

# Structural timber — Determination of characteristic values of mechanical properties and density

The European Standard EN 384:2004 has the status of a  
British Standard

ICS 79.040

# National foreword

This British Standard is the official English language version of EN 384:2004. It supersedes BS EN 384:1995 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/518, Structural timber, which has the responsibility to:

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 23 December 2004

### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 15 and a back cover.

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### Amendments issued since publication

| Amd. No. | Date | Comments |
|----------|------|----------|
|          |      |          |
|          |      |          |
|          |      |          |
|          |      |          |
|          |      |          |

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ISBN 0 580 45170 4

English version

## Structural timber - Determination of characteristic values of mechanical properties and density

Bois de structure - Détermination des valeurs  
caractéristiques des propriétés mécaniques et de la masse  
volumique

Bauholz für tragende Zwecke - Bestimmung  
charakteristischer Werte für mechanische Eigenschaften  
und Rohdichte

This European Standard was approved by CEN on 20 February 2003.

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## Foreword

This document (EN 384:2004) has been prepared by Technical Committee CEN/TC 124 “Timber structures”, the secretariat of which is held by DS.

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of an identical text or by endorsement, at the latest by July 2004, and conflicting national standards shall be withdrawn at the latest by July 2004.

This document supersedes EN 384:1995.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

In this revised edition the method for determining characteristic values from tests on small clear specimens is now only permitted for hardwoods. Changes to factor  $k_v$  and other minor changes have also been made.

Structural codes can only function effectively if standard methods of determining the mechanical and physical properties exist.

Whilst total accuracy of characteristic values for any defined population is an aim, it is recognized that this is not achievable. A major aim of the procedures given in this standard is to produce characteristic values that are comparable in terms of the populations they represent. It is also important that the standard permits the use of as much existing test data as possible from various sampling and testing techniques.

Where methods are given to permit characteristic values to be determined from a less than ideal amount of structural size test data or from small, clear, defect-free specimen test data, reduction factors to reflect a lower degree of confidence are employed.

This standard covers the stages of population definition, sampling, testing and analysis of data in the determination of characteristic values.