

Slip Check to AS 4586-2013 Tundra 3D Light

Report Number: R28662

Report Date: 2 May 2023

Total Number of Pages 3

Accredited for compliance with ISO/IEC 17025 – Testing

NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates

Issued by

Safe Environments Pty Limited
Unit 4, 40 Bessemer Street
Blacktown NSW 2148

Prepared for

DW Tiles
17 Everley Road
Chester Hill NSW 2162

Approved by



Nasser Cura
Authorised Signatory

2 May 2023

Test Report No. R28662

Slip Resistance Classification of New Pedestrian Surface Materials

AS 4586-2013 Appendix A (Wet Pendulum Test)

The slip resistance classification has been determined for unused surfaces under specific conditions. Factors such as usage, cleaning systems, applied coatings and patterns of wear may affect the characteristics of the surface after classification. Standards Australia Handbook 198:2014 *Guide to the specification and testing of slip resistance of pedestrian surfaces* provides guidance for the selection of slip resistant pedestrian surfaces classified in accordance with AS 4586-2013. It is recommended that this test report be read in conjunction with AS 4586, HB 197 & HB 198.

Requested by: DW Tiles
Client Address: 17 Everley Road
Chester Hill NSW 2162
Product Manufacturer: Supplied by DW Tiles
Product Description: Tundra 3D Light

Test conducted according to: AS 4586:2013 Appendix A
Sampling Procedures: Performed by client and tested as received.
Location: 4/40 Bessemer Street, Blacktown NSW 2148
Conducted by: Dylan Anderson

Date: 02 May 2023
Sample: Unfixed
Rubber slider used: Slider 96
Slope of specimen: Tested on a flat level surface
Direction of Test: NA
Temperature: 19°C
Cleaning: None
Conditioned: Grade P 400 paper dry followed by wet lapping film

	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Specimen 5
Mean BPN of last 3 swings:	53	54	46	54	55

Reported SRV of Sample:	52
Class:	P4

The expanded uncertainty (U_{95}) at the 95% level of confidence with a coverage factor (k) of 2 has been estimated to be 3 BPN or 8 %, whichever is the greater; sampling uncertainty has not been included. The expanded uncertainty should be considered when interpreting results or assessing conformity. Results relate only to items tested.

2 May 2023

Test Report No. R28662

Accelerated Wear Slip Resistance Test

AS 4586-2013 Appendix A: incorporating accelerated wear conditioning to evaluate in-service wear

The purpose of the accelerated wear condition is to assist specifiers to better understand how the slip resistance of an individual product may alter with wear, thus helping to differentiate between products that might otherwise have seemingly similar slip resistance characteristics. AS 4586 does not provide guidance on the conduct of such accelerated wear tests; however, Appendix A3 states that “if a product Standard or specification contains a requirement for the permanence of slip resistance, this requirement shall be determined after the appropriate accelerated again or wear testing procedure”. The conditioning protocol primarily used within industry is based on method developed by Strautins¹. The results are intended to be used as an informative guide to the selection of surfaces within a quality management system; please refer to AS 4586, HB 198 and Strautins (2008) for further information.

Test Method: AS 4586 Appendix A:
Test sample description, operating and equipment parameters outlined on previous page

Sample Preparation: Safe Environments in-house SOP – Accelerated Wear Slip Testing

Abrasive pad: 3M Scotchbrite Heavy Duty Scour Pad No. 86 (water wet)

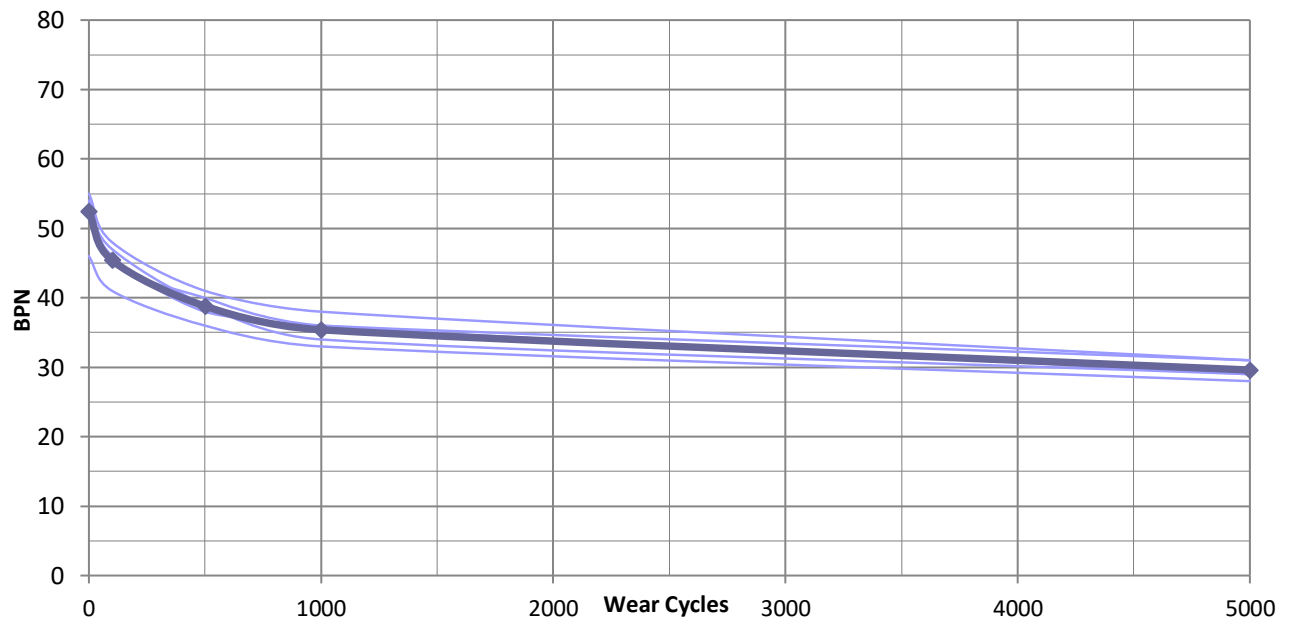
Machine: Gardco D12VFI washability and wear-testing machine

Mass of friction boat: 1000 ±50g Area: 100 ±10mm x 100 ±10mm

Cycle Rate: 50 ±5 cycles per min Path length: 300 ±50 mm

Wear Cycles	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Specimen 5	Mean	Class
0	53	54	46	54	55	52	P4
100	47	45	41	46	48	45	P4
500	39	40	36	38	41	39	P3
1000	34	36	33	36	38	35	P3
5000	29	29	28	31	31	30	P2

BPN vs Wear Cycles



¹ Strautins, Carl J (2008) ‘Sustainable Slip Resistance: An Opportunity for Innovation’, Qualicer ’08, Xth World Congress on Ceramic Tile Quality, Castellon Spain. Publication available upon request.