

Report

Pedestrian Slip Resistance Test

For Wayout Evacuation Systems Pty Ltd, P.O. Box 250 Brighton VIC 3186 Australia

The purpose of this test was to ascertain the suitability of proposed coating for a ramped bicycle path (riders dismounted). The gradient of the ramp is up to 10.8°.

Details

Test specimen:	Coloured recycled glass with 0.3 – 0.8 mm glass chips and one coat of clear UV overspray. See photo.
Specimen supplied by	Way Out Evacuation Systems Pty Ltd, P.O. Box 250 Brighton VIC 3186 Australia
Reference code:	AS4586-2013 Appendix A.
Test Location	Balwyn, Victoria
RH; Temp	
Cleaning procedure	Supplied clean.
Test surface lubricant	Potable water
Tribometer	Wessex British Pendulum
Slider used	Four S rubber
Tribometrist	Rodney Hunter
Slider bevel width	0.75 mm increasing with successive traversals, through wear, to 3 mm.
Test Date	22 September, 2013
Gradient of sample	0°
Test procedure	Minimum of five traversals of the sample was conducted in four orthogonally opposite directions.

Results

Direction	BPN Ave. (SRV)	Class.	Adjustment for slope			
			10.8°		12°	
			SRV	Class.	SRV	Class.
1–2 *	82	P5	66	P5	64	P5
2–1	78	P5	62	P5	60	P5
3–4	78	P5	62	P5	60	P5
4–3	80	P5	64	P5	62	P5
3–4 *	76	P5	59	P5	57	P5
Ave.	79	P5	62	P5	59	P5

* Slider bevel conditioned

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Comments

Conditioning the slider bevel to a smooth surface had negligible effect due to the aggressive abrasion of the rubber slider by the specimen. Conditioning was therefore conducted only for directions 1—2 and 3—4, as indicated in the results table.

The rubber of the test slider used here does not necessarily match the rubber of footwear soles used by cyclists, and is quite different to the polymer cleats of bicycle shoes worn by some cyclists.

Conclusion

Class P5 is equivalent to Class V in the previous version of AS 4586. HB197 - 1999 'Introductory guide to the slip resistance of pedestrian surface materials' states that Class V corresponds with a 'very low contribution to the risk of slipping when wet'. The tested sample if used on a slope of 10.8° would correspond with this risk assessment.

It is proposed by the Australian Building Codes Board that the Building Code of Australia in 2014 stipulate that ramps with a gradient steeper than 4.1° (1 in 14) have a slip resistance rating of at least P5. The specimen would therefore satisfy the proposed BCA requirement.

Rodney Hunter

16 December, 2013