

Guide to

Safety precautions and procedures for the construction and descent of machine-bored shafts for piling and other purposes

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee B/526, Geotechnics, to Subcommittee B/526/5, Construction of piles, pile shafts and boreholes, upon which the following bodies were represented:

Association of Consulting Engineers
 British Iron and Steel Producers' Association
 Building Employers' Confederation
 Concrete Society
 County Surveyors' Society
 District Surveyors' Association
 Federation of Civil Engineering Contractors
 Federation of Piling Specialists
 Health and Safety Executive
 Institution of Civil Engineers
 Institution of Structural Engineers

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The following BSI references relate to the work on this standard:
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Foreword

This British Standard has been prepared by Subcommittee B/526/5.

BS 8008:1996 +A1:2008 supersedes BS 8008:1996, which is withdrawn.

The start and finish of text introduced or altered by Amendment No. 1 is indicated in the text by tags **A1** **A1**.

Large-diameter shafts, particularly for cast-in-situ piling work, continue to be used extensively. Personnel occasionally descend these shafts, either for purposes of inspection or for additional hand work such as cleaning out or extending the underreamed bases of the piles. The Management of Health and Safety at Work Regulations 1999 [1]¹⁾ require that risk assessments are carried out to identify the measures that need to be taken to ensure the health and safety of persons. The first consideration should be the avoidance of operations that place persons at risk, hence methods of working that do not require persons to enter pile shafts are preferable to those that do.

Considerable reliance is placed on the competence of supervisors and on the commonsense of the personnel engaged in shaft entry as it is extremely difficult to anticipate every potentially dangerous circumstance that might arise.

Attention is drawn to the following Acts and Regulations:

- Health and Safety at Work etc. Act 1974 [2];
- Health and Safety (First Aid) Regulations 1981;
- Reporting of Injuries, Diseases and Dangerous Occurrences 1985;
- Control of Substances Hazardous to Health Regulations 1988;
- Construction (Head Protection) Regulations 1989;
- Electricity at Work Regulations 1989;
- Management of Health and Safety at Work Regulations 1999 [1];
- Manual Handling Regulations 1992;
- Personal Protective Equipment at Work Regulations 1998 [3];
- Provision and Use of Work Equipment Regulations 1998;
- Lifting Operations and Lifting Equipment Regulations 1998;
- Control of Noise at Work Regulations 2005;
- Construction (Design and Management) Regulations 2007 [4].

In addition, further information can be obtained by reference to the current edition of Guidance Note EH/40 on workplace exposure limits [5] issued by the Health and Safety Executive (HSE).

It is incumbent on users of this British Standard to ensure that they refer to the latest editions of the Statutory Instruments listed.

Those engaged in the construction of machine-bored shafts need to maintain an awareness of current legislation. If legislation is complied with, the possibility of an accident will be reduced, but certain specific precautions are necessary in the case of large-diameter shafts. The purpose of this British Standard is to reduce the possibility of accidents occurring by drawing attention to the hazards involved.

It has been assumed in the drafting of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been prepared.

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⁾ Publications referred to in the main text of this standard are identified by a number in square brackets. These publications are listed on the inside back cover.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 12, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

