

# Design and Construction Note 102 16

Street Layout and Pavement Design Guidelines

# Sandstone Paving Material Specification

Reviewed: 30/10/2018

### Sandstone Paving

# 1) Performance Specification:

Compressive Strength	Minimum 27.6 Mpa (Dry & Wet)	Tested by Std ASTM C99
Modulus of Rupture	Minimum 2.4 Mpa (Dry & Wet)	Tested by Std ASTM C99
Abrasion Resistance	Minimum of Ha 2	Tested by Std ASTM C1353
Moisture Absorption		
by Weight	Max 8% by weight	Tested by Std ASTM C97
Density	Minimum 2003 kg/cum	Tested by Std ASTM C97

## 2) Testing of Paving:

All proposed paving must have test results to confirm the above properties are fulfilled. Testing to be irrespective of orientation and be performed on exfoliated finished samples. The required methods and standards of testing are:

#### **ASTM Standards:**

C97/C97M Test methods for absorption and bulk specific gravity of dimension stone.

C99/C99M Test method for modulus of rupture of dimension stone.

C119 Terminology relating to dimension stone.

C170/C170M Test method for compressive strength of dimension stone.

C241/C241M Test method for abrasion resistance of stone subjected to foot traffic.

C880/C880M Test method for flexural strength of dimension stone.

D7102 Test method –intact rock core specimens.

#### Australian Standards:

AS4456.5-2003 Masonry units and segmental pavers and flags - Methods of test -

Determining the breaking load of segmental pavers and flags

AS4586-2004 Slip resistance classification of new pedestrian surface materials

#### 3) Approval of Test Results:

The appropriate specimens should be prepared from the supplied samples and the above test work completed prior to supply of paving.

4) Use of Sandstone, Natural Stone and other non-standard paving materials: Sandstone, Natural Stone and paving materials that are not included in the City of Perth Design and Construction Notes must be approved by the City of Perth. Prior to submission for approval, a sample shall be prepared and all required tests carried-out. The tests required shall be determined through consultation with the City of Perth.