

**Conservation of cultural property - Test methods -
Measurement of water absorption by pipe method**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 97.195

English Version

Conservation of cultural heritage - Test methods - Measurement of water absorption by pipe method

Conservation des biens culturels - Méthodes d'essai -
Mesurage de l'absorption d'eau par la méthode à la pipette

Erhaltung des kulturellen Erbes - Prüfverfahren - Messung
der Wasseraufnahme bei niedrigem Druck

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Foreword

This document (EN 16302:2013) has been prepared by Technical Committee CEN/TC 346 "Conservation of cultural heritage", the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2013, and conflicting national standards shall be withdrawn at the latest by August 2013.

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Introduction

This test method can be applied if it does not change the value of the cultural property following the ethical code of conservation practice.

This test aims to measure water penetration under pressure analogous to incident rainfall.

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1 Scope

This European Standard specifies a method to measure water absorption of porous inorganic materials used for and constituting cultural property by pipe method.

The method may be used on porous inorganic materials which are untreated or have been subjected to any treatment or ageing.

The method may be used both in the laboratory and in situ due to its non destructive nature.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 15898:2011, *Conservation of cultural property — Main general terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15898:2011 and the following apply.

3.1

porous inorganic material

material including natural stones e.g. sandstone, limestone, marble; as well as artificial materials, such as mortar, plaster, brick, and others

Note 1 to entry: See EN 15801.

3.2

water absorption by pipe method

amount of water (ml) transferred from the pipe through a defined test area (cm²) after a fixed time, expressed as ml/cm²

3.3

specimen

part considered representative of the material constituting an object

Note 1 to entry: The specimen can have different origins and can be taken from:

- materials similar to those constituting the object under study (e.g. stone quarries);
- specifically prepared comparative materials e.g. reference materials;
- available materials from the object.

Note 2 to entry: The number and dimension of the specimens can be different depending on constraints encountered in sampling the required amount of material.

4 Principle

Determination of the amount and rate at which water is absorbed through the test surface that is in contact with water.