



**MACKA'S**  
**SAND & SOIL**  
 SUPPLIES

**Salt Ash Quarry, Port Stephens NSW**

Date Sampled - 03/03/2010



## Sand for use in Concrete (general use), Mortar and Grout - RTA R53

METHOD	PROPERTY	REQUIREMENTS	RESULTS
AS1141.4	Bulk Density		1.62 t/m <sup>3</sup> compacted 1.50 t/m <sup>3</sup> loose
AS1141.6.1	Particle Density and Water Absorption of Fine Aggregate	AS 2758.1 7.1 (b)	2.65 t/m <sup>3</sup> apparent particle density 2.59 t/m <sup>3</sup> particle density - dry basis 2.61 t/m <sup>3</sup> particle density - SSD basis 0.9% water absorption
AS1141.11	Particle Size Distribution	AS 2758.1 Table 3 Uncrushed fine aggregate	refer to report
AS1141.12	Material Finer than 75 microns	AS 2758.1 Table 3	0.8%
AS1012.20C32	Chloride Content	AS 2758.1 Section 14.3.1	0.002% Cl
AS1012.20C33	Sulfate Content	AS 2758.1 Section 14.3.2	0.02% S04
AS1289.4.1.1	Organic Matter	AS 2758.1	0.1%
AS1141.31	Light Particles	AS 2758.1	Nil
AS1141.35	Sugar	AS 2758.1 No presence	Not detected
AS1141.24	Sodium Soundness	Refer to AS2758.1- 9.3.3 Table 6	0.4% Total percentage weighted Loss

In accordance with AS2758.1 Section 7.1, particle density indicates aggregate is of normal weight and meets water absorption criteria outlined in Section 7.3.

Grading requirements for fine sand comply as per AS2758.1 Table 3.

Results from chloride and sulfate content indicate aggregate is acceptable for use in both plain and reinforced concrete.

As per AS2758.1 Section 14.3.1 and Section 14.3.2.

The Aggregate Soundness (by use of Sodium Sulfate) meets and exceeds criteria outlined in Section 9.2 & 9.3.3 Table 6, and is satisfactory for use in Concrete Exposure Classifications A1, A2, B1, B2 and C, based on AS1141.24.

Exposure Classifications can be obtained from Appendix A of AS2758.1 Table A1.