

# STANDARD FLY ASH CERTIFICATE



**MILLMERRAN  
FLYASH**  
SUSTAINABLE STRENGTH

**FINAL**  
Prior Reports: None

**Certificate Number:** CERT233777  
**Issued:** 15 November 2023

**Independent Flyash Brokers Pty Ltd**  
Head Office  
431 Moffatt Reserve  
Millmerran QLD 4357  
Tel : (07) 4695 6033  
Fax: (07) 4695 6133  
www.mflyash.com.au

**Product being certified:** Independent Flyash Broker Monthly Grab Fly Ash  
**Product sample date:** 24-Oct-2023  
**Sample Identification:** Sample Code: 23101168  
**Source Power Station:** Millmerran Power Station  
**Sample Condition:** Tested as Received. Testing Commenced on 27-Oct-2023  
**Certifying Laboratory:** Cement Australia - Darra Laboratory,  
18 Station Avenue, Darra Queensland 4076 Australia.

## Test Results

Test	Moisture %	Fineness @ 45 micron % Passed	Loss on Ignition %	Sulfuric Anhydride %	Available Alkali %	Chloride Ion %	Chemical Composition %
Result	< 0.1	89	0.1	0.1	Not Tested	< 0.002	95.0
Test Method	AS3583.2	AS3583.1	AS3583.3	AS2350.2	AS3583.12	AS3583.13	AS2350.2
AS 3582.1	0.5 % Maximum	75% Minimum	4.0 % Maximum	3.0 % Maximum	-	0.1 % Maximum	70% Minimum

Test	Relative Density	Relative Water Requirement %	Strength Index 7 Day Acc. %	Reference Cement Details
Result	1.93	93	93	Identification:: 23101257 Source: Goliath GP
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP
AS 3582.1	-	-	75% Minimum	Sample Date: 30-Oct-23

## Additional Testing - Oxides

Test	CaO by XRF %	SiO <sub>2</sub> by XRF %	Al <sub>2</sub> O <sub>3</sub> by XRF %	Fe <sub>2</sub> O <sub>3</sub> by XRF %	SO <sub>3</sub> by XRF %	MgO by XRF %	Na <sub>2</sub> O by XRF %
Result	1.8	58.6	33.4	3.0	0.1	1.3	0.44
Test Method	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2

Test	K <sub>2</sub> O by XRF %	SrO by XRF %	TiO <sub>2</sub> by XRF %	P <sub>2</sub> O <sub>5</sub> by XRF %	Mn <sub>2</sub> O <sub>3</sub> by XRF %	Total Alkali (NaEQ) %
Result	0.61	<0.1	1.7	0.2	< 0.1	0.84
Test Method	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2

This sample grade conforms to the following requirements of AS 3582.1:2016

Special	Grade 1	Grade 2
	X	

**Approved Signatory**

*V Connell*

V Connell  
Signatory - Cement Australia  
Chemical Testing  
Construction Materials Testing

Accredited for compliance with ISO/IEC 17025 - Testing  
NATA is a signatory to the ILAC Mutual Recognition  
Arrangement for the mutual recognition of the  
equivalence of testing, medical testing, calibration,  
inspection, proficiency testing scheme providers and  
reference materials producers reports and certificates.



Laboratory accreditation number: 188  
Laboratory accreditation number: 187

Notes:

