

# Industrial Research Services

Materials Science & Engineering, Graham Road (PO Box 56), Highett, Victoria, Australia 3190 Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Email: tiles@csiro.au Web: http://www.cmse.csiro.au

### **Registered Testing Authority - CSIRO**

1 September 2008 Our Ref. EN13 / 518 03/0212

### **TEST REPORT No. 4521s**

Requested by: Armstrong World Industries (Australia) Pty Ltd

on (date): 29 August 2008

Manufacturer: Armstrong World Industries (Australia) Pty Ltd

Product Desc.: Stair nosing Insert/safety Glo strip

50mm wide strip

Sampling details:

Where: Delivered

Date: 29 August 2008

By whom: Courier How (methods): N/A

The results reported relate only to the sample(s) tested and the information received. No responsibility is taken for the accuracy of the sampling unless it is done under our own supervision. CSIRO cannot accept responsibility for deviations in the manufactured quality and performance of the product. While CSIRO takes care in preparing the reports it provides to clients, it does not warrant that the information in this particular report will be free of errors or omissions or that it will be suitable for the client's purposes. CSIRO will not be responsible for the results of any actions taken by the client or any other person on the basis of the information contained in the report or any opinions expressed in it. The reproduction of this test report is only authorised in the form of a complete photographic facsimile. Our written approval is necessary for any partial reproduction.

This test report consists of 3 pages

#### **SUMMARY OF SLIP RESISTANCE TESTS PERFORMED:**

Result Class

AS/NZS 4586:2004 Slip resistance classification of new pedestrian surface materials

Appendix A: WET Pendulum (Four S slider):

Mean BPN: 59 V [MEDIUM\*]

\* = CSIRO classification

In order to interpret the classifications, please refer to Standards Australia Handbook 197, An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials, which recommends minimum classifications for a wide variety of locations.

It is important to realise that test results obtained on unused factory-fresh samples may not be directly applicable in service, where proprietary surface coatings, contamination, wear and subsequent cleaning all influence the behaviour of the pedestrian surface.



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**REPORT NO:** 

4521s

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**ISSUE DATE:** 

1 September 2008

MANUFACTURER:

Armstrong World Industries (Australia) Pty Ltd

PRODUCT DESC:

Stair nosing Insert/safety Glo strip

50mm wide strip

#### SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

### WET PENDULUM TEST METHOD

TEST CARRIED OUT IN ACCORDANCE WITH

AS/NZS 4586:2004 (Appendix A)

Test Date: 1 September 2008

**RESULTS:** 

Location:

Slip Resistance Laboratory

Rubber slider used: Four S

Conditioned with grade P400 paper, dry

Sample:

Fixed

Cleaning:

Deionized water

Temperature: 23°C

Pendulum Friction Tester: Munro-Stanley (S/N: 0312, calibrated 01/03/07)

Test conducted by: Peter Westgate

	Specimen 1	2	3	4	5
Last 3 swings	56 56 57	54 55 55	60 60 60	61 61 62	61 61 61
Averages	56	55	60	61	61

Mean BPN: 59

**CLASS:** 

V [MEDIUM\*]

Where products are to be used in wet barefoot areas, it is more appropriate to test to Appendix C of AS/NZS 4586 (which is technically equivalent to DIN 51097).

<sup>\* =</sup> CSIRO classification



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ISSUE DATE: 1 September 2008

MANUFACTURER: Armstrong World Industries (Australia) Pty Ltd

TILE DESC: Stair nosing Insert/safety Glo strip

50mm wide strip

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Date and Place

1 September 2008, Highett, Vic

Name, Title and Digital Signature:

PETER WESTGATE Project Leader Tel: 61 3 92526108

Fax: 61 3 92526244

Email: Peter.Westgate@csiro.au

\*CSIRO recommended classification of Slip Resistance as determined from: AS/NZS 4586: 2004 Slip Resistance Classification of New Pedestrian Surface Materials (Appendices A & D).

Wet Pendulum Class	BPN 4S Rubber	CSIRO Class LOW	CSIRO Class MEDIUM	CSIRO Class HIGH
V	>54	54-57	58-61	>61
W	45-54	45-48	49-51	52-54
Х	35-44	35-38	39-41	42-44
Υ	25-34	25-28	29-31	32-34
Z	<25	<18	18-21	22-25
Oil Wet Ramp Class	Angle (degrees)	CSIRO Class LOW	CSIRO Class MEDIUM	CSIRO Class HIGH
R9	≥6 to <10	≥6 to 7.5	7.6 to 9	9.1 to 9.9
R10	≥10 to <19	≥10 to 12	12.1 to 15	15.1 to 18.9
R11	≥19 to <27	≥19 to 21	21.1 to 24	24.1 to 26.9
R12	≥27 to <35	≥27 to 29	29.1 to 32	32.1 to 34.9
R13	≥35	>35 to 36	36.1 to 38	>38.1

This table should not be read or relied upon without reference to the CSIRO/Standards Australia publication: AS/NZS 4586 Slip Resistance Classification of New Pedestrian Surface Materials (Appendices A & D).

CSIRO has categorized the AS4586 classifications into sub-groups Low, Medium & High. The slip resistance test classification is still determined according to AS 4586 Australian Standard (Appendices A & D). The added information of Low, Medium and High allows professionals to make a better judgement of pedestrian floor requirements.