

# FINAL REPORT

CERTIFICATE No.: 24973



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:** TDDFA2302228  
**DATE DESPATCHED:** 6/06/2023

PROPERTY	REQUIREMENTS OF AS 3582.1 - Grade 1	RESULT
Fineness (AS 3583.3)	≥ 75 %	82 %
LOI (AS 3583.3)	≤ 4.0 %	1.9 %
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)		70.0 %
Al <sub>2</sub> O <sub>3</sub> (AS 2350.2)		23.8 %
Fe <sub>2</sub> O <sub>3</sub> (AS 2350.2)		1.9 %
Chemical Composition (AS 2350.2)	≥ 70 %	96 %
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**

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TEST REPORT – FLYASH
**CLIENT:** BORAL CEMENT – (TECHNICAL)

**FILE NO:** 50/23

**ADDRESS:** 39 Delhi Road, North Ryde, NSW 2113

**REQUEST NO:** 106513

**SAMPLE IDENTIFICATION:** TDDFA2302228

**LAB SAMPLE NO:** 286116

**SOURCE OF SAMPLE:** Boral Cement - Berrima

**DATE SAMPLED:** 06/06/2023

**DATE RECEIVED:** 26/06/2023

**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	30/06/2023	2.07	AS 3583.5
Relative water requirement	06/07/2023	100%	AS 3583.6
Relative strength 7 days (accelerated)	13/07/2023	91%	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 \_\_\_\_\_

Sam El-Hamawi

 Date 22/7/23

 Serial No. CEM106513.SE.1




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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.: 106513

**TEST PROCEDURE:**

AS 3583.12 – 1991 – Determination of Available Alkali

Laboratory Sample No.: 286116  
Date Sampled: 06/06/2023  
Date Received: 26/06/2023  
Date Tested: 28/07/2023  
Sample Description: TDDFA2302228

Field No.: 1

**TEST RESULTS:**

Sodium as Na<sub>2</sub>O (%) 0.03  
Potassium as K<sub>2</sub>O (%) 0.14  
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 28-07-23

Serial No. CHEM106513.NS.1



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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

NATA Accredited Laboratory

Number: 9968