

**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

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.

©ROBYN\My Documents\TECHPAPS\ClassifCriteria.doc

27/134 Springvale Road, PO Box 286, SPRINGVALE VIC. 3171

Phone: (03) 9574 6144 Fax: (03) 9574 6133

www.attar.com.au Email: admin@attar.com.au

**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: 04/6108.3

The tests reported herein have been performed in accordance with its terms of accreditation. This laboratory is accredited by the National Association of Testing Authorities, Australia. This document shall not be reproduced except in full. Registration Number: 2738

March 25, 2004

Total Pages: 1**WET SLIP RESISTANCE**

Job No: M04/4244

Prepared for:	Shieldcoat Pty Ltd Unit 2/1075 Beaudesert Road ARCHERFIELD QLD 4108											
Attention:	Mark Slater											
Test Site:	ATTAR, Unit 27, 134 Springvale Road, Springvale.											
Test Date:	March 25, 2004											
Test Specimens, Size and Quantity:	Stencilshield applied on smooth side of masonite board, 30x30 cm, 5 off.											
Preparation:	As received, washed in tap water and dried.											
Fixed/Unfixed:	Unfixed.											
Air Temperature:	23°C											
Test Equipment:	Stanley Skid Resistance Tester (Pendulum) Serial Number 0320, Calibrated 20/05/2003.											
Test Standard:	AS/NZS 4586 - 1999 Slip resistance classification of new pedestrian surface materials - Appendix A.											
Slider Rubber:	Four S Batch No. (96-100)											
Classification Criteria:	Refer Appendix 1 - Classification Criteria, attached.											
British Pendulum Number	Specimen Number											
	<table border="1"> <thead> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>Mean</th> </tr> </thead> <tbody> <tr> <td>59</td> <td>59</td> <td>59</td> <td>56</td> <td>59</td> <td>58</td> </tr> </tbody> </table>	1	2	3	4	5	Mean	59	59	59	56	59
1	2	3	4	5	Mean							
59	59	59	56	59	58							
Classification:	V											

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

Marcus Braché
 Engineering Technician

\\ROBYN\My Documents\Reports\2004\SLIPT046108.3.doc

This report may not be reproduced except in its entirety.

27/134 Springvale Road, PO Box 286, SPRINGVALE VIC. 3171
 Phone: (03) 9574 6144 Fax: (03) 9574 6133
 www.attar.com.au Email: admin@attar.com.au

**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: 04/6108.2

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

March 25, 2004

Total Pages: 1**WET SLIP RESISTANCE**

Job No: M04/4244

Prepared for:	Shieldcoat Pty Ltd Unit 2/1075 Beaudesert Road ARCHERFIELD QLD 4108					
Attention:	Mark Slater					
Test Site:	ATTAR, Unit 27, 134 Springvale Road, Springvale.					
Test Date:	March 25, 2004					
Test Specimens, Size and Quantity:	Concreshield X (aluminum anti-slip) applied on smooth side of masonite board, 30x30 cm, 5 off.					
Preparation:	As received, washed in tap water and dried.					
Fixed/Unfixed:	Unfixed.					
Air Temperature:	23°C					
Test Equipment:	Stanley Skid Resistance Tester (Pendulum) Serial Number 0320, Calibrated 20/05/2003.					
Test Standard:	AS/NZS 4586 - 1999 Slip resistance classification of new pedestrian surface materials - Appendix A.					
Slider Rubber:	Four S Batch No. (96-100)					
Classification Criteria:	Refer Appendix 1 - Classification Criteria, attached.					
British Pendulum Number	Specimen Number					Mean
	1	2	3	4	5	
	64	59	69	59	63	63
Classification:	V					

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

Marcus Braché
 Engineering Technician

\\ROBYN\My Documents\Reports\2004\SLIPT046108.2.doc

This report may not be reproduced except in its entirety.

27/134 Springvale Road, PO Box 286, SPRINGVALE VIC. 3171

Phone: (03) 9574 6144 Fax: (03) 9574 6133

www.attar.com.au Email: admin@attar.com.au

**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: 04/6108.1

The test reports herein have been performed in accordance with the terms of accreditation. This laboratory is accredited by the National Association of Testing Authorities, Australia. This document shall not be reproduced except in full. Registration Number: 2735

March 25, 2004

Total Pages: 1**WET SLIP RESISTANCE**

Job No: M04/4244

Prepared for:	Shieldcoat Pty Ltd Unit 2/1075 Beaudesert Road ARCHERFIELD QLD 4108					
Attention:	Mark Slater					
Test Site:	ATTAR, Unit 27, 134 Springvale Road, Springvale.					
Test Date:	March 25, 2004					
Test Specimens, Size and Quantity:	Concreshield X (wax bead anti-slip) applied on smooth side of masonite board, 30x30 cm, 5 off.					
Preparation:	As received, washed in tap water and dried.					
Fixed/Unfixed:	Unfixed.					
Air Temperature:	23°C					
Test Equipment:	Stanley Skid Resistance Tester (Pendulum) Serial Number 0320, Calibrated 20/05/2003.					
Test Standard:	AS/NZS 4586 - 1999 Slip resistance classification of new pedestrian surface materials - Appendix A.					
Slider Rubber:	Four S Batch No. (96-100)					
Classification Criteria:	Refer Appendix 1 Classification Criteria, attached.					
British Pendulum Number	Specimen Number					Mean
	1	2	3	4	5	
	54	55	55	54	56	55
Classification:	V					

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

Marcus Braché
 Engineering Technician

V:\ROBYN\My Documents\Reports\2004\SLIPT046108.1.doc

This report may not be reproduced except in its entirety.

27/134 Springvale Road, PO Box 286, SPRINGVALE VIC. 3171
 Phone: (03) 9574 6144 Fax: (03) 9574 6133
 www.attar.com.au Email: admin@attar.com.au