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Part 1-3: General — Code of practice for geotechnical design

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Foreword

Publishing information

This part of BS 6349 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 April 2021. It was prepared by Technical Committee CB/502, *Maritime works*. A list of organizations represented on this committee can be obtained on request to the committee manager.

Supersession

This part of BS 6349 supersedes [BS 6349-1-3:2012](#), which is withdrawn.

Relationship with other publications

BS 6349 is published in the following parts:

- Part 1-1: *General – Code of practice for planning and design for operations*;
- Part 1-2: *General – Code of practice for assessment of actions*;
- Part 1-3: *General – Code of practice for geotechnical design*;
- Part 1-4: *General – Code of practice for materials*;
- Part 2: *Code of practice for the design of quay walls, jetties and dolphins*;
- Part 3: *Design of dry docks, locks, slipways and ship building berths, shiplifts and dock and lock gates*;
- Part 4: *Code of practice for design of fendering and mooring systems*;
- Part 5: *Code of practice for dredging and land reclamation*;
- Part 6: *Design of inshore moorings and floating structures*;
- Part 7: *Guide to the design and construction of breakwaters*;
- Part 8: *Code of practice for the design of Ro-Ro ramps, linkspans and walkways*.

This part of BS 6349 is intended to be read in conjunction with BS EN 1997-1:2004 and BS EN 1997-2:2007.

Information about this document

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

- general restructuring;
- inclusion of clause on bearing piles, previously in [BS 6349-1-4](#);
- enhanced reference to and alignment with BS EN 1997-1:2004 and BS EN 1997-2:2007;
- removal of general geotechnical guidance, which was more akin to a design manual.

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Users may substitute any of the recommendations in this British Standard with practices of equivalent or better outcome. 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 in 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.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

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Section 1: General

1 Scope

This part of BS 6349 gives recommendations for geotechnical activities associated with the design and implementation of maritime works. It covers ground investigation and geotechnical design, and gives additional guidance on testing procedures.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions of this document¹⁾. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

[BS 6031](#), *Code of practice for earthworks*

[BS 6349-1-2](#), *Maritime works – Part 1-2: General – Code of practice for assessment of actions*

[BS 6349-1-4](#), *Maritime works – Part 1-4: General – Code of practice for materials*

[BS 6349-2](#), *Maritime works – Part 2: Code of practice for the design of quay walls, jetties and dolphins*

[BS 8006-1](#), *Code of practice for strengthened/reinforced soil and other fills*

[BS 8081](#), *Code of practice for ground anchorages*

BS EN 1536, *Execution of special geotechnical work – Bored piles*

BS EN 1538, *Execution of special geotechnical works – Diaphragm walls*

BS EN 1992 (all parts), *Eurocode 2 – Design of concrete structures*

[BS EN 1995](#), *Eurocode 5: Design of timber structures*

BS EN 1993-5:2007, *Eurocode 3 – Design of steel structures – Part 5: Piling*

BS EN 1997-1:2004, *Eurocode 7 – Geotechnical design – Part 1: General rules*

BS EN 1997-2:2007, *Eurocode 7 – Geotechnical design – Part 2: Ground investigation and testing*

BS EN 1998 (all parts), *Eurocode 8 – Design of structures for earthquake resistance*

BS EN 12063:1999, *Execution of special geotechnical work – Sheet pile walls*

BS EN 14755, *Execution of special geotechnical works – Ground treatment by deep vibration*

BS EN ISO 2475-1, *Geotechnical investigation and testing – Sampling methods and groundwater measurements – Part 1: Technical principles for execution*

BS EN 1997-1:2004, *UK National Annex to Eurocode 7 – Geotechnical design – Part 1: General rules*

¹⁾ Documents that are referred to solely in an informative manner are listed in the Bibliography.