

CERTIFICATE OF ANALYSIS

**CERTIFICATE No.** 0827-18  
**TEST CERTIFICATE FOR:** Flyash Blend 25  
**PRODUCED AT:** Sunstate Cement Ltd, Port of Brisbane  
**SAMPLE IDENTIFICATION:** Spot Despatch Sample sample F6P-001169 sampled on 16/4/2018  
**SAMPLE TESTED AT:** Sunstate Cement Ltd, Port of Brisbane

| SPECIFIED PROPERTY                     | TEST METHOD          | AS3972 REQUIREMENTS |          | RESULT   |
|--|----------------------|---------------------|----------|----------|
| Compressive strength                   | AS2350.11, AS2350.12 |                     |          |          |
| 3 day                                  |                      |                     |          | 30.2 MPa |
| 7 day                                  |                      | Minimum             | 20 MPa   | 40.3 MPa |
| 28 day                                 |                      | Minimum             | 35 MPa   | 59.1 MPa |
| Setting time                           | AS2350.4             |                     |          |          |
| Initial                                |                      | Minimum             | 45 mins  | 135 mins |
| Final                                  |                      | Maximum             | 600 mins | 210 mins |
| Soundness                              | AS2350.5             | Maximum             | 5 mm     | 1 mm     |
| Sulphuric anhydride (SO <sub>3</sub> ) | In House             | Maximum             | 3.5 %    | 2.3 %    |

| REPORTABLE PROPERTY | TEST METHOD |  |  | RESULT                 |
|---------------------|-------------|--|--|------------------------|
| Loss on ignition    | AS2350.2    |  |  | 2.5 %                  |
| Fineness            | AS2350.8    |  |  | 445 m <sup>2</sup> /kg |
| Chloride            | AS3583.13   |  |  | 0.0059 %               |

| OTHER PROPERTIES   | TEST METHOD |  |  | RESULT |
|--------------------|-------------|--|--|--------|
| Normal Consistency | In House    |  |  | 32.2 % |

**SAMPLING PROCEDURE:** Cement samples obtained according to the requirements of AS2350.1

**REMARKS:** The results of the above tests relate only to the sample as described above.  
The blended cement is produced with a nominal 25% fly ash content.



**G Santaguiliana**  
**Approved Signatory**  
**24-May-2018**



NATA accredited laboratory  
Laboratory Number: 2190 / 2191  
Accredited for compliance with  
ISO/IEC 17025  
The results of the tests,  
calibrations and/or measurements  
included in this document are  
traceable to Australian/national  
standards. This document shall  
not be reproduced except in full.