

## **Cement Test Certificate**

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Final

ABN 50 006 673 470

Product Certified:
Test Certificate Number:
Produced At:
Sample Code:
Sample Date:

Type HE High Early Strength Cement (Creme) 180417 Cockburn Cement, Kwinana Plant, WA B06308f 10/04/2018

Nominal Blend	Requirements	Result
Clinker		>86.5 %
Ground Granulated Iron Blast-Furnace Slag		Nil
Mineral Addition	Max 7.5 %	<5 %
Calcium Sulphate		<5 %
Minor Additional Constituents	Max 5 %	Nil

Poportable Droparty	Test Method	<b>Requirements of</b>	Pocult	
Reportable Property	Test Method	AS3972	Result	
3 Day Strength	AS2350.11	Min 25.0 MPa	38.3 MPa	
7 Day Strength	AS2350.11	Min 40.0 MPa	50.9 MPa	
28 Day Strength	AS2350.11	N/R	61.8 MPa	
Initial Set Time	AS2350.4	Min 45 min	105 min	
Final Set Time	AS2350.4	Max 360 min	180 min	
Soundness	AS2350.5	Max 5 mm	1 mm	
Sulfuric Anhydride content (SO <sub>3</sub> )	AS2350.2	Max 3.5 %	3.4 %	
Chloride Ion	BH-TM-0507	Max 0.10 %	0.008 %	
Other Properties				
SiO <sub>2</sub>	AS2350.2	N/R	21.9 %	
Al <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	3.7 %	
Fe <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	0.4 %	
CaO	AS2350.2	N/R	64.0 %	
MgO	AS2350.2	N/R	1.0 %	
Na <sub>2</sub> O Equivalent	AS2350.2	N/R	0.5 %	
Loss on Ignition	AS2350.2	N/R	4.0 %	
Fineness Index	AS2350.8	N/R	395 m²/kg	
Normal Consistency	AS2350.3	N/R	28.0 %	
Brightness (L)*	MU-TM-2614	N/R	86	

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## REMARKS

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

This despatch grab sample complies to the requirements of AS3972:2010, Type HE Cement.

\*NATA accreditation 252 does not cover the performance of this service.

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:

29/05/2018