

# FINAL REPORT

CERTIFICATE No.: 25479



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:** TDDFA2304953  
**DATE DESPATCHED:** 9/11/2023

PROPERTY	REQUIREMENTS OF AS 3582.1 - Grade 1	RESULT
Fineness (AS 3583.1)	≥ 75 %	90 %
LOI (AS 3583.3)	≤ 4.0 %	2.4 %
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)		74.6 %
Al <sub>2</sub> O <sub>3</sub> (AS 2350.2)		19.9 %
Fe <sub>2</sub> O <sub>3</sub> (AS 2350.2)		1.3 %
Chemical Composition (AS 2350.2)	≥ 70 %	96 %
Total Alkali (AS 2350.2)		0.4 %
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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[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: 109329

SAMPLE IDENTIFICATION: TDDFA2304953

LAB SAMPLE NO: 295015

SOURCE OF SAMPLE: Boral Cement - Berrima

DATE SAMPLED: 09/11/2023

DATE RECEIVED: 28/11/2023

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	06/12/2023	2.10	AS 3583.5
Relative water requirement	07/12/2023	101%	AS 3583.6
Relative strength 7 days (accelerated)	14/12/2023	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

18/12/23

Serial No.

CEM109329.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.: 109329

**TEST PROCEDURE:**

AS 3583.12 – 1991 – Determination of Available Alkali

Laboratory Sample No.: 295015  
Date Sampled: 09/11/2023  
Date Received: 28/11/2023  
Date Tested: 02/01/2024  
Sample Description: TDDFA2304953

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.



Approved Signatory  Nanthini Selvadurai  
Date 03-01-24 Serial No. CHEM109329.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