

ASYUT LIMESTONE TEST DATA

	Test Result		Specification
Finish	Tumbled & Sandblasted		-
Slip Resistance	72	Mean BPN	AS/NZS 4586
	P5	Classification	
Compressive Strength	97 MPa	-	ASTM C170
Flexural Strength	7.5 MPa	-	ASTM C880
Modulus of Rupture	8.4 MPa	-	ASTM C99
Water Absorption	0.98 %	Mean % by Volume	ASTM C97
Density	2691 kg/m ³	-	ASTM C97
Salt Resistance	0.7%	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