

# Australian Standard™

## Methods of testing soils for engineering purposes

### Method 5.4.3: Soil compaction and density tests—Compaction control test—Dry density ratio and moisture ratio using statistical selection of reference values

AS 1289.5.4.3—2006

#### 1 SCOPE

This Standard sets out the method for statistically controlling maximum dry density and optimum moisture content values used for the determination of dry density ratio and moisture ratio. It is applicable to material that contains not more than 20% by mass of material, on a wet basis, retained on the 37.5 mm sieve and where all test and sample sites have been randomly selected from within an area of work (which is defined as a lot).

#### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

##### AS

- |            |  |
|------------|--|
| 1289       | Methods of testing soils for engineering purposes  |
| 1289.1.4.1 | Method 1.4.1: Sampling and preparation of soils—Selection of sampling or test sites—Random number method   |
| 1289.1.4.2 | Method 1.4.2: Sampling and preparation of soils—Selection of sampling or test sites—Stratified random number 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)                           |
| 1289.2.1.2 | Method 2.1.2: Soil moisture content tests—Determination of the moisture content of a soil—Sand bath method (subsidiary method)                           |
| 1289.2.1.4 | Method 2.1.4: Soil moisture content tests—Determination of the moisture content of a soil—Microwave-oven drying method (subsidiary method)               |
| 1289.2.1.5 | Method 2.1.5: Soil moisture content tests—Determination of the moisture content of a soil—Infrared lights method (subsidiary method)                     |
| 1289.2.1.6 | Method 2.1.6: Soil moisture content tests—Determination of the moisture content of a soil—Hotplate drying method (subsidiary method)                     |
| 1289.2.3.1 | Method 2.3.1: Soil moisture content tests—Establishment of correlation—Subsidiary method and the 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 or moisture content relation of a soil using modified compactive effort |