

# Australian Standard®

AS 5101.5—2008

## Methods for preparation and testing of stabilized materials

### Method 5: Absorption, swell and capillary rise of compacted materials

#### 1 SCOPE

This Standard sets out the method for determining the water absorption, swell and capillary rise of water in compacted specimens of unbound, bound and self-cementing materials.

Specimens tested using this Standard are not used for determining the unconfined compressive strength of the material.

#### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

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|------------|---|
| 1141       | Methods for sampling and testing aggregates   |
| 1141.1     | Method 1: Definitions   |
| 1141.2     | Method 2: Basic testing equipment   |
| 1152       | Specification for test sieves   |
| 1289       | Methods of testing soils for engineering purposes   |
| 1289.1.2.1 | Method 1.2.1: Sampling and preparation of soils—Disturbed samples—Standard method   |
| 1289.2.1.1 | Method 2.1.1: Soil moisture content tests—Determination of the moisture content of a soil—Oven drying method (standard method)                        |
| 1289.5.1.1 | Method 5.1.1: Soil compaction and density tests—Determination of the dry density/moisture content relation of a soil using standard compactive effort |
| 1289.5.2.1 | Method 5.2.1: Soil compaction and density tests—Determination of the dry density/moisture content relation of a soil using modified compactive effort |

#### 3 DEFINITIONS

For the purpose of this Standard, the definitions in AS 1141.1 and those below apply.

##### 3.1 Bound material

A material to which a binder such as lime, cement, bitumen or similar binding agent has been added to produce structural stiffness.

##### 3.2 Laboratory density ratio

The ratio of the dry density of a test specimen to the maximum dry density of that material, as determined by test in accordance with AS 1289.5.1.1 or AS 1289.5.2.1, expressed as a percentage.