

## FINAL REPORT

CERTIFICATE No.: 25429



Boral Cement Limited

N 62 008 528 523

Taylor Avenue New Berrima NSW 2577

Locked Bag 4 New Berrima NSW 2577

T +61 2 4860 2222

**TEST CERTIFICATE OF:** Tarong Daily Despatch Grade 1 Fly Ash  
**PRODUCED AT:** Boral Cement Limited Tarong  
**TESTED AT:** Berrima Works Laboratory  
**SAMPLE IDENTIFICATION:** TDDFA2304653  
**DATE DESPATCHED:** 6/10/2023

PROPERTY	REQUIREMENTS OF AS 3582.1 - Grade 1	RESULT
Fineness (AS 3583.1)	≥ 75 %	87 %
LOI (AS 3583.3)	≤ 4.0 %	1.6 %
Moisture (AS 3583.2)	≤ 0.5 %	0.2 %
SO <sub>3</sub> (AS 2350.2)	≤ 3.0 %	< 0.1 %
SiO <sub>2</sub> (AS 2350.2)		72.8 %
Al <sub>2</sub> O <sub>3</sub> (AS 2350.2)		21.8 %
Fe <sub>2</sub> O <sub>3</sub> (AS 2350.2)		1.7 %
Chemical Composition (AS 2350.2)	≥ 70 %	96 %
Total Alkali (AS 2350.2)		0.3 %
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

Marc Smith  
Technical Services Manager



**Boral Construction Materials  
Materials Technical Services**Unit 4, 3-5 Gibbon Road  
Baulkham Hills NSW 2153 Australia

PO Box 400, Winston Hills NSW 2153

T +61 (02) 9624 9900

[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:** 108911**SAMPLE IDENTIFICATION:** TDDFA2304653**LAB SAMPLE NO:** 293507**SOURCE OF SAMPLE:** Boral Cement - Berrima**DATE SAMPLED:** 06/10/2023**DATE RECEIVED:** 07/11/2023**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	14/11/2023	2.11	AS 3583.5
Relative water requirement	16/11/2023	102%	AS 3583.6
Relative strength 7 days (accelerated)	23/11/2023	98%	AS 3583.6

**Note:**

- Sample supplied by the client and tested as received.

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

Approved Signatory



Sam El-Hamawi

Date

4/12/23

Serial No.

CEM108911.SE.1

Accredited for compliance with ISO/IEC 17025 – Testing

This report shall not be reproduced in full without the approval of the Boral MTS Laboratory.

Test results in this Test Report relate only to the samples tested.



NATA Accredited Laboratory

Number: 547





**Boral Construction Materials  
Materials Technical Services**

Unit 4, 3-5 Gibbon Road  
Baulkham Hills NSW 2153 Australia  
PO Box 400, Winston Hills NSW 2153

T: +61 (02) 9624 9900

F: +61 (02) 9624 9999

www.boral.com.au

**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.: 108911

**TEST PROCEDURE:**

AS 3583.12 – 1991 – Determination of Available Alkali

Laboratory Sample No.: 283507  
Date Sampled: 06/10/2023  
Date Received: 07/11/2023  
Date Tested: 12/12/2023  
Sample Description: TDDFA2304653

Field No.: 1

**TEST RESULTS:**

Sodium as Na<sub>2</sub>O (%) 0.01  
Potassium as K<sub>2</sub>O (%) 0.07  
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 Koehier, Mat.File, File.



Approved Signatory

Nanthini Selvadurai

Date 12 - 12 - 23

Serial No. CHEM108911.NS.1

NATA Accredited Laboratory

Accredited for compliance with ISO/IEC 17025 - Testing  
This report shall not be reproduced except in full without the approval of the Boral MTS Laboratory  
Test results in this Test Report relate only to the samples tested

Number: 9968