

Ehituspuit. Tugevusklassid

Structural timber - Strength classes

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 338:2005 sisaldab Euroopa standardi EN 338:2003 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 06.06.2003 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 23.04.2003.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 338:2005 consists of the English text of the European standard EN 338:2003.

This standard is ratified with the order of Estonian Centre for Standardisation dated 06.06.2003 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English version

Structural timber - Strength classes

Bois de structure - Classes de résistance

Bauholz für tragende Zwecke - Festigkeitsklassen

This European Standard was approved by CEN on 14 February 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 338:2003) 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 October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

This document supersedes EN 338:1995.

Annex A is informative.

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

Introduction

This revised edition has additional strength classes and lists the equations, formerly in EN 384, that form the relations between some of the characteristic values. Changes have also been made to some of the characteristic values and the requirements for assigning grades and species to strength classes.

Due to variations in the type and quality of timber available, the variety of end uses and the size of production output of the local timber industry, many different combinations of species and strength grade exist with different strength properties, which therefore complicate the design and specification of timber structures.

A strength class system groups together grades and species with similar strength properties thus making them interchangeable. This then permits an engineer to specify a chosen strength class and use the characteristic strength values of that class in design calculations.

Advantages of the strength class system are:

- Additional species/grades can be incorporated into the system at any time without affecting existing specifications for structural timber.
- At the time of carrying out design calculations, an engineer need not be aware of the costs and availability of alternative species and grades. He can simply design using the strength values of a particular class and then specify that class; he can then use the tenders to select the most suitable and economic species/grade on offer. Note that, where a particular species is not acceptable (e.g. for reasons of durability) for a project, the specification needs to make this clear.
- Suppliers can offer their material to meet more specifications than would be possible if species and grades were specified.

1 Scope

This standard establishes a system of strength classes for general use in structural codes.

It gives characteristic strength and stiffness properties and density values for each class and the rules for the allocation of timber populations (i.e. combinations of species, source and grade) to the classes.

This standard applies to all softwood and hardwood timber for structural use.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 384, *Structural timber – Determination of characteristic values of mechanical properties and density.*

prEN 14081-1, *Timber structures – Strength graded structural timber with rectangular cross-section – Part 1: General requirements.*

prEN 14081-2, *Timber structures – Strength graded structural timber with rectangular cross-section – Part 2: Machine Grading - Additional requirements for initial type testing.*

prEN 14081-3, *Timber structures – Strength graded structural timber with rectangular cross-section – Part 3: Machine Grading - Additional requirements for factory production control.*