

CERTIFICATE OF ANALYSIS

CERTIFICATE No. 0168-18
TEST CERTIFICATE FOR: Flyash Blend 25
PRODUCED AT: Sunstate Cement Ltd, Port of Brisbane
SAMPLE IDENTIFICATION: Spot Despatch Sample sample F6P-001151 sampled on 12/2/2018
SAMPLE TESTED AT: Sunstate Cement Ltd, Port of Brisbane

| SPECIFIED PROPERTY | TEST METHOD | AS3972 REQUIREMENTS | | RESULT |
|--|----------------------|---------------------|----------|----------|
| Compressive strength | AS2350.11, AS2350.12 | | | |
| 3 day | | | | 32.4 MPa |
| 7 day | | Minimum | 20 MPa | 43.4 MPa |
| 28 day | | Minimum | 35 MPa | 57.7 MPa |
| Setting time | AS2350.4 | | | |
| Initial | | Minimum | 45 mins | 105 mins |
| Final | | Maximum | 600 mins | 210 mins |
| Soundness | AS2350.5 | Maximum | 5 mm | 0 mm |
| Sulphuric anhydride (SO ₃) | In House | Maximum | 3.5 % | 1.9 % |

| REPORTABLE PROPERTY | TEST METHOD | | | RESULT |
|---------------------|-------------|--|--|------------------------|
| Loss on ignition | AS2350.2 | | | 1.9 % |
| Fineness | AS2350.8 | | | 410 m ² /kg |
| Chloride | AS3583.13 | | | 0.0121 % |

| OTHER PROPERTIES | TEST METHOD | | | RESULT |
|--------------------|-------------|--|--|--------|
| Normal Consistency | In House | | | 31.8 % |

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
9-Apr-2018

