

ISO 11274:2019 (E)

Soil quality — Determination of the water-retention characteristic — Laboratory methods

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Guidelines for choice of method
4.1	General
4.2	Sand, kaolin or ceramic suction tables for determination of pressures from 0 kPa to –50 kPa
4.3	Porous plate and burette apparatus for determination of pressures from 0 kPa to –20 kPa
4.4	Pressure plate extractor for determination of pressures from –5 kPa to –1 500 kPa
4.5	Pressure membrane cells for determination of pressures from –33 kPa to –1 500 kPa
5	Sampling
5.1	General requirements
5.2	Sample preparation
6	Determination of the soil water characteristic using sand, kaolin and ceramic suction tables
6.1	Principle
6.2	Apparatus
6.3	Preparation of suction tables
6.4	Procedure
6.5	Expression of results
6.5.1	Procedure for soils containing less than 20 % stones (diameter greater than 2 mm)
6.5.2	Conversion of results to a fine soil basis
7	Determination of soil water characteristic using a porous plate and burette
7.1	Principle
7.2	Apparatus
7.3	Assembly of porous plate/burette apparatus
7.4	Procedure
7.5	Expression of results
8	Determination of soil water characteristic by pressure plate extractor
8.1	Principle
8.2	Apparatus
8.3	Assembly of apparatus
8.4	Procedure
8.5	Calculation and expression of results
8.5.1	Procedure for stoneless soils
8.5.2	Procedure for stony soils
9	Determination of soil water characteristic using pressure membrane cells
9.1	Principle
9.2	Apparatus
9.3	Assembly of apparatus
9.4	Procedure

9.5	Expression of results
9.6	Test report
10	Test report
11	Precision
Annex A	(informative) Construction of suction tables
A.1	Sand suction table
A.2	Kaolin suction table

Page count: 23