BS 8002:2015

BSI Standards Publication

Code of practice for earth retaining structures

bsi.

...making excellence a habit.™

Publishing and copyright information

Published by BSI Standards Limited 2015

ISBN 978 0 580 86678 4

ICS 93.020

The following BSI references relate to the work on this document:
Committee reference B/526
Draft for comment 15/30301518 DC

Publication history

First published April 1994
Second (present) edition, June 2015

Amendments issued since publication

Date	Text affected

Contents

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 96, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 June 2015. It was prepared by Technical Committee B/526, *Geotechnics*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

Together with BS EN 1997-1:2004+A1:2013, this British Standard supersedes BS 8002:1994, which is withdrawn.

Relationship with other publications

BS 8002 gives non-contradictory, complementary information for use with BS EN 1997 and its UK National Annexes.

Information about this document

This is a full revision of the standard, which introduces the following principal changes:

- the revised text is fully compatible with the current version of Eurocode 7 (BS EN 1997);
- guidance is given on designing earth retaining structures according to limit state principles using partial factors;
- guidance is given on the selection of design parameters for soils;
- guidance is given on model factors to be applied to prop loads determined by calculation;
- the revised text reflects advances in earth retaining structure technology over the past 30 years.

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

The word "should" is used to express recommendations of this standard. The word "may" is used in the text to express permissibility, e.g. as an alternative to the primary recommendation of the clause. The word "can" is used to express possibility, e.g. a consequence of an action or an event.

Notes and commentaries are provided throughout the text of this standard. Notes give references and additional information that are important but do not form part of the recommendations. Commentaries give background information.

Contractual and legal considerations

This 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.

1 Scope

This British Standard gives recommendations for the design and construction of earth retaining structures to support ground at slopes steeper than the ground would naturally assume. It provides non-contradictory, complementary information for use in conjunction with BS EN 1997 and its UK National Annex.

Clause **4** gives general recommendations for the design and construction of all types of earth retaining structures; Clause **5**, Clause **6**, and Clause **7** give specific recommendations for the design and construction of gravity walls, semi-gravity walls, and embedded walls (respectively); and Clause **8** gives specific recommendations for the design and construction of cofferdams, basements, and strutted excavations.

Annex A gives specific recommendations for the design and construction of deadman anchors.

Annex B gives information about specific geological formations encountered in the UK.

NOTE 1 This standard does not cover the design and construction of anchors (other than deadman anchors), for which see BS 8081.

NOTE 2 This standard does not cover the design and construction of earthworks, for which see BS 6031.

NOTE 3 This standard does not cover the design and construction of foundations, for which see BS 8004.

NOTE 4 This standard does not cover the design and construction of maritime works, for which see BS 6349.

NOTE 5 This standard does not cover the design and construction of earth retaining structures constructed using strengthened or reinforced soil walls, for which see BS 8006.

2 Normative references

Standards publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 65, *Specification for vitrified clay pipes, fittings and ducts, also flexible mechanical joints for use solely with surface water pipes and fittings*

BS 437, *Specification for cast iron drain pipes, fittings and their joints for socketed and socketless systems*

BS 4449, *Steel for the reinforcement of concrete – Weldable reinforcing steel – Bar, coil and decoiled product – Specification*

BS 4660, *Thermoplastics ancillary fittings of nominal sizes 110 and 160 for below ground gravity drainage and sewerage*

BS 4729, *Clay and calcium silicate bricks of special shapes and sizes – Recommendations*

BS 4962, *Specification for plastics pipes and fittings for use as subsoil field drains*

BS 5480, *Specification for glass reinforced plastics (GRP) pipes, joints and fittings for use for water supply or sewerage*

BS 5481, *Specification for unplasticized PVC pipe and fittings for gravity sewers*