

Australian Standard™

Methods of testing soils for engineering purposes

Method 2.1.6: Soil moisture content tests— Determination of the moisture content of a soil— Hotplate drying method

AS 1289.2.1.6—2005

1 SCOPE

This Standard sets out the method for the determination of the moisture content of a soil as a percentage of its dry mass, using a hotplate to dry the sample.

The hotplate drying method is a rapid method and is considered less accurate than the standard method (see AS 1289.2.1.1).

This method is not suitable for soil that has a significant clay fraction or for soil containing gypsum, calcareous material or organic matter since the temperature of drying cannot be controlled.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1289	Methods of testing soils for engineering purposes
1289.0	Method 0: General requirements and list of methods
1289.1.1	Method 1.1: Sampling and preparation of soils—Preparation of disturbed soil samples for testing
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)
1289.2.3.1	Method 2.3.1: Soil moisture content tests—Establishment of correlation—Subsidiary method and the standard method

3 APPARATUS

The following apparatus is required:

- (a) Heating device such as electric frypan, electric hotplate, gas or kerosene stove.
- (b) Suitable balance with limit of performance as shown in Table 1.
- (c) A heat-tolerant and corrosion-resistant metal container or tray (if not using an electric frypan).
- (d) A palette knife of convenient size.