

Recommendations for

Transplanting root-balled trees

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Basic Data and Performance Criteria for Civil Engineering and Building Structures Standards Policy Committee (BDB/-) to Technical Committee BDB/5, upon which the following bodies were represented:

- Arboricultural Association
- Association of County Councils
- Association of District Councils
- Association of Metropolitan Authorities
- Building Employers' Confederation
- Construction Health and Safety Group
- Department of the Environment (Property Services Agency)
- Engineering Equipment and Materials Users' Association
- Federation of Civil Engineering Contractors
- Federation of Manufacturers of Construction Equipment and Cranes
- Federation of Piling Specialists
- Health and Safety Executive
- Incorporated Association of Architects and Surveyors
- Institute of Building Control
- Institute of Clerks of Works of Great Britain Inc.
- Institution of Civil Engineers
- Institution of Environmental Health Officers
- Institution of Structural Engineers
- Landscape Institute
- National Council of Building Materials' Producers
- National Federation of Demolition Contractors
- Royal Institute of British Architects
- Royal Institution of Chartered Surveyors
- Scottish Development Department
- Trades Union Congress

The following bodies were also represented in the drafting of the standard, through sub-committees and panels:

- Department of the Environment
- Department of the Environment (Construction Industries Directorate)
- Forestry Commission
- Horticultural Trades Association
- House Builders' Federation
- Institute of Leisure and Amenity Management
- Loss Prevention Council
- Timber Trade Federation

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Foreword

This British Standard was prepared under the direction of the Basic Data and Performance Criteria for Civil Engineering and Building Structures Standards Policy Committee. It is a revision of BS 4043:1966, which is withdrawn.

The revision was found necessary because of the changes in techniques, equipment and materials, and a wider availability, since 1966, of planting stock grown specifically for transplanting with a ball of soil around the roots.

This standard recognizes two distinct groups of trees; those which have been prepared for transplanting and those which have received no preparatory treatment. The degree of care when lifting and the aftercare needed are very different for each group of trees.

Attention is drawn to BS 3998, BS 4428 and BS 5837. A British Standard is being prepared concerning grounds maintenance.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

In particular, attention is drawn to the requirements for safety at work under the Health and Safety at Work (Etc.) Act, 1974, and to the Health and Safety (First Aid) Regulations, 1981.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, 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.

Section 1. General

1.1 Scope

This British Standard gives recommendations for techniques for transplanting trees which are to be moved with a ball of earth around their roots. Particular attention is given to trees whose combined size and weight is such that special equipment is needed to effect the operation. The standard describes their preparation and aftercare.

The techniques described apply also to large shrubs.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

1.2 Planning

1.2.1 Choice between root-balled trees and other nursery stock

Factors that should influence the choice between root-balled trees and other nursery stock (see BS 3936-1) include:

- a) whether or not an immediate impact on the landscape is considered essential;
- b) the species, varieties and sizes of plants available. There is usually a greater choice of small nursery stock than for larger root-balled trees. Small nursery stock is likely to be the most adaptable to change, provided that the species is suitable for the new soil conditions;
- c) conditions at a planting site. Even when ameliorated to as high a standard as it is practical to achieve, soil conditions may still be marginal for healthy root growth, or limit the growth of some species.

1.2.2 Safety precautions

Persons who are transplanting root-balled trees should be given adequate instruction and supervision to ensure that tasks are completed in a safe manner.

First aid equipment should be provided throughout the lifting and transplanting operation, and used in accordance with the Health and Safety (First Aid) Regulations: 1981, and the requirements for safety at work under the Health and Safety at Work (Etc.) Act, 1974, should be satisfied.

All operators should be immunized against tetanus.

1.2.3 Protection of services

Before work is started, all statutory undertakings and pipeline agencies should be contacted. As far as possible the location of all service runs, such as water supply, gas, electricity (overhead and underground), telephone and existing drainage systems (including land drainage, springs and watercourses) should be ascertained. Their location should be marked upon a plan giving their position, size and depth and, if necessary, they should be marked on site and exposed by hand excavations.

When services could be affected by excavation or when machines may be working close to underground services, the services concerned should be carefully sealed off, protected or diverted. Any work of a temporary nature should be made good at completion. Any permanent adjustments should be part of the new works. Adjoining landowners should be kept fully informed.

NOTE In most cases it will be necessary to obtain the approval and assistance of the statutory undertakings and local authorities concerned.

The position of any overhead power lines should be noted at the planning stage. The owners or operators of the lines should be consulted if minimum clearances, 15 m when lines are suspended from steel towers or 9 m for timber poles, cannot be maintained. Reference should be made to the Health and Safety Executive Guidance Note GS6.