

## FINAL REPORT

CERTIFICATE No.: 24767



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: TDDFA2301291  
DATE DESPATCHED: 5/04/2023

PROPERTY	REQUIREMENTS OF AS 3582.1 - Grade 1	RESULT
Fineness (AS 3583.3)	$\geq$ 75 %	85 %
LOI (AS 3583.3)	$\leq$ 4.0 %	2.2 %
Moisture (AS 3583.2)	$\leq$ 0.5 %	< 0.1 %
SO <sub>3</sub> (AS 2350.2)	$\leq$ 3.0 %	< 0.1 %
SiO <sub>2</sub> (AS 2350.2)		72.4 %
Al <sub>2</sub> O <sub>3</sub> (AS 2350.2)		21.7 %
Fe <sub>2</sub> O <sub>3</sub> (AS 2350.2)		1.6 %
Chemical Composition (AS 2350.2)	$\geq$ 70 %	96 %
Total Alkali (AS 2350.2)		0.5 %
Cl (AS 2350.2)	$\leq$ 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

**TEST REPORT – FLYASH****CLIENT:** BORAL CEMENT – (TECHNICAL)**FILE NO:** 50/23**ADDRESS:** 39 Delhi Road, North Ryde, NSW 2113**REQUEST NO:** 105278**SAMPLE IDENTIFICATION:** TDDFA2301291**LAB SAMPLE NO:** 282375**SOURCE OF SAMPLE:** Boral Cement - Berrima**DATE SAMPLED:** 05/04/2023**DATE RECEIVED:** 17/04/2023**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	20/04/2023	2.06	AS 3583.5
Relative water requirement	04/05/2023	101%	AS 3583.6
Relative strength 7 days (accelerated)	11/05/2023	92%	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 C. Alvaro Julius Alvaro  
Date 12/05/2023 Serial No. CEM105278.JA.2

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



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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.: 105278

**TEST PROCEDURE:**

AS 3583.12 – 1991 – Determination of Available Alkali

Laboratory Sample No.: 282375  
Date Sampled: 05/04/2023  
Date Received: 17/04/2023  
Date Tested: 18/05/2023  
Sample Description: TDDFA2301291

Field No.: 2

**TEST RESULTS:**

Sodium as Na<sub>2</sub>O (%) 0.01  
Potassium as K<sub>2</sub>O (%) 0.10  
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 19-05-23

Serial No.

CHEM105278.NS.1

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Number: 9968

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