

3. RESULTS

Results are summarised in the table below and compared with the ASTM specification requirements for quartz based dimension stone; full test data are detailed in Appendix A of this report.

Property	Grampians Sandstone White	ASTM C616-08 Sandstone Specification
Bulk Specific Gravity (kg.m ⁻³)		
• Set 1	2292 (2287 - 2297)	2003 (min)
• Set 2	2361 (2347 - 2374)	
Water Absorption (% by weight)		
• Set 1	5.4 (5.2 - 5.6)	8 (max)
• Set 2	2.6 (2.5 - 2.8)	
Modulus of Rupture		
• Dried Strength (MPa)		
• Set 1	4.8 (4.5 - 5.1)	2.4 (min)
• Set 2	7.9 (6.5 - 8.5)	
• Soaked Strength (MPa)		
• Set 1	2.2 (2.1 - 2.3)	2.4 (min)
• Set 2	5.0 (4.1 - 5.4)	
Compressive Strength		
• Dried Strength (MPa)		
• Set 1	65 (52 - 72)	27.6 (min)
• Set 2	91 (86 - 96)	
• Soaked Strength (MPa)		
• Set 1	50 (42 - 57)	27.6 (min)
• Set 2	72 (66 - 78)	
Resistance to Salt Attack		
• Weight loss (%)		
• Set 1	2.4 (2.0 - 3.1)	-
• Set 2	1.7 (0.8 - 2.9)	
• Mode of Decay		
• Set 1	Surface pitting	-
• Set 2	Slight Surface pitting	