

Client: Parchem Construction Supplies Pty Ltd
7 Lucca Road
Wyong NSW 2259

Your Reference: Chloride Diffusion Resistance Testing of Guncrete E

Our Reference: JN 14-06-28

Certificate of Test No. 9772

Sample: Cement Based Repair Mortar

Date Received: 14th February 2014

Date Tested: 18th February – 04th June 2014

From:

Description & Condition: 1 –off bag of Guncrete E

Test Description: Chloride Diffusion, Nordtest NT Build 443

Sample Preparation:

Samples were cast by SGS as per Parchem's Technical Data Sheet. Samples were cured in limewater at 23±2 °C for 56 days prior to test. Test surface of samples were skimmed using a wet saw, coated with epoxy resin and saturated to constant weight.

Test Method:

Method of test in accordance with Nordtest NT Build 443 Approved 1995-11 "Concrete, Hardened: Accelerated Chloride Penetration". Sub-samples analysed for chloride content by BS 1881:Part 124:1988 "Methods for Analysis of Hardened Concrete" Section 10.2 except titration by potentiometric method.



Tested By
A. Luobikis, Technical Officer

09/06/2014
Date



Authorised Signatory
F. Juwono, Senior Technical Officer

09/06/2014
Date



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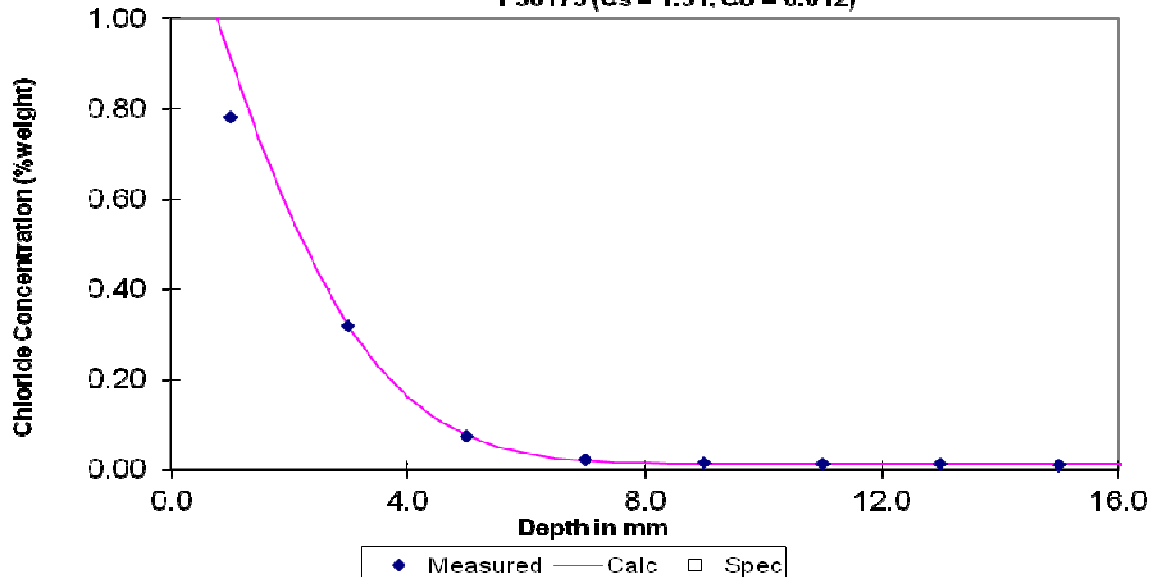
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Test Results:

Sample Identification

SGS Laboratory No: P38173
 Client Sample No: Guncrete E
 Date Cast: 18/02/14

**Cl- Penetration Coefficient Prediction
 P38173 (Cs = 1.31, Ci = 0.012)**



- Chloride Ion Concentration Profile: (average of three test pieces)

Depth/mm	% Cl by wt Concrete
0-2	0.782 (ignored in curve fit)
2-4	0.319
4-6	0.074
6-8	0.022
8-10	0.016
10-12	0.013
12-14	0.013
14-16	0.011
Background, C_i	0.012
- Determined Diffusion Coefficient, D_e : $1.0 \times 10^{-12} \text{ m}^2/\text{sec}$
 Surface Chloride Concentration, C_s : 1.31 %
 Final Chloride Concentration, C_f : 0.05 %
- Penetration Parameter, K_{Cl} : 18 mm/ $\sqrt{\text{year}}$

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