

# SLOVENSKI STANDARD

## SIST EN ISO 17892-2:2015

01-marec-2015

Nadomešča:

SIST-TS CEN ISO/TS 17892-2:2004

SIST-TS CEN ISO/TS 17892-2:2004/AC:2010

---

**Geotehnično preiskovanje in preskušanje - Laboratorijsko preskušanje zemljin - 2. del: Ugotavljanje prostorninske gostote (ISO 17892-2:2014)**

Geotechnical investigation and testing - Laboratory testing of soil - Part 2: Determination of bulk density (ISO 17892-2:2014)

**iTeh STANDARD PREVIEW**

Geotechnische Erkundung und Untersuchung - Prüfen von Bodenproben im Labor - Teil 2: Bestimmung der Dichte von feinkörnigem Boden (ISO 17892-2:2014)

[SIST EN ISO 17892-2:2015](https://standards.itih.ai/catalog/standards/sist/7201656-a5cd-4a1a-91ec-ca69dc83dd85/sist-en-iso-17892-2-2015)

Reconnaissance et essais géotechniques - Essais de laboratoire sur les sols - Partie 2: Détermination de la masse volumique (ISO 17892-2:2014)

**Ta slovenski standard je istoveten z: EN ISO 17892-2:2014**

---

**ICS:**

13.080.20	Fizikalne lastnosti tal	Physical properties of soils
93.020	Zemeljska dela. Izkopavanja.	Earthworks. Excavations.
	Gradnja temeljev. Dela pod zemljo	Foundation construction. Underground works

**SIST EN ISO 17892-2:2015**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17892-2:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 17892-2**

December 2014

ICS 13.080.20; 93.020

Supersedes CEN ISO/TS 17892-2:2004

English Version

**Geotechnical investigation and testing - Laboratory testing of soil  
- Part 2: Determination of bulk density (ISO 17892-2:2014)**

Reconnaissance et essais géotechniques - Essais de  
laboratoire sur les sols - Partie 2: Détermination de la  
masse volumique (ISO 17892-2:2014)

Geotechnische Erkundung und Untersuchung - Prüfen von  
Bodenproben im Labor - Teil 2: Bestimmung der Dichte von  
feinkörnigem Boden (ISO 17892-2:2014)

This European Standard was approved by CEN on 18 October 2014.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

[SIST EN ISO 17892-2:2015](https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015)

<https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015>



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**Contents**

Page

Foreword.....3

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17892-2:2015](https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015)

<https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015>

## Foreword

This document (EN ISO 17892-2:2014) has been prepared by Technical Committee ISO/TC 182 "Geotechnics" in collaboration Technical Committee CEN/TC 341 "Geotechnical Investigation and Testing" the secretariat of which is held by BSI.

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 June 2015, and conflicting national standards shall be withdrawn at the latest by June 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN ISO/TS 17892-2:2004.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 17892-2:2014 has been approved by CEN as EN ISO 17892-2:2014 without any modification.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**  
SIST EN ISO 17892-2:2015  
<https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17892-2:2015](https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015)

<https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015>

INTERNATIONAL  
STANDARD

ISO  
17892-2

First edition  
2014-12-01

---

---

**Geotechnical investigation and  
testing — Laboratory testing of soil —  
Part 2:  
Determination of bulk density**

*Reconnaissance et essais géotechniques — Essais de laboratoire  
sur les sols —*

**iTeh STANDARD PREVIEW**  
*Partie 2: Détermination de la masse volumique*  
**(standards.iteh.ai)**

[SIST EN ISO 17892-2:2015](https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015)

[https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-  
ea69dc83ddb5/sist-en-iso-17892-2-2015](https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015)



Reference number  
ISO 17892-2:2014(E)

© ISO 2014

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 17892-2:2015](https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015)

<https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015>



### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland



# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
<b>4 Equipment</b> .....	<b>2</b>
4.1 Linear measurement method.....	2
4.2 Immersion in fluid method.....	2
4.3 Fluid displacement method.....	2
<b>5 Test procedure</b> .....	<b>3</b>
5.1 Linear measurement method.....	3
5.1.1 General.....	3
5.1.2 Specimen from block sample.....	3
5.1.3 Specimen from sample tube.....	3
5.1.4 Cylindrical specimen of smaller diameter than the sample tube.....	4
5.1.5 Measurements.....	4
5.2 Immersion in fluid method.....	4
5.2.1 Equipment preparation.....	4
5.2.2 Specimen preparation and measurements.....	5
5.3 Fluid displacement method.....	6
5.3.1 Equipment preparation.....	6
5.3.2 Specimen preparation and measurements.....	7
<b>6 Test results</b> .....	<b>8</b>
6.1 Volume.....	8
6.1.1 Linear Method.....	8
6.1.2 Immersion in fluid method.....	9
6.1.3 Fluid displacement method.....	9
6.2 Bulk density.....	9
6.3 Dry density.....	10
<b>7 Test report</b> .....	<b>10</b>
<b>Annex A (normative) Calibration, maintenance and checks</b> .....	<b>11</b>
<b>Annex B (informative) Explanations</b> .....	<b>13</b>
<b>Bibliography</b> .....	<b>14</b>

## ISO 17892-2:2014(E)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. [www.iso.org/directives](http://www.iso.org/directives)

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. [www.iso.org/patents](http://www.iso.org/patents)

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword - Supplementary information](#)

ISO 17892-2 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 341, *Geotechnical investigation and testing*, in collaboration with Technical Committee ISO/TC 182, *Geotechnics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement). <https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015>

This first edition of ISO 17892-2 cancels and replaces ISO/TS 17892-2:2004, which has been technically revised. It also incorporates the Technical Corrigendum ISO/TS 17892-2:2004/Cor 1:2006.

ISO 17892 consists of the following parts, under the general title "*Geotechnical investigation and testing — Laboratory testing of soil*":

- *Part 1: Determination of water content*
- *Part 2: Determination of bulk density*
- *Part 3: Determination of particle density*
- *Part 4: Determination of particle size distribution*
- *Part 5: Incremental loading oedometer test*
- *Part 6: Fall cone test*
- *Part 7: Unconfined compression test on fine-grained soils*
- *Part 8: Unconsolidated undrained triaxial test*
- *Part 9: Consolidated triaxial compression tests on water-saturated soils*
- *Part 10: Direct shear tests*
- *Part 11: Determination of permeability by constant and falling head*
- *Part 12: Determination of Atterberg limits*

## Introduction

This document covers areas in the international field of geotechnical engineering never previously standardised internationally. It is intended that this document presents broad good practice throughout the world and significant differences with national documents is not anticipated. It is based on international practice (see Reference [1]).

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 17892-2:2015](https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015)

<https://standards.iteh.ai/catalog/standards/sist/7a201656-a5cd-4a1a-91ec-ea69dc83ddb5/sist-en-iso-17892-2-2015>