

CERTIFICATE of ANALYSIS



FINAL
Prior Reports: None

Cement Australia
PO Box 802
Mt Ommaney, Qld, 4074
Australia
Telephone: +61 7 3335 3266
Fax: +61 7 3335 3227

Certificate Number: CERT180048
Issued: 15, January 2018

Material being certified: Cement Type I
Material sample date: 28-Nov-2017
Sample Identification: Sample Code: 17111393
Description: Sample supplied by Customer - SCG Trading
Testing Conditions: As received at Cement Australia Darra Laboratory,
18 Station Avenue, Darra Queensland 4076 Australia. Testing commenced on 01-Dec-17

Test Results

Test	Fineness Index m ² /kg	Residue 45µm Sieve %	Normal Consistency ² %	Setting Time Initial ² min	Setting Time Final ² min	Soundness ¹ mm	Loss on Ignition %
Result	330	6.8	28.3	135	195	2	2.0
Standard	AS/NZS 2350.8:2006	AS/NZ 2350.9:2006	AS/NZS 2350.3:2006	AS/NZS 2350.4:2006	AS/NZS 2350.4:2006	AS/NZS 2350.5:2006	AS/NZS 2350.2:2006
AS 3972:2010 Limit	None	None	None	45min Minimum	Not Tested	5mm Maximum	None

Test	CaO by XRF %	SiO ₂ by XRF %	Al ₂ O ₃ by XRF %	Fe ₂ O ₃ by XRF %	SO ₃ by XRF %	MgO by XRF %	Na ₂ O Equivalent %
Result	64.8	19.6	5.2	3.2	2.8	1.4	0.4
Standard	AS/NZ 2350.2:2006	AS/NZ 2350.2:2006	AS/NZ 2350.2:2006	AS/NZ 2350.2:2006	AS/NZ 2350.2:2006	AS/NZ 2350.2:2006	AS/NZ 2350.2:2006
AS 3972:2010 Limit	None	None	None	None	3.5% Maximum	None	None

Test	Mortar Compressive Strength			Shrinkage 28 Days µStrain	Peak Temp Rise		16 wk Sulfate Resistance µStrain	Total Chloride by XRF %
	3 Days MPa	7 Days MPa	28 Days MPa		°C	hrs		
Result	37.0	47.1	57.7	640	30.9	13.8	Not Tested	0.011
Standard	AS/NZS2350.11:2006			AS/NZ 2350.13:2006	AS2350.7-2006		AS2350.14-2006	AS/NZS 2350.2:2006
AS 3972:2010 Limit	None	35MPa Minimum	45MPa Minimum	750µStrain Max.	Not Tested		Not Tested	0.1% Maximum

This sample conforms to the following requirements of AS 3972:2010

Type GP	Type GB	Type HE	Type LH	Type SL	Type SR
✓				✓	

Approved Signatory

V Connell

V Connell
Chemical Testing
Construction Materials Testing

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.



NATA Accredited Laboratory Numbers
187 188

Notes:

- Variation AS/NZS 2350.5:2006- Section 5(c) Cooling accelerated after boiler.
- A modified sample mass was used to determine Normal Consistency.

