

Slip Check to AS 4586-2013 Ultimate SurfaceTec

Report Number: R32212

Report Date: 8 October 2024

Total Number of Pages 3

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Accredited for compliance with ISO/IEC 17025 – Testing

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Issued by

Safe Environments Pty Limited
6/7 Inglewood Place
Norwest NSW 2153

Prepared for

DW Tiles
17 Everley Road
Chester Hill NSW 2162

Approved by



Carl Strautins
Authorised Signatory

8 October 2024

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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: Padua
 Product Description: Ultimate SurfaceTec

Test conducted according to: AS 4586:2013 Appendix A
 Sampling Procedures: Performed by client and tested as received.
 Location: 6/7 Inglewood Place, Norwest NSW 2153

Conducted by: Ratan Venkatesan

Date: 08 October 2024 Temperature: 22°C
 Sample: Unfixed Cleaning: None
 Rubber slider used: Slider 96 Conditioned: Grade P 400 paper dry followed by wet lapping film
 Slope of specimen: Tested on a flat level surface
 Direction of Test: N/A

	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Specimen 5
Mean BPN of last 3 swings:	53	52	51	45	49

Reported SRV of Sample:	50
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.

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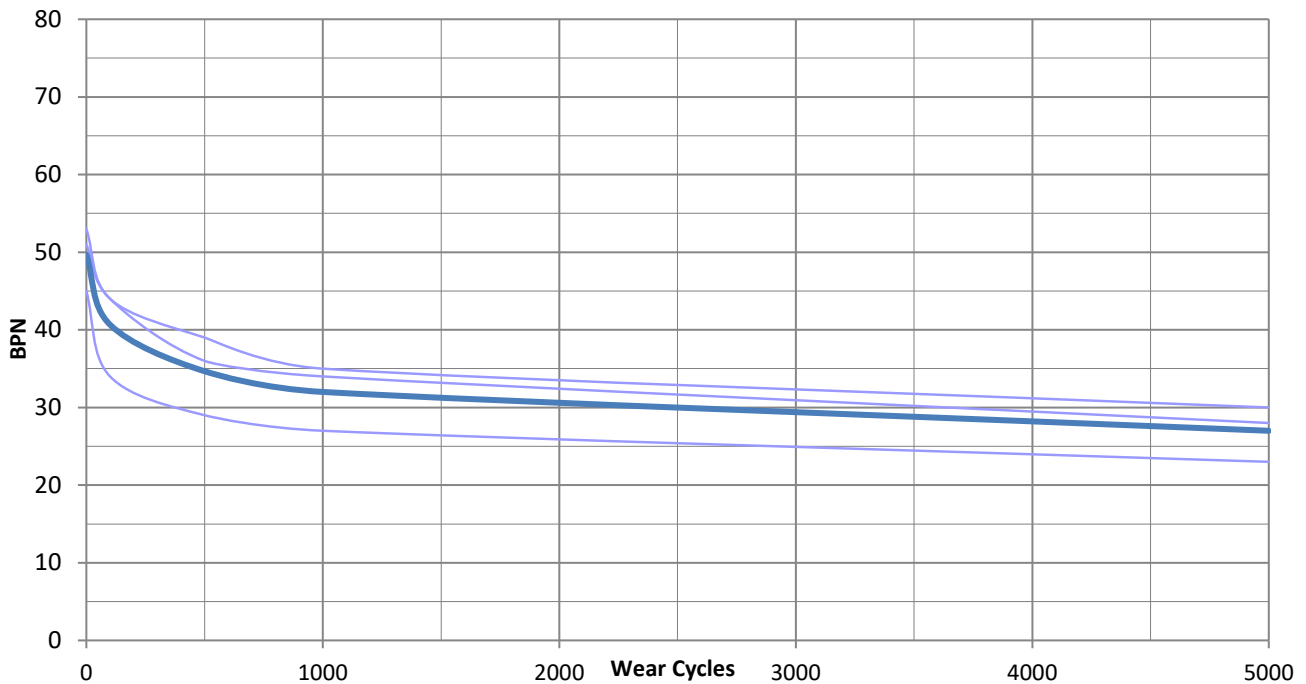
Accelerated Wear Slip Resistance Test

AS 4586-2013 Appendix A: (Modified) 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 4586:2013 does not provide guidance on the conduct of such accelerated wear tests; however, Paragraph 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, assessing the potential classification after wear; please refer to AS 4586, HB 198 and Strautins (2008) for further information.

Test Method:	Safe Environments in-house <i>SOP – Accelerated Wear Slip Testing</i>		
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 3	Specimen 4	Mean BPN	Class
0	53	51	45	50	P5
100	44	44	34	41	P3
500	39	36	29	35	P3
1000	35	34	27	32	P2
5000	30	28	23	27	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.