

# Industrial Research Services

Manuf. & Materials Technology, 14 Julius Ave (Riverside Corp. Park), North Ryde, NSW, 2113, Australia Telephone: 61 2 9490 5614 Facsimile: 61 2 9490 5777 Email: tiles@csiro.au Web: http://www.cmse.csiro.au

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

3 September 2008 Our Ref. ES13 / 1609 03/0212

### TEST REPORT No. SY4529-4

Requested by: Drytreat Pty Ltd on (date): 26 June 2008 Manufacturer: Drytreat Pty Ltd

Product Desc.: JUPARANA COLOMBO granite unsealed 305mm x 305mm

Sampling details:

Where: Delivered
Date: 1 July 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: 23 Z [HIGH\*]

\* = 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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ISSUE DATE: 3 September 2008 MANUFACTURER: Drytreat Pty Ltd

PRODUCT DESC: JUPARANA COLOMBO granite unsealed 305mm x 305mm

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### 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: 4 August 2008

RESULTS: Location: North Ryde Slip Resistance Laboratory

Sample: L

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Rubber slider used: Four S

Conditioned with grade P400 paper, dry

Cleaning:

Unfixed Distilled water

Temperature: 23°C

Pendulum Friction Tester: Stanley (S/N: 0312, calibrated 28/02/07)

Test conducted by: Hugh McMullen

	Specimen 1	2	3	4	5
Last 3 swings	24 24 24	23 22 22	23 23 23	25 24 24	24 24 24
Averages	24	22	23	24	24

Mean BPN: 23

**CLASS:** 

Z [HIGH\*]

\* = CSIRO classification



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ISSUE DATE: 3 September 2008 MANUFACTURER: Drytreat Pty Ltd

TILE DESC: JUPARANA COLOMBO granite unsealed 305mm x 305mm

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Date and Place

3 September 2008, North Ryde, NSW

Name, Title and Digital Signature:



**HUGH MCMULLEN Laboratory Manager** 

Tel: 61 2 94905614 Fax: 61 2 94905777

Email: Hugh.McMullen@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
X	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.