

Australian Standard™

Methods of testing soils for engineering purposes

Method 2.1.5: Soil moisture content tests— Determination of the moisture content of a soil— Infrared lights method (subsidiary method)

AS 1289.2.1.5—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 system of infrared lights.

The infrared lights 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 soils containing gypsum, calcareous 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
1289.1.1	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
2243	Safety in laboratories
2243.7	Part 7: Electrical aspects

3 APPARATUS

The following apparatus is required:

- (a) Heat-resistant and corrosion-resistant containers of suitable dimensions.
- (b) A system of one or more lights with 250 W infrared globes with each globe having approximately 150 mm clearance above a container base.
NOTE: The infrared light system used should comply with the appropriate requirements of AS 2243.7.
- (c) Suitable balance with limit of performance as shown in Table 1.
- (d) A palette knife of convenient size.
- (e) A timer with an alarm.