

## Slip Check to AS 4586-2013 Tundra 3D Light

**Report Number: R28662**

**Report Date: 2 May 2023**

**Total Number of Pages 3**

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**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

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

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

<b>Reported SRV of Sample:</b>	<b>52</b>
<b>Class:</b>	<b>P4</b>

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.

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## Accelerated Wear Slip Resistance Test

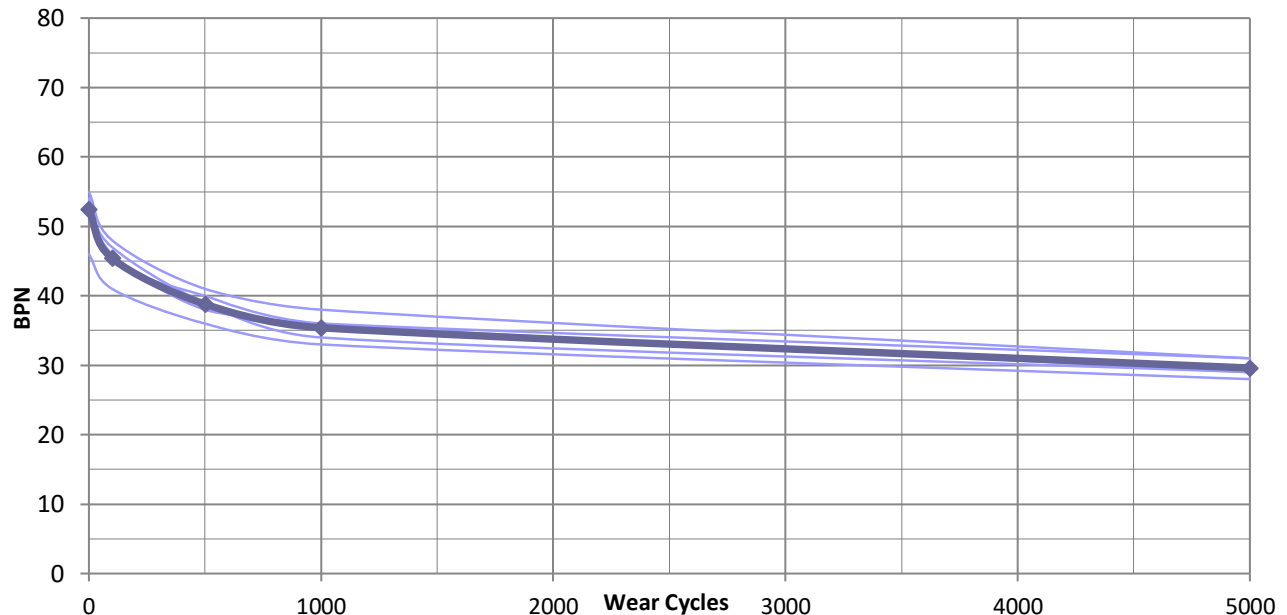
### AS 4586-2013 Appendix A: incorporating accelerated wear conditioning to evaluate in-service wear

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 Strautins<sup>1</sup>. 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



<sup>1</sup> 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.