



Industrial Research Services

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Registered Testing Authority - Building Code of Australia

26 February 2007

Our Ref: EN13 / 816 03/0211

TEST REPORT No. 3784.2s

Requested by: R Ten Plus Pty Ltd
Client: David Maccioli
on (date): 12 February, 2007
Product Descriptions: Polished / Glazed Ceramic Control Tile (40x40)
Polished / Glazed Ceramic Treated Tile (40x40)

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

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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): | | |
| | Ceramic Control Tile | Mean BPN: 15 | Z |
| | Ceramic Treated Tile | Mean BPN: 43 | X |
| AS/NZS 4586:2004 | Slip resistance classification of new pedestrian surface materials Appendix B: DRY Floor Friction Tester: | | |
| | Ceramic Control Tile | Mean coefficient of friction: 0.50 | F |
| | Ceramic Treated Tile | Mean coefficient of friction: 0.69 | F |



Report No: 3784.2s
Issue Date: 26 February 2007
Manufacturer: R Ten Plus Pty Ltd
Sample Description: Polished / Glazed Ceramic Tiles, 450x450mm

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 Rubber Slider Used: Type Four S
 Conditioned with grade P400 paper, dry
 Sample Sample Unfixed
 Cleaning Dust residue removed by brush, cleaned with distilled water
 Temperature: 23°C

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 | 15 | 15 | 15 | 15 | 15 | 46 | 40 | 44 | 43 | 46 |
| | 15 | 15 | 14 | 15 | 14 | 46 | 39 | 43 | 43 | 46 |
| | 15 | 14 | 14 | 14 | 14 | 46 | 39 | 43 | 43 | 46 |
| Averages: | 15 | 15 | 14 | 15 | 14 | 46 | 39 | 43 | 43 | 46 |
| Mean BPN | 15 | | | | | 43 | | | | |

Class :

Z

X

Comment:

The surface of the tiles samples were cleaned with distilled water prior to the assessment. The ceramic tiles were of an ivory / beige appearance and the difference in the reflected luminance was minimal.

The measured outcomes were from single tiles and it is only indicative of the potential of the anti-slip treatment for ceramic 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 Rubber Type: Four S
Sample Sample Fixed Conditioned with grade P400 paper, dry
Cleaning Antistatic Swipe
Temperature: 23°C
FFT measurements taken over 2 passes of 800mm each

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: | 0.50 | 0.69 |
| Run 2: | Average COF: | 0.51 | 0.68 |
| | Mean COF: | 0.50 | 0.68 |

According to AS/NZS 4586 the dry Coefficient of Friction shall be reported as:
(mean rounded to the nearest 0.05)

| | |
|------|------|
| 0.50 | 0.70 |
|------|------|

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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