

Geotechnical investigation and testing — Identification and classification of soil —

Part 2: Principles for a classification

ICS 93.020

National foreword

This British Standard is the UK implementation of EN ISO 14688-2:2004+A1:2013. It is identical to ISO 14688-2:2004, incorporating amendment 1:2013. It supersedes BS EN ISO 14688-2:2004, which is withdrawn. It partially supersedes BS 5930:1999+A2:2010.

The UK participation in its preparation was entrusted by Technical Committee B/526, Geotechnics, to Subcommittee B/526/3, Site investigation and ground testing.

A list of organizations represented on the subcommittee can be obtained on request to its secretary.

Table 4 provides some scale of density terms based on the Density Index. It needs to be made clear whether the terms “very loose”, “loose”, “medium dense”, “dense” and “very dense” have been derived from this table or from SPT N values, the latter being more commonly used in the UK.

Table 5 provides a scale of undrained shear strength values based on test results. This scale has no descriptive element, and uses different terms to those previously used in UK practice and as given in BS 5930:1999+A2:2010. It is suggested that where test results are available the terms in Table 5 be used in preference to the field descriptive terms given in 5.14 of BS EN ISO 14688-1:2002.

Annex B provides an example of a soil classification based on grading alone. This is not an approach that suits UK practice and so it is recommended that a method of classification which also includes other characteristics such as plasticity, water content and density is used.

The publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 25 January 2006

© The British Standards Institution 2013.
Published by BSI Standards Limited 2013

ISBN 978 0 580 73733 6

Amendments/corrigenda issued since publication

Amd. No.	Date	Comments
16928 Corrigendum No. 1	28 February 2007	Revision of National foreword
	30 November 2013	Implementation of ISO amendment 1:2013, with CEN endorsement A1:2013: Clause 4.5 modified, Table 3 title updated

English version

Geotechnical investigation and testing - Identification and
classification of soil - Part 2: Principles for a classification (ISO
14688-2:2004)

Reconnaissance et essais géotechniques - Dénomination,
description et classification des sols - Partie 2: Principes
pour une classification (ISO 14688-2:2004)

Geotechnische Erkundung und Untersuchung -
Benennung, Beschreibung und Klassifizierung von Boden -
Teil 2: Grundlagen von Bodenklassifizierung (ISO 14688-
2:2004)

This European Standard was approved by CEN on 24 June 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 14688-2:2004) 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 DIN.

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 January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

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

Endorsement notice

The text of ISO 14688-2:2004 has been approved by CEN as EN ISO 14688-2:2004 without any modifications.

Foreword to amendment A1

This document (EN ISO 14688-2:2004/A1:2013) 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 ELOT.

This Amendment to the European Standard EN ISO 14688:2004 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2014, and conflicting national standards shall be withdrawn at the latest by March 2014.

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.

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 14688-2:2004/Amd 1:2013 has been approved by CEN as EN ISO 14688-2:2004/A1:2013 without any modification.

INTERNATIONAL STANDARD

ISO
14688-2

First edition
2004-07-15

Geotechnical investigation and testing — Identification and classification of soil —

Part 2: Principles for a classification

*Reconnaissance et essais géotechniques — Dénomination, description
et classification des sols —*

Partie 2: Principes pour une classification



Reference number
ISO 14688-2:2004(E)

AVA Documents
Document Sharing Hub

Contents

Page

1	Scope.....	1
2	Normative references	1
3	Terms and definitions.....	2
4	Principles of soil classifications	3
4.1	General.....	3
4.2	Fractions	4
4.3	Particle size distribution (grading).....	4
4.4	Plasticity.....	5
4.5	Organic content.....	5
5	Other principles suitable for soil classification	5
5.1	General.....	5
5.2	Correlations of density terms for sands and gravels.....	5
5.3	Undrained shear strength of fine soils	6
5.4	Consistency index	7
5.5	Other suitable parameters.....	7
Annex A (informative)	Principles of soil classifications.....	8
Annex B (informative)	Example of a classification of soils, based on grading alone	10
Bibliography		13