

## APPENDIX 6.4

GENERAL SPECIFICATIONCOCKBURN LOW HEAT CEMENT - TYPE LH

Values stated within this specification are based upon test results from grab samples. Individual results may from time to time lie outside these ranges and such occurrence should not necessarily be regarded as failure of the sampled batch to conform to this general specification.

Parameter	Method	Units	Typical	Range		AS3972 Limits
<b>Chemical Analysis</b>						
SiO <sub>2</sub>	XRF	%	28.5	1.2	1.8	
Al <sub>2</sub> O <sub>3</sub>	XRF	%	10.6	48.4	51.2	
Fe <sub>2</sub> O <sub>3</sub>	XRF	%	1.5	3.5	4.0	
CaO	XRF	%	49.8	48.4	51.2	
MgO	XRF	%	3.8	3.5	4.0	
SO <sub>3</sub>	XRF	%	2.6	2.0	3.2	3.5% max
LOI	AS2350.2	%	0.8	-0.1	1.6	
Chloride	ASTM C114	%	0.010	0.003	0.016	
Na <sub>2</sub> O equiv	ASTM C114	%	0.20	0.16	0.23	
<b>Fineness Index</b>						
	AS2350.8	M <sub>2</sub> /kg	282	216	347	
<b>Normal Consistency</b>						
	AS2350.3	%	30.1	24.9	35.3	
<b>Setting Times</b>						
Initial	AS2350.4	mins	210	145	275	45 mins min
Final	AS2350.4	mins	280	215	345	10 hr max
<b>Soundness</b>						
	AS2350.5	mm	17.2	13.7	20.6	5mm max
<b>*Compressive Strengths</b>						
3 day	AS2350.11	MPa	17.2	13.7	20.6	
7 day	AS2350.11	MPa	30.1	24.9	35.3	10 MPa
28 day	AS2350.11	MPa	52.9	46.4	59.5	30 MPa
56 Day	AS2350.11	MPa	67.8	61.2	74.5	
<b>Heat of Hydration</b>						
Peak temp Rise	AS2350.7	°C	20.8	17.9	23.8	23 °C Max

\*Normen standard sand used