

# FINAL REPORT

CERTIFICATE No.: 24834



Boral Cement Limited  
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**TEST CERTIFICATE OF:** Tarong Daily Despatch Grade 1 Fly Ash  
**PRODUCED AT:** Boral Cement Limited Tarong  
**TESTED AT:** Berrima Works Laboratory  
**SAMPLE IDENTIFICATION:** TDDFA2301612  
**DATE DESPATCHED:** 3/05/2023

PROPERTY	REQUIREMENTS OF AS 3582.1 - Grade 1	RESULT
Fineness (AS 3583.3)	≥ 75 %	84 %
LOI (AS 3583.3)	≤ 4.0 %	2.6 %
Moisture (AS 3583.2)	≤ 0.5 %	< 0.1 %
SO <sub>3</sub> (AS 2350.2)	≤ 3.0 %	< 0.1 %
SiO <sub>2</sub> (AS 2350.2)		69.5 %
Al <sub>2</sub> O <sub>3</sub> (AS 2350.2)		23.2 %
Fe <sub>2</sub> O <sub>3</sub> (AS 2350.2)		2.0 %
Chemical Composition (AS 2350.2)	≥ 70 %	95 %
Total Alkali (AS 2350.2)		0.5 %
Cl (AS 2350.2)	≤ 0.1 %	0.01 %

## REMARKS

Sampling not carried out by laboratory. Samples tested as received.



Accredited for compliance with ISO/IEC 17025 - Testing

A handwritten signature in blue ink, appearing to read "Marc Smith".

Marc Smith  
Technical Services Manager

**Boral Construction Materials  
Materials Technical Services**Unit 4, 3-5 Gibbon Road  
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PO Box 400, Winston Hills NSW 2153

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[boral.com.au](http://boral.com.au)**TEST REPORT – FLYASH****CLIENT:** BORAL CEMENT – (TECHNICAL)**FILE NO:** 50/23**ADDRESS:** 39 Delhi Road, North Ryde, NSW 2113**REQUEST NO:** 105759**SAMPLE IDENTIFICATION:** TDDFA2301612**LAB SAMPLE NO:** 283757**SOURCE OF SAMPLE:** Boral Cement - Berrima**DATE SAMPLED:** 03/05/2023**DATE RECEIVED:** 16/05/2023**IDENTIFICATION OF CEMENT USED:** Boral Cement SL Berrima Ref. 2022**TEST METHOD:** AS 3583: Methods of test for supplementary cementitious materials for use with Portland cement

PROPERTY	DATE TESTED	RESULT	TEST METHOD
Relative density	17/05/2023	2.11	AS 3583.5
Relative water requirement	18/05/2023	102%	AS 3583.6
Relative strength 7 days (accelerated)	25/05/2023	93%	AS 3583.6

**Note:**

- Sample supplied by the client and tested as received.

Marc Smith, Parisa Sowti, Violeta Paicu, Stephanie Koehler, Mat. File, File

Approved Signatory



Julius Alvaro

Date

27/05/2023

Serial No.

CEM105759.JA.1



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Test results in this Test Report relate only to the samples tested.**NATA Accredited Laboratory  
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**TEST REPORT**

CLIENT: BORAL CEMENT – TECHNICAL  
39 Delhi Road, North Ryde, NSW 2113.

FILE No.:50/23

PROJECT: Testing of Fly ash samples for R.W, R.S, Density and Available Alkali.

REQUEST No.: 105759

**TEST PROCEDURE:**

AS 3583.12 – 1991 – Determination of Available Alkali

Laboratory Sample No.: 283757  
Date Sampled: 03/05/2023  
Date Received: 16/05/2023  
Date Tested: 19/06/2023  
Sample Description: TDDFA2301612

Field No.: 1

**TEST RESULTS:**

Sodium as Na<sub>2</sub>O (%) 0.01  
Potassium as K<sub>2</sub>O (%) 0.09  
Available Alkali (%) 0.1

Available Alkali (%) = Na<sub>2</sub>O (%) + (0.658 x K<sub>2</sub>O %)

**Note:**

- Sample was provided by the Client and tested as received.

Marc Smith, Parisa Sowti, Violeta Paicu, Stephanie Koehler, Mat.File, File.

Nanthini Selvadurai

Approved Signatory \_\_\_\_\_

Date 19-06-23 Serial No. CHEM105759.NS.1



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