

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

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.