

General Characteristics

For Bruhn Limestone – Supplied by CSIRO

TABLE 22 - CSIRO		
PROPERTY	RANGE OF VALUES	MEAN
1. Colour	White cream to pale brown	
2. Grain Size	Fine to medium, clastic	
3. Nature	Fragmental, organic limestone (fossiliferous: bryozoal).	
4. Composition	Dominantly calcite, trace dolomite.	
5. Porosity (effective) %	36 – 44	39.9
6. Porosity (total) %	53 – 59	56.4
7. Saturation coefficient	0.68 – 0.74	0.71
8. Compressive strength Mpa (as tested 1973)		
- Dry	3.95 – 4.20Mpa	4.10
- Soaked – after 12 hours immersion	2.60 – 3.00Mpa	2.85
9. Modulus of Rupture MI’53 – 58		
- Dry	1.0 – 2.7	1.7
- Soaked	0.7 – 2.1	1.4
10. Young’s Modulus MI’a 10		
- Dry	0.57 – 7.70	2.2
- Soaked	0.38 – 3.69	1.5
11. Poisson’s ratio		
- Dry	-0.14 – 0.64	0.18
- Soaked	-1.05 – 0.87	0.08
12. Ultrasonic Pulse Velocity m/sec	1660 – 2445	2140
13. Dimensional Instability, %	0.02 – 0.06	0.05
14. Coefficient of Thermal expansion, mm/mm/ C 10	3 – 6	5

