

13 February 2017



BAM Stone
PO Box 156
Port Fairy VIC 3284

Attention: Tony Rowe

Basalt Cobbles

- Determination of Slip Resistance

Client reference: Request Tony Rowe

Our reference: BAM0217-1

Investigating officer: Kate Tonkin

Report prepared by: Kate Tonkin

James P Mann
Laboratory Manager



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1. INTRODUCTION

A request was received from the client to determine the slip resistance of a basalt cobble sample. The sample supplied was identified as follows:

- Basalt Cobble (our reference B139)

2. TEST PROGRAM

Slip resistance was determined in accordance with Appendix A of AS 4586:2013 “Slip resistance classification of new pedestrian surface materials”. Testing was carried out at five sites in a wet condition using a British Pendulum fitted with a Slider 96 (4S) rubber slider¹.

3. RESULTS

Results are summarised in the table below. Full test data are detailed in Appendix A of this report.

Property	Basalt Cobbles
Slip Resistance AS 4586:2013	
– Classification	P5
– Slip Resistance Value (SRV)	67 (BPN 65 - 70)

4. DISCUSSION

The Basalt Cobbles achieved an SRV of 67 attaining a P5 classification (SRV >54). According to Table 3B of the Standards Australia handbook HB198-2014² the surface finish is suitable for locations³ that include:

- External walkways including ramps, sloping driveways, footpaths etc., including those steeper than 1 in 14
- Loading docks undercover and commercial kitchens
- Swimming pool ramps and stairs leading to water

¹ Slider expiry date: 1 September 2017

² Guide to the specification and testing of slip resistance of pedestrian surfaces

³ 5.2 of HB198 states: “The use of these values should be in the context of design, which also considers abnormal wear, maintenance, abnormal contamination, the presence (or otherwise) of water or other lubricants, the nature of the pedestrian traffic (including age, gait and crowding), the footwear (or lack thereof), slope lighting and handrails.”

Appendix A

Test Certificates



WET SLIP RESISTANCE (AS 4586:2013 APP A) Test Certificate

TEST METHOD	AS 4586:2013 Appendix A (Wet Pendulum)		
TEST DATE	13-Feb-17		
CLIENT	BAM Stone		
OUR REFERENCE	BAM0217-1		
SAMPLE	Basalt Cobbles		
SURFACE FINISH	Cobblestone		
SAMPLE ORIGIN	Not Known		
SAMPLING DATE	1/02/2017	SAMPLE LOCATION	Not Known
SHAPE and NOMINAL SIZE	Prism: 100mm x 100mm		
AIR TEMPERATURE	22.1 °C	TEST SITE	SI Laboratory
WEATHER	Not Applicable		
TEST TYPE	Unfixed		
ANGLE OF TEST	Horizontal		
SLIDER TYPE	Slider 96	SLIDER EXPIRY	01-Sep-17
SLIDER PREPARATION	Slider passed 3x over 400 grit paper, 10x over 3mic lapping film.		
SURFACE PREPARATION	Washed with potable water and cloth		
SURFACE CONDITION	As supplied		

Test Number	Orientation	BPN Readings	Mean
S12807	B139/1 Random	72, 70, 69, 69, 69	69
S12808	B139/2 Random	73, 71, 70, 70, 69	70
S12809	B139/3 Random	66, 66, 65, 65, 65	65
S12810	B139/4 Random	65, 65, 65, 65, 65	65
S12811	B139/5 Random	66, 65, 65, 65, 66	65

MEAN Wet SLIP RESISTANCE VALUE (SRV): 67 ±2 (U95)
SLIP RESISTANCE CLASSIFICATION: P5

NOTE: The expanded measurement uncertainty values (u95) quoted in this report are at a confidence level of 95 % with a nominal coverage factor of 2. These values do not include any estimate of the effects associated with sampling.

COMMENTS/VARIATIONS

TESTED BY: Kate Tonkin

APPROVED SIGNATORY:

NAME: James P Mann



ISSUE DATE: 13-Feb-17



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