

Infrastructure Technology

Manuf. & Materials Technology, 14 Julius Ave (Riverside Corp. Park), North Ryde, NSW, 2113, Australia Telephone: 61 2 9490 8252 Facsimile: 61 2 9490 5777 Email: tiles@csiro.au Web: http://www.cmse.csiro.au

Registered Testing Authority - CSIRO

12 April 2013

Our Ref. ES13 / 71 03/0212

TEST REPORT No. SY6649

Requested by:	Olympic Tiles 1265 The Horsley Drive Wetherill Park
on (date): Manufacturer: Product Desc.:	NSW 2164 10 April 2013 Taicera Enterprises (Vietnam) 300x600 G63129 Shaded Sandstone Charcoal
Sampling details: Where: Date: By whom: How (methods):	Delivered 10 April 2013 Courier N/A
unloss it is done under or	e only to the sample(s) tested and the information received. No responsibility is taken for the accuracy of the sampling in own supervision. CSIRO cannot accept responsibility for deviations in the manufactured quality and performance of the kes care in preparing the reports it provides to clients it des not warrant that the information in this particular report will ions or that it will be suitable for the client's purposes. CSIRO will not be responsible for the results of any actions taken person on the basis of the information contained is the report of any opinions expressed in it. The reproduction of this test in the form of a complete photographic facsimile. Our written approval is necessary for any partial reproduction. This test report consists of 9 pages
	SUMMARY OF SLIP RESISTANCE TESTS PERFORMED:
AS/NZS 4586:2004	Result Class Slip resistance classification of new pedestrian surface materials Appendix A: WE1 Reputum (Four S slider):
* = CSIRO classifica	Mean BPN: 38 X [LOW*]
In order to interpret the Resistance of Pedestri	e classifications, please refer to Standards Australia Handbook 197, An Introductory Guide to the Slip an Surface Materials, which recommends minimum classifications for a wide variety of locations.
It is important to realis proprietary surface co	e that test results obtained on unused factory-fresh samples may not be directly applicable in service, where tings, contamination, wear and subsequent cleaning all influence the behaviour of the pedestrian surface.
	Please note that this test/result is issued to you on an INDICATION ONLY basis as tests are conducted on a particular shade/production, not necessarily to material you would be receiving. Olympic Tiles Pty Ltd will not be held responsible for the item not meeting this result. It is the responsibility of the end user to carry out appropriate testing for the tiles intended use.



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REPORT NO: SY6649 Page 2 of 3 **ISSUE DATE:** 12 April 2013 MANUFACTURER: Taicera Enterprises (Vietnam) 300x600 G63129 Shaded Sandstone Charcoal PRODUCT DESC: SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATER WET PENDULUM TEST METHOD TEST CARRIED OUT IN ACCORDANCE WITH AS/NZS 4586:2004 (Appendix A) Test Date RESULTS: Location: North Ryde Slip Resistance Laboratory Rubber slider used: Four S ditioned with grade P400 paper, dry Unfixed Sample: Cleaning: Acetone Temperature: 23°C Pendulum Friction Tester: Munro-Stanley (S/N: 0312, calibrated 20/04/2012) Test conducted by: Babak Navak Specimen 1 5 Last 3 swings 40 39 35 39 35 40 40 38 35 39 35 **Averages** 37 40 Mean BPN : 38 X [LOW*] CLASS :

* = CSIRO classification 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).



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REPORT NO: 6649 Page 3 of 3 **ISSUE DATE:** 12 April 2013 Taicera Enterprises (Vietnam) MANUFACTURER: 300x600 G63129 Shaded Sandstone Charcoal TILE DESC: North Ryde, NSW Date and Place 12 April 2013, Name, Title and Digital Signature: KNAVAK erials Scientist [el. 61 2 94908252 ax: 64 2 94905777 Email: Babak.Navak@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 Olass LOW	CSIRO Class MEDIUM	CSIRO Class HIGH
V	>54	54-57	58-61	>61
W	45.54	45-48	49-51	52-54
X	3544	35-38	39-41	42-44
Y 💐	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
UL AN		- C to 7 5	7.6 to 9	9.1 to 9.9
R9 🦷	6 to <10	≥6 to 7.5	7.0109	5.105.5
R9 R10	10 ≤10 ≤10 ≤10	≥6 to 7.5 ≥10 to 12	12.1 to 15	15.1 to 18.9
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a finite a f	≥10 to <19	≥10 to 12	12.1 to 15	15.1 to 18.9

ASINZS 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.