



ABN 50 006 673 470

# Cement Test Certificate

Final

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**Product Certified:** Type LH Low Heat Cement  
**Test Certificate Number:** 200400  
**Produced At:** Cockburn Cement, Kwinana Plant, WA  
**Sample Code:** B07aac2  
**Sample Date:** 19/08/2020

| Nominal Blend                             | Requirements | Result |
|---|--------------|--------|
| Clinker                                   |              | 30%    |
| Ground Granulated Iron Blast-Furnace Slag |              | 65%    |
| Mineral Addition                          | Max 7.5 %    | Nil    |
| Calcium Sulphate                          |              | <5 %   |
| Minor Additional Constituents             | Max 5 %      | Nil    |

| Reportable Property                           | Test Method | Requirements of AS3972 | Result   |
|---|-------------|------------------------|----------|
| 3 Day Strength                                | AS2350.11   | N/R                    | 16.8 MPa |
| 7 Day Strength                                | AS2350.11   | Min 10.0 MPa           | 30.8 MPa |
| 28 Day Strength                               | AS2350.11   | Min 30.0 MPa           | 53.8 MPa |
| Initial Set Time                              | AS2350.4    | Min 45 min             | 150 min  |
| Final Set Time                                | AS2350.4    | Max 600 min            | 255 min  |
| Soundness                                     | AS2350.5    | Max 5 mm               | 0 mm     |
| Sulfuric Anhydride content (SO <sub>3</sub> ) | AS3583.8    | Max 3.5 %              | 2.2 %    |
| Chloride Ion                                  | BH-TM-0507  | Max 0.10 %             | 0.012 %  |
| Peak Temp Rise                                | AS2350.7    | Max 23 °C              | 22.8 °C  |

### Other Properties

|                                |          |     |                        |
|--------------------------------|----------|-----|------------------------|
| SiO <sub>2</sub>               | AS2350.2 | N/R | 28.6 %                 |
| Al <sub>2</sub> O <sub>3</sub> | AS2350.2 | N/R | 10.1 %                 |
| Fe <sub>2</sub> O <sub>3</sub> | AS2350.2 | N/R | 1.6 %                  |
| CaO                            | AS2350.2 | N/R | 50.1 %                 |
| MgO                            | AS2350.2 | N/R | 4.3 %                  |
| Na <sub>2</sub> O Equivalent   | AS2350.2 | N/R | 0.5 %                  |
| Loss on Ignition               | AS2350.2 | N/R | 1.2 %                  |
| Fineness Index                 | AS2350.8 | N/R | 405 m <sup>2</sup> /kg |
| Normal Consistency             | AS2350.3 | N/R | 33.2 %                 |

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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 LH Cement.

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

M. Wythe

Issue Date: 29/09/2020