ICS 13.080.20, 93.020 SLOVENSKÁ TECHNICKÁ NORMA August 2018

STN	**Geotechnický prieskum a skúšky Laboratórne skúšanie zemín Časť 8: Nekonsolidovaná neodvodnená traxiálna skúška (ISO 17892-8: 2018)**	**STN EN ISO 17892-8** 72 1049

Geotechnical investigation and testing - Laboratory testing of soil - Part 8: Unconsolidated undrained triaxial test (ISO 17892-8:2018)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/18

Obsahuje: EN ISO 17892-8:2018, ISO 17892-8:2018

126923

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 17892-8

March 2018

ICS 13.080.20; 93.020

Supersedes CEN ISO/TS 17892-8:2004

English Version

Geotechnical investigation and testing - Laboratory testing of soil - Part 8: Unconsolidated undrained triaxial test (ISO 17892-8:2018)

Reconnaissance et essais géotechniques - Essais de laboratoire sur les sols - Partie 8: Essai triaxial non consolidé non drainé (ISO 17892-8:2018)

Geotechnische Erkundung und Untersuchung - Laborversuche an Bodenproben - Teil 8: Unkonsolidierter undränierter Triaxialversuch (ISO 17892-8:2018)

This European Standard was approved by CEN on 18 January 2018.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 17892-8:2018 E

EN ISO 17892-8:2018 (E)

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European foreword

This document (EN ISO 17892-8:2018) has been prepared by Technical Committee ISO/TC 182 "Geotechnics" in collaboration with 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of an identical text or by endorsement, at the latest by September 2018, and conflicting national standards shall be withdrawn at the latest by September 2018.

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

This document supersedes CEN ISO/TS 17892-8:2004.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 17892-8:2018 has been approved by CEN as EN ISO 17892-8:2018 without any modification.

INTERNATIONAL STANDARD

ISO 17892-8

First edition
2018-02

Geotechnical investigation and testing — Laboratory testing of soil —

Part 8: Unconsolidated undrained triaxial test

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

Partie 8: Essai triaxial non consolidé non drainé

Reference number
ISO 17892-8:2018(E)

ISO 17892-8:2018(E)

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Published in Switzerland

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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 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 341, *Geotechnical investigation and testing*, in collaboration with ISO Technical Committee TC 182, *Geotechnics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 17892-8 cancels and replaces ISO/TS 17892-8:2004 and ISO/TS 17892-8:2004/Cor.1:2006.

A list of all the parts in the ISO 17892 series can be found on the ISO website.

Introduction

This document covers areas in the international field of geotechnical engineering never previously standardized. 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]).

INTERNATIONAL STANDARD **ISO 17892-8:2018(E)**

Geotechnical investigation and testing — Laboratory testing of soil —

Part 8: Unconsolidated undrained triaxial test

1 Scope

This document specifies a method for unconsolidated undrained triaxial compression tests.

This document is applicable to the laboratory determination of undrained triaxial shear strength under compression loading within the scope of geotechnical investigations.

The cylindrical specimen, which can comprise undisturbed, re-compacted, remoulded or reconstituted soil, is subjected to an isotropic stress under undrained conditions and thereafter is sheared under undrained conditions. The test allows the determination of shear strength and stress-strain relationships in terms of total stresses.

Non-standard procedures such as tests with the measurement of pore pressure or tests with filter drains are not covered in this document.

NOTE This document fulfils the requirements of unconsolidated undrained triaxial compression tests for geotechnical investigation and testing in accordance with EN 1997-1 and EN 1997-2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14688-1, *Geotechnical investigation and testing — Identification and classification of soil — Part 1: Identification and description*

ISO 17892-1, *Geotechnical investigation and testing — Laboratory testing of soil — Part 1: Determination of water content*

ISO 17892-2, *Geotechnical investigation and testing — Laboratory testing of soil — Part 2: Determination of bulk density*

ISO 17892-3, *Geotechnical investigation and testing — Laboratory testing of soil — Part 3: Determination of particle density*

