

## ASWAN LIMESTONE TEST DATA

|                             | Test Result            |                  | Specification |
|-----------------------------|------------------------|------------------|---------------|
| <b>Finish</b>               | Tumbled & Acid Etched  |                  | -             |
| <b>Slip Resistance</b>      | 56                     | Mean BPN         | AS/NZS 4586   |
|                             | P5                     | Classification   |               |
| <b>Compressive Strength</b> | 97 MPa                 | -                | ASTM C170     |
| <b>Flexural Strength</b>    | 7.5 MPa                | -                | ASTM C880     |
| <b>Modulus of Rupture</b>   | 8.4 MPa                | -                | ASTM C99      |
| <b>Water Absorption</b>     | 0.98 %                 | Mean % by Volume | ASTM C97      |
| <b>Density</b>              | 2691 kg/m <sup>3</sup> | -                | ASTM C97      |
| <b>Salt Resistance</b>      | 0.11%                  | Mean Mass Loss   | AS/NZS 4456.1 |

**Compressive strength** is a measure of the resistance to crushing loads. The compressive strength is the maximum load per unit area that the stone can bear without crushing. A higher compressive strength indicates that the stone can withstand a higher crushing load.

**Modulus of Rupture** and **Flexural Strength** determine the strength of the stone in bending. A stone or door lintel must resist the bending loads from the weight of the stone. The modulus of rupture test applies a load to a single point at mid-span. The flexural strength test applies the load simultaneously to two points, each one quarter of the span from the end support. A higher flexural strength and modulus of rupture indicates a higher bending strength.

**Water Absorption** is a measure of the porosity of a stone and can be an indicator of its susceptibility to damage during freezing. A stone that has greater water absorption will also tend to absorb liquid stains more readily. In general, the lowest water absorption is desired. The absorption is expressed as the percent weight change due to absorbed water.

**Slip Resistance** is a measure how resistant the stone is to slip. The test results provide a British Pendulum Number (BPN) or Skid Resistance Value (SRV) and are classified into 5 classes.

P5 = Very low (SRV > 54)  
P4 = Low (SRV 45-54)  
P3 = Moderate (SRV 35-44)  
P2 = High (SRV 25-34)  
P1 = High (SRV 12-24)  
P0 = Very high (SRV <12)

*Very low = potential for risk of slipping*