

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

2 August 2013

Our Ref. EN13 / 420.2 03/0212

### **TEST REPORT No. 6773As**

[Supersedes Report No. 6673s]

Requested by:	Kenbrock Flooring Pty Ltd 63 Waterview Close
	Dandenong South
	VIC 3175
on (date):	29 July 2013
Manufacturer:	Kenbrock Flooring Pty Ltd
Product Desc.:	Pinnacle 55/Grange, PU Coating, Vinyl Plank, 1219x183mm
Compling datailar	

Sampling details:	
Where:	Delivered
Date:	29 July 2013
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 4 pages

	SUMMARY OF SLIP RESISTANCE TESTS PERFORM	IED:	
		Result	Class
AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials Appendix A: WET Pendulum (Four S slider):		
	Mean BPN:	32	Y [HIGH*]
AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials, Appendix D: OIL-WET Ramp		
	Mean overall acceptance angle:	14.2°	R 10 [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.



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

REPORT NO:6773AsISSUE DATE:2 August 2013MANUFACTURER:Kenbrock Flooring Pty LtdPRODUCT DESC:Pinnacle 55/Grange, PU Coating, Vinyl Plank, 1219x183mm

Page 2 of 4

### SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

#### WET PENDULUM TEST METHOD

	RIED OUT IN A 86:2004 (Appe		ICE WITH			Test Date:	30 July 2013	
RESULTS:	Location:	Slip Resista	ance Labora	tory			der used: Four S	
	Sample: Cleaning: Temperature:	Unfixed Deionized water 23℃				Conditioned with grade P400 paper, dry		
	Friction Tester: cted by: Andy (		nley (S/N: (	)312, calib	rated 20/04	/2012)		
		Specimer	า					
		<b>'</b> 1	2	3	4	5		
Last 3 s	swings	34 34 34	34 33 33	30 31 31	33 33 33	28 28 28		
Average	es	34	33	31	33	28		
					Ме	an BPN :	32	
					CL	ASS :	Y [HIGH*]	
* = CSIRO c	lassification							



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

REPORT NO:6773AsISSUE DATE:2 August 2013MANUFACTURER:Kenbrock Flooring Pty LtdPRODUCT DESC:Pinnacle 55/Grange, PU Coating, Vinyl Plank, 1219x183mm

Page 3 of 4

### SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

### **OIL-WET RAMP TEST METHOD**

TEST CARRIED OUT IN ACCORDANCE WITH AS/NZS 4586:2004 (Appendix D)

Test Date: 1 August 2013

Location: Slip Resista	ance Laboratory	
Sample Fixed		
Joint width: 0 mm		
Surface structure:	[ ] Smooth [X] Profiled [ ] Structured	
RESULTS		
Mean overall acceptar	nce angle: 14.2 °	
Displacement space:	not tested	
CLASSIFICATION:		
Slip Resistanc	e Assessment Group:	R 10 [MEDIUM*]
Displacement	Space Assessment Group:	-
* = CSIRO classification		



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

REPORT NO:6773AsISSUE DATE:2 August 2013MANUFACTURER:Kenbrock Flooring Pty LtdTILE DESC:Pinnacle 55/Grange, PU Coating, Vinyl Plank, 1219x183mm

Page 4 of 4

Date and Place

2 August 2013,

Highett, Vic

Name, Title and Digital Signature:

Alianl

ANDY GIANG Technical Officer Tel: 61 3 92526000 Fax: 61 3 92526244 Email: Andy.Giang@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
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
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

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.