

## APPENDIX 6.12

GENERAL SPECIFICATIONCOCKBURN MICROSILICA PORTLAND CEMENT - TYPE MGP

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	AS3972-1997 Limits
<b>Chemical Analysis</b>					
SiO <sub>2</sub>	XRF	%	27.8	26.5 – 29.0	
Al <sub>2</sub> O <sub>3</sub>	XRF	%	4.3	4.1 – 4.4	
Fe <sub>2</sub> O <sub>3</sub>	XRF	%	2.5	2.3 – 2.6	
CaO	XRF	%	58.5	57.5 – 59.5	
MgO	XRF	%	2.6	2.4 – 2.7	
SO <sub>3</sub>	XRF	%	2.2	2.1 – 2.3	3.5% max
LOI	AS2350.2	%	1.3	1.0 – 1.6	
Chloride	ASTM C114	%	0.01	0.01 – 0.02	
Na <sub>2</sub> O equivalent	ASTM C114	%	0.50	0.35 – 0.60	
<b>Fineness Index</b>					
	AS2350.8	m <sup>2</sup> /kg	600	540 – 660	
<b>Normal Consistency</b>					
	AS2350.3	%	29.0	27.8 – 30.2	
<b>Setting Times</b>					
- Initial	AS2350.4	mins	150	120 – 180	45 mins min
- Final		mins	225	195 – 255	10 hrs max
<b>Soundness</b>					
	AS2350.5	mm	1		5 mm max
<b>*Compressive Strengths</b>					
	AS2350.11				
	3 day	MPa	38	35 – 40	
	7 day	MPa	50	46 – 54	15 MPa min
	28 day	MPa	68	63 – 73	30 MPa min

\*Normen standard sand used