Industrial Research Services

Manufacturing & Materials Technology, 37 Graham Road (PO Box 56), Highett, Victoria 3190, Australia
Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Web: http://www.cmmt.csiro.au

Registered Testing Authority - Building Code of Australia

26 February 2007 Our Ref: EN13 / 816 03/0211

TEST REPORT No. 3784.1s

Requested by: R Ten Plus Pty Ltd
Client: David Macciolli
on (date): 12 February, 2007
Product Descriptions: Polished Porcelain Control Tile (30x30)
Polished Porcelain Treated Tile (30x30)

Sampling Details
Date: n/a
How (methods): By Client
February 2007

This test report consists of 4 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 (FourS Slider):			
	Porcelain Control Tile	Mean BPN:	17	Z
	Porcelain Treated Tile	Mean BPN:	52	W
AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials			
	Appendix B: DRY Floor Friction Tester:			
	Porcelain Control Tile	Mean coefficient of friction:	0.57	F
	Porcelain Treated Tile	Mean coefficient of friction:	0.87	F

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Report No: **3784.1s**
Issue Date: 26 February 2007
Manufacturer: R Ten Plus Pty Ltd
Sample Description: Polished Porcelain Tiles, 300x300mm

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: 14 February 2007

RESULTS:

Location: Slip Resistance Laboratory
Sample: Sample Unfixed
Cleaning: Distilled water
Temperature: 23°C

Rubber Slider Used: Type Four S
Conditioned with grade P400 paper, dry

Pendulum Friction Tester: Stanley (Serial #9234, calibrated 13/06/05)
Test conducted by: David Weeks

	Specimen									
	Control					Treated (with r 10+ anti-slip)				
	1	2	3	4	5	1	2	3	4	5
Last 3 swings	19	18	17	16	18	56	55	54	48	47
	19	17	17	15	18	55	54	53	48	48
	18	17	16	15	17	55	53	53	48	48
Averages:	19	17	17	15	18	55	54	53	48	48

Mean BPN	**17**	**52**
Class :	**Z**	**W**

Comment:

The surface of the tile samples were cleaned with distilled water prior to the assessment. The polished porcelain tiles were a dark grey/green appearance and the difference in reflected luminance was noticeable between the two surfaces, control (shiny) and treated (dull).

The measured outcomes were from two tiles and it is only indicative of the potential of the anti-slip treatment for polished porcelain tiles. There has been no assessment for changes to the surface properties of the treated tiles.

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SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

DRY FLOOR FRICTION TEST METHOD

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

Test Date: 14 February, 2007

RESULTS:

Location Slip Resistance Laboratory
Sample Sample Fixed
Cleaning Antistatic Swipe
Temperature: 23°C
FFT measurements taken over 2 passes of 800mm each

Rubber Type: Four S
Conditioned with grade P400 paper, dry

Floor Friction Tester: Tortus MkII (S/N: 224)
Test conducted by: David Weeks

		Specimen	
		Control	Treated (with r 10+ anti-slip)
Run 1:	**Average COF:**	**0.55**	**0.86**
Run 2:	**Average COF:**	**0.58**	**0.88**
	Mean COF:	**0.57**	**0.87**
According to AS/NZS 4586 the dry Coefficient of friction shall be reported as: (mean rounded to the nearest 0.05)		**0.55**	**0.90**

Class : **F** **F**

Comment:

This is a dry assessment of the co-efficient of friction of the surface of the samples. The increased slip resistance is a direct result of changes to the surface structure from the anti-slip treatment and not a chemical reaction when in contact with water.

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Date and Place 26 February 2007 Highett, Victoria

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