



BSI Standards Publication

## Earthworks

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Part 3: Construction procedures

## National foreword

This British Standard is the UK implementation of EN 16907-3:2018.

The UK participation in its preparation was entrusted to Technical Committee B/526/-/1, Earthworks.

A list of organizations represented on this committee can be obtained on request to its secretary.

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## European foreword

This document (EN 16907-3:2018) 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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.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;*
- *Part 3: Construction procedures (this document);*
- *Part 4: Soil treatment with lime and/or hydraulic binders;*
- *Part 5: Quality control;*
- *Part 6: Land reclamation earthworks with dredged hydraulic fill;*
- *Part 7: Hydraulic placement of waste.*

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## 1 Scope

This European Standard provides execution procedures for excavating, transporting and placing soils and rocks for the construction of earth-structures and guidance for the work. Additionally, it includes excavation and placement of rock materials underwater.

Dredging of soils and the associated hydraulic placement of fills are covered by EN 16907-6 and EN 16907-7.

Execution of earthworks follows the conclusions of the earthworks design and optimization phase (EN 16907-1), which should anticipate soil and rock specificities and their suitability. In case some events could not be foreseen, additional design is performed during the execution of works.

## 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 16907-1, *Earthworks - Part 1: Principles and general rules*

EN 16907-2, *Earthworks - Part 2: Classification of materials*

EN 16907-6, *Earthworks - Part 6: Land reclamation earthworks with dredged hydraulic fill*

## 3 Terms and definitions

For the purposes of this document, the terms, definitions and symbols given in EN 16907-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### **trafficability**

ability of a material surface to support the passage of earthworks

### 3.2

#### **compaction**

process of removing air from a soil normally by mechanical means

### 3.3

#### **compactive effort**

energy applied to achieve compaction

### 3.4

#### **over compaction**

condition that arises during compaction when sufficient air has been expelled from a fill such that further compactive effort results in elevated pore water pressures causing the fill surface to become unstable as the material “mattresses”

Note 1 to entry: Over compaction of granular soils can also result in the crushing of individual particles thereby modifying the particle size distribution.