Australian Standard®

Methods of testing soils for engineering purposes

Method 4.4.1: Soil chemical tests—Determination of the electrical resistivity of a soil—Method for sands and granular materials

1 SCOPE This Standard sets out a procedure for the measurement of electrical resistivity of sands and granular materials (see Note 1).

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS		
1289	Methods of testing soils for engineering purposes	
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)
1289.5.1.1	Method 5.1.1:	Soil compaction and density tests—Determination of the dry density/moisture content relation of a soil using standard compactive effort
1289.5.4.1	Method 5.4.1:	Soil compaction and density tests—Compaction control test—Dry density ratio, moisture variation and moisture ratio
1289.E5.1	Method E5.1:	Soil compaction and density tests—Determination of minimum and maximum dry density of a cohesionless material
1289.E6.1	Method E6.1:	Soil compaction and density tests—Density index method for a cohesionless material

3 APPARATUS The following apparatus shall be used:

(a) A plastic soil box as shown in Figure 1. The box shall be approximately 220 mm long with internal dimensions of 40 mm × 30 mm. It shall be fitted with plate electrodes at each end and potential measurement pins on one side spaced so that