1**

9 November 2006

**Total Pages: 1****DRY SLIP RESISTANCE**

Job No: M06/1178

<b>Prepared for:</b>	WK Marble & Granite Pty Ltd 129 Fairford Rd PADSTOW NSW 2211		
<b>Attention:</b>	Mr Bill El Cheikh		
<b>Test Site:</b>	ATTAR, Unit 27, 134 Springvale Road, Springvale.		
<b>Test Date:</b>	7/09/2004		
<b>Test Specimens, Size and Quantity:</b>	Terrastone Terrazzo, 20 x 20 cm, 5 off		
<b>Sampling:</b>	Conducted by client.		
<b>Preparation:</b>	As received, washed in tap water and methylated spirits and dried.		
<b>Fixed/Unfixed:</b>	Unfixed.		
<b>Air Temperature:</b>	20°C		
<b>Test Equipment:</b>	Tortus Floor Friction Tester; Tortus Model Mk 2 (with integral printer), Serial No: 233.		
<b>Test Standard:</b>	AS/NZS 4586 - 1999 Slip resistance classification of new pedestrian surface materials – Appendix B.		
<b>Slider Rubber:</b>	Four S Batch No. (89-95)		
<b>Classification Criteria:</b>	Refer Appendix 1 – Classification Criteria, attached.		
<b>Dynamic Coefficient of Friction</b>	<b>Run 1</b>	<b>Run 2</b>	<b>Mean</b> Rounded to 0.05
	0.84	0.89	0.85
<b>Classification:</b>	<b>Wet</b>		<b>Dry</b>
	<b>Y</b>		<b>F</b>

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**David Padfield Eng(Mat)Hons  
Materials EngineerSimon Langdon  
Engineering Technician

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**ATTAR**

Advanced Technology Testing and Research

**ATTAR TEST REPORT NUMBER: 06/1178.2**



The tests reported herein have been performed in accordance with its scope of accreditation. This laboratory is accredited by the National Association of Testing Authorities, Australia. This document shall not be reproduced except in full. Accreditation Number: 2735

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<b>Sampling:</b>	Conducted by client.					
<b>Preparation:</b>	As received, washed in tap water and methylated spirits and dried.					
<b>Fixed/Unfixed:</b>	Unfixed.					
<b>Air Temperature:</b>	20°C					
<b>Test Equipment:</b>	Stanley Skid Resistance Tester (Pendulum) Serial Number 0320, Calibrated 20/05/2003.					
<b>Test Standard:</b>	AS/NZS 4586 - 1999 Slip resistance classification of new pedestrian surface materials – Appendix A.					
<b>Slider Rubber:</b>	Four S Batch No.(106-110)					
<b>Classification Criteria:</b>	Refer Appendix 1 – Classification Criteria, attached.					
<b>British Pendulum Number</b>	<b>Specimen Number</b>					<b>Mean</b>
	1	2	3	4	5	
	32	26	27	29	25	28
<b>Classification:</b>	<b>Y</b>					

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

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Materials Engineer

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## **APPENDIX 1**

**CLASSIFICATION CRITERIA – AS/NZS 4586 - 1999****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		Contribution of the floor surface to the risk of slipping when wet
	Four S rubber	TRRL rubber	
V	>54	>44	Very low
W	45-54	40-44	Low
X	35-44	-	Moderate
Y	25-34	-	High
Z	<25	-	Very high

\*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 be more slip resistive 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

NOTE: Tables 2 and 3 estimate the contribution only of the floor surface to an occurrence of a slip under the wet or dry conditions. Estimates of the total risk of a slip should include consideration of other possible contributory factors which may include type of footwear, use of walking aid, speed of gait, lighting, wear, surface gradient, contamination and similar.

**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 above the relevant criteria set out in the Table, and each individual result shall be either within the 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.