

## **Test Certificate**

Lot 242 Russell Road East, Munster WA 6166 PO Box 38, Hamilton Hill WA 6963 T: +61 8 9411 1000 F: +61 8 9411 1150

Final

**Product Certified:** Ground Granulated Blast Furnace Slag

Test Certificate Number: 180895

**Despatched From:** Cockburn Cement, Port Hedland Plant, WA

Sample Code: B066d28
Sample Date: 3/09/2018

Nominal Blend	Requirements	Result
Ground Granulated Iron Blast-Furnace Slag		>95 %
Calcium Sulphate		<5 %

Reportable Property	Test Method	Requirements of	Result
		AS3582.2	
Alumina (Al <sub>2</sub> O <sub>3</sub> )	AS2350.2	Max 18.0 %	17.2 %
Total Iron (FeO)	AS2350.2	N/R	0.4 %
Magnesia (MgO)	AS2350.2	Max 15.0 %	10.9 %
Total Alkali (Na₂O Equivalent)	AS2350.2	N/R	0.6 %
Manganese (MnO)	ASTM C114	N/R	0.6 %
Sulfate (as SO <sub>3</sub> ) content	AS3583.8	N/R	<0.1%
Sulfide Sulfur (S)	AS3583.7	Max 1.5 %	0.8 %
Chloride Ion Content	AS3583.13	Max 0.1 %	0.005 %
Loss on Ignition	AS3583.3	N/R	-0.9 %
Insoluble Residue	AS3583.14	N/R	0.2 %
45 μm Residue	AS3583.1	N/R	97 % passing
Relative Density	AS3583.5	N/R	2.93
Relative Water Requirement	AS3583.6	N/R	100 %
Strength Index	AS3583.6	N/R	107 %
Other Properties			
SiO <sub>2</sub>	AS2350.2	N/R	31.3 %
CaO	AS2350.2	N/R	36.8 %
Fineness Index	AS2350.8	N/R	405 m²/kg

This document shall not be reproduced except in full.

## REMARKS

These test results apply specifically to the above designated sample as received at the Adelaide Brighton Cement Birkenhead Laboratory (Accredited number: 252), 62 Elder Rd Birkenhead SA 5015.

For Relative Water and Strength Index testing the reference control used is Birkenhead GP code B**06812b**.

This despatch grab sample complies to the requirements of AS3582.2:2016, Ground Granulated Blast Furnace Slag. N/R = No Requirement



Accredited for compliance with ISO/IEC 17025 - Testing. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory

F. Pope

Issue Date: 28/11/2018