# Timber poles for overhead lines - Determination of characteristic values

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#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN
12511:2002 sisaldab Euroopa standardi
EN 12511:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 19.06.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12511:2002 consists of the English text of the European standard EN 12511:2001.

This document is endorsed on 19.06.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This standard specifies the methods for determining characteristic values for bending strength and modulus of elasticity, of any population of wood poles. It is not intended for routine quality control.

#### Scope:

This standard specifies the methods for determining characteristic values for bending strength and modulus of elasticity, of any population of wood poles. It is not intended for routine quality control.

ICS 29.240.20, 79.080

**Võtmesõnad:** electric power transmiss, electric power transmission, modulus of elasticity, overhead power line, overhead power lines, ratings, specification (approval), specifications, telecommunication pole lines, testing, wood technology, wooden poles, woodworking industry

### EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 12511

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ICS 29,240,20: 79,080

#### **English version**

## Wood poles for overhead lines - Determination of characteristic values

Poteaux en bois pour lignes aériennes - Détermination des valeurs caractéristiques

Holzmaste für Freileitungen - Bestimmung von charakteristischen Werten

This European Standard was approved by CEN on 21 October 2001.

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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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#### **Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 124 "Structural timber", 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 June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

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

#### Introduction

This standard is one of five standards covering requirements for visual or machine grading, test methods, determination of characteristic values, methods of specifying durability and sizes.

This standard has been drafted on the assumption that the design requirements for transmission and telecommunication poles will be left to the end-buyer and are not covered by Eurocode 5, which is for the design of buildings and civil engineering structures.

This standard is for initially determining the characteristic values for a given population of poles, and additionally Tis de la contraction de la co when there is a reason to suspect that the characteristic values for a population have changed.

#### 1 Scope

This European Standard specifies the methods for determining characteristic values for bending strength and modulus of elasticity, of any population of wood poles. It is not intended for routine quality control.

This standard covers only single poles under cantilever or compression loading. For example, this standard does not cover poles used as beams.

The provision of poles for use in any overhead line or cable infrastructure shall take into account a range of factors not covered by this standard which will necessitate the specification by the end user of complementary and synonymous attributes to those defined in this standard. This refers to requirements for a number of factors including safety, overhead plant, handling, fittings, installation machinery and working practices including climbing.

#### 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 12479, Wood poles for overhead lines - Sizes - Methods of measurement and permissible deviations.

prEN 12509, Wood poles for overhead lines - Test methods - Determination of elasticity, bending strength, density and moisture.

EN 12510, Wood poles for overhead lines - Strength grading criteria.

#### 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

#### 3.1

#### characteristic value

value that corresponds to the 5 % fractile of the statistical distribution of strength or the mean value of modulus of elasticity

#### 3.2

#### fibre saturation point (fsp)

state of a piece of timber when the cell walls are saturated with moisture but no moisture exists in the cell cavities

#### 3.3

#### pole

long round timber for use in a free standing application

#### 3.4

#### population

a group of poles defined by having the same parameters of species, source and grade

#### 3.5

#### sample

number of test poles from one population