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Earthworks - Part 2: Classification of materials

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

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#### **English Version**

### Earthworks - Part 2: Classification of materials

Terrassements - Partie 2: Classification des matériaux

Erdarbeiten - Teil 2: Materialklassifizierung

This European Standard was approved by CEN on 14 May 2018.

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

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## EN 16907-2:2018 (E)

Con	itents	Page
Euro	pean foreword	3
ntroduction		
1	Scope	5
2	Normative references	
3	Terms, definitions, symbols and abbreviations	6
3.1	Terms and definitions	
3.2	Abbreviations and symbols	7
4	Principles of classification	8
5	The process of description and classification	
5.1	General	
5.2	Description	
5.3	Classification	11
6	Classification by intrinsic parameters	11
6.1	General	11
6.2	Definition of soil groups	
6.3	Definition of rock groups	
6.4	Use of other intrinsic properties	23
7	Classification by state parameters	23
7.1	General	23
7.2	Soil state properties	23
7.3	Rock state properties	24
8	Characteristics and tests for assessing earthworks materials in situ	25
8.1	General	25
8.2	Characteristics for execution of earthworks	
8.3	Characteristics for material classification for use in earth structures	27
9	Sampling of soil and rock	27
10	Test standards to support classification	28
Anne	ex A (informative) List of test standards relevant to earthworks as detailed in	
	Clause 10	29
Rihli	ogranhy	40

## **European foreword**

This document (EN 16907-2:2018) has been prepared by Technical Committee CEN/TC 396 "Earthworks", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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 is one of the European Standards within the framework series of EN 16907 on *Earthworks*, as follows:

- Part 1: Principles and general rules,
- Part 2: Classification of materials (this document),
- Part 3: Construction procedures,
- Part 4: Soil treatment with lime and/or hydraulic binders,
- Part 5: Quality control,
- Part 6: Land reclamation earthworks using dredged hydraulic fill,
- Part 7: Hydraulic placement of extractive waste.

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### EN 16907-2:2018 (E)

### Introduction

This European Standard is part of a European Standard on Earthworks. It was decided by CEN/TC 396 to establish a stand-alone standard part on the classification of materials used in earthworks.

The different regional situations in geology and climate result in national differences in the earthwork procedures which do not allow a single classification of materials throughout Europe at present. Therefore, this standard identifies the principles and systems for classification considering national practices. Furthermore the test procedures suitable for earthworks are identified.

### 1 Scope

This document defines a common basis for description and classification for use by all parties involved in the design, planning and construction of the earthworks.

This document specifies the processes and properties to be used in the description and classification of earthworks materials. It specifies soil and rock groups as a basis of material specifications for earth structure elements. This classification relates to the physical and chemical properties of the soil and rock materials.

NOTE 1 The approach to description of soil and rock set out in EN ISO 14688-1 and EN ISO 14689 respectively and the approach to classification of soil set out in EN ISO 14688-2 are applicable to earthworks, but the range and scope of classification for earthworks given here is more detailed and orientated to the specific demands of earthwork procedures and earth structure elements.

NOTE 2 Informative examples of existing national experience based classification systems and their use are presented in the annexes to EN 16907-1:2018.

#### 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.

EN 932-1, Tests for general properties of aggregates — Part 1: Methods for sampling

EN 1997-2, Eurocode 7 — Geotechnical design — Part 2: Ground investigation and testing

EN 13383-1, Armourstone — Part 1: Specification

EN 16907-1:2018, Earthworks — Part 1: Principles and general rules

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

EN ISO 14689, Geotechnical investigation and testing — Identification, description and classification of rock (ISO 14689)

EN ISO 22475-1, Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 1: Technical principles for execution (ISO 22475-1)

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