

**Puitkonstruktsioonid. Tootenõuded
konstruktsioonilistele ogaplaatliidetega
valmiselementidele**

Timber structures - Product requirements for prefabricated structural members assembled with punched metal plate fasteners

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14250:2010 sisaldab Euroopa standardi EN 14250:2010 ingliskeelset teksti.

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English Version

**Timber structures - Product requirements for prefabricated
structural members assembled with punched metal plate
fasteners**

Structure en bois - Exigences de produit relatives aux
éléments de structures préfabriqués utilisant des
connecteurs à plaque métallique emboutie

Holzbauwerke - Produktanforderungen an vorgefertigte
tragende Bauteile mit Nagelplattenverbindungen

This European Standard was approved by CEN on 3 December 2009.

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Foreword

This document (EN 14250:2010) 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of an identical text or by endorsement, at the latest by July 2010, and conflicting national standards shall be withdrawn at the latest by July 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14250:2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

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1 Scope

This European Standard specifies material, product and documentation requirements for prefabricated structural members (e.g. trusses for roofs, walls and floors, frames, composite beams and girders) for use in buildings made from solid structural timber according to EN 14081-1 with or without finger joints assembled with punched metal plate fasteners.

This document is valid for trusses with lengths up to 35 m and for other prefabricated structural members with spans up to 12 m.

The standard also covers tests and/or calculation methods to carry out the evaluation of conformity, requirements for the marking of these members, and external conditions (service class 3 in accordance with EN 1995-1-1 or use classes 3, 4 and 5 in accordance with EN 335-1).

As regards resistance to biological organisms, this standard covers prefabricated structural members manufactured from either untreated timber or timber treated to improve its natural durability.

This standard does not cover prefabricated timber structural members intended to be used in constructions under predominantly dynamic loads (e.g. bridges) or for use in unprotected external conditions (i.e. use class 3 in accordance with EN 335-1).

Furthermore, it does not cover members treated to improve their fire performance.

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 335-1, *Durability of wood and wood-based products — Definition of use classes — Part 1: General*

EN 335-2, *Durability of wood and wood-based products — Definition of use classes — Part 2: Application to solid wood*

EN 336:2003, *Structural timber — Sizes, permitted deviations*

EN 350-2, *Durability of wood and wood-based products — Natural durability of solid wood — Part 2: Guide to natural durability and treatability of selected wood species of importance in Europe*

EN 844-3, *Round and sawn timber — Terminology — Part 3: General terms relating to sawn timber*

EN 844-9:1997, *Round and sawn timber — Terminology — Part 9: Terms relating to features of sawn timber*

EN 1310, *Round and sawn timber — Method of measurement of features*

EN 1990, *Eurocode — Basis of structural design*

EN 1991 (all parts), *Eurocode 1 — Actions on structures*

EN 1995-1-1, *Eurocode 5: Design of timber structures — Part 1-1: General — Common rules and rules for buildings*

EN 1995-1-2, *Eurocode 5: Design of timber structures — Part 1-2: General — Structural fire design*

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

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 13501-2, *Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services*

EN 13823, *Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item*

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

EN 14545, *Timber structures — Connectors — Requirements*

EN 15228, *Structural timber — Structural timber preservative treated against biological attack*

prEN 15497, *Finger jointed structural timber — Performance requirements and minimum production requirements*

EN ISO 9001:2008, *Quality management systems — Requirements (ISO 9001:2008)*

3 Terms and definitions

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

3.1

anchorage area

surface area of timber occupied by the plate projections in any particular member

3.2

batch

all the structural members produced according to the same specifications in one shift

3.3

dead knot

knot that on the considered surface is intergrown with the surrounding wood for less than one quarter of the cross-sectional perimeter, as defined in EN 844-9:1997

3.4

effective thickness/width

actual thickness/width as defined in EN 336:2003 minus any wane present on the edge being considered

3.5

internal bracing

element to prevent lateral buckling of a compression member

3.6

live knot

intergrown knot

knot that on the considered surface is intergrown with the surrounding wood for more than three quarters of the cross-sectional perimeter as defined in EN 844-9:1997

3.7

plate projection

plate tooth, plate nail or burst used for the purpose of transferring forces between members