

# STANDARD FLY ASH CERTIFICATE



**MILLMERRAN  
FLYASH**  
SUSTAINABLE STRENGTH

**FINAL**  
Prior Reports: None

**Certificate Number:** CERT240179  
**Issued:** 24 January 2024

**Independent Flyash Brokers Pty Ltd**

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**Product being certified:** Independent Flyash Broker Monthly Grab Fly Ash  
**Product sample date:** 20-Dec-2023  
**Sample Identification:** Sample Code: 23121029  
**Source Power Station:** Millmerran Power Station  
**Sample Condition:** Tested as Received. Testing Commenced on 20-Dec-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	0.3	0.1	Not Tested	0.002	94.8
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	1.94	95	96	Identification:: 23121096 Source: Goliath GP
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP
AS 3582.1	-	-	75% Minimum	Sample Date: 22-Dec-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	1.7	58.1	34.3	2.4	0.1	0.9	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	0.78	<0.1	1.8	0.2	< 0.1	0.95
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**



A Prem  
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**

WORLD RECOGNISED  
ACCREDITATION

Notes:

