

**Timber structures - Test methods - Load bearing
nails, screws, dowels and bolts**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1380:2009 sisaldab Euroopa standardi EN 1380:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 29.05.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.04.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1380:2009 consists of the English text of the European standard EN 1380:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 29.05.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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Võtmesõnad:

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Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

English Version

**Timber structures - Test methods - Load bearing nails, screws,
dowels and bolts**

Structures en bois - Méthode d'essai - Pointes, tire-fonds,
broches et boulons porteurs

Holzbauwerke - Prüfverfahren - Tragende
Nagelverbindungen

This European Standard was approved by CEN on 2 November 2006.

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 CEN 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 CEN Management Centre has the same status as the official versions.

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



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 1380:2009) has been prepared by Technical Committee CEN/TC 124 “Timber structures”, the secretariat of which is held by SFS.

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 2009, and conflicting national standards shall be withdrawn at the latest by October 2009.

This document supersedes EN 1380:1999.

The first version of this European Standard was published in September 1999 and considered only connections with nails. When the product standard for dowel type fasteners EN 14592 became available the scope of EN 1380 was expanded. Therefore, this revised version covers dowel type fasteners as nails, screws, dowels and bolts.

Connections with load bearing staples are considered in EN 1381:1999.

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

1 Scope

This European Standard specifies test methods for determining the strength and deformation characteristics of laterally loaded connections with nail, screws, dowels and bolts in load-bearing timber structures.

The methods assess connections with members of timber (solid timber or glued laminated timber) or wood-based products or metal plates (but not punched metal plate fasteners) in the combination proposed for use in service.

The methods are used to determine load-slip characteristics and maximum load of connections where various angles between the applied force and the timber grain direction, or the main direction of the wood-based products, respectively, are possible.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 322, *Wood-based panels — Determination of moisture content*

EN 323, *Wood-based panels — Determination of density*

EN 13183-2, *Moisture content of a piece of sawn timber — Part 2: Estimation by electrical resistance method*

EN 14080, *Timber structures — Glued laminated timber — Requirements*

EN 14081-1, *Timber structures — Strength graded structural timber with rectangular cross section — Part 1: General requirements*

EN 14358, *Timber structures — Calculation of characteristic 5-percentile values and acceptance criteria for a sample*

EN 14592, *Timber structures — Dowel-type fasteners — Requirements*

EN 26891:1991, *Timber structures — Joints made with mechanical fasteners — General principles for the determination of strength and deformation characteristics (ISO 6891:1983)*

EN 28970, *Timber structures — Testing of joints made with mechanical fasteners — Requirements for wood density (ISO 8970:1989)*

ISO 3131, *Wood — Determination of density for physical and mechanical tests*