Puitkonstruktsioonid. Lamineeritud liimpuit. Nõuded

Timber structures - Glued laminated timber - Requirements



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN	This Estonian standard EVS-EN
14080:2005 sisaldab Euroopa standardi	14080:2005 consists of the English text of
EN 14080:2005 ingliskeelset teksti.	the European standard EN 14080:2005.
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Käesolev dokument on jõustatud	This document is endorsed on 29.08.2005
29.08.2005 ja selle kohta on avaldatud	with the notification being published in the
teade Eesti standardiorganisatsiooni	official publication of the Estonian national
ametlikus väljaandes.	standardisation organisation.
Standard on kättesaadav Eesti	The standard is available from Estonian
standardiorganisatsioonist.	standardisation organisation.

Käsitlusala:

This European Standard specifies the requirements for glued laminated timber for use in load bearing structures.

Scope:

This European Standard specifies the requirements for glued laminated timber for use in load bearing structures.

ICS 79.060.99

Võtmesõnad: conformity tests, lam, mechanical properties, physical properties, production, properties, quality control, ratings, specification (approval), specifications, structural timber, timber construction, timber structures, wood, woodbased sheet materials, wooden boards

EUROPEAN STANDARD

EN 14080

NORME EUROPÉENNE EUROPÄISCHE NORM

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ICS 79.060.99

English version

Timber structures - Glued laminated timber - Requirements

Structures en bois - Bois lamellé collé - Exigences

Holzbauwerke - Brettschichtholz - Anforderungen

This European Standard was approved by CEN on 25 April 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of 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.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This European Standard (EN 14080:2005) 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 December 2005, and conflicting national standards shall be withdrawn at the latest by March 2007.

This European Standard 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.

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, ire d, Poi. 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.

1 Scope

This European Standard specifies the requirements for glued laminated timber for use in load bearing structures.

It also specifies the requirements for large finger joints in the glued laminated timber.

This European Standard specifies the requirements for glued laminated timber produced from untreated timber or from timber treated against biological attack.

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 301:1992, Adhesives, phenolic and amino plastic, for load-bearing timber structures – Classification and performance requirements

EN 302-1, Adhesives for load-bearing timber structures – Test methods – Part 1: Determination of bond strength in longitudinal tensile shear strength

EN 302-2, Adhesives for load-bearing timber structures – Test methods – Part 2: Determination of resistance to delamination

EN 302-3:2004, Adhesives for load-bearing timber structures – Test methods – Part 3: Determination of the effect of acid damage to wood fibres by temperature and humidity cycling on the transverse tensile strength

EN 302-4, Adhesives for load-bearing timber structures – Test methods – Part 4: Determination of the effect of wood shrinkage on the shear strength

ENV 302-5, Adhesives for load-bearing timber structures – Test methods – Part 5: Determination of the conventional assembly time

EN 302-6:2004, Adhesives for load-bearing timber structures – Test methods – Part 6: Determination of the conventional pressing time

EN 302-7, Adhesives for load-bearing timber structures – Test methods – Part 7: Determination of the conventional working life

EN 350-1, Durability of wood and wood-based products – Natural durability of solid wood – Part 1: Guide to the principles of testing and classification of the natural durability of wood

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

EN 385:2001, Finger jointed structural timber – Performance requirements and minimum production requirements

EN 386:2001, Glued laminated timber – Performance requirements and minimum production requirements

EN 387:2001, Glued laminated timber – Large finger joints – Performance requirements and minimum production requirements

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EN 390, Glued laminated timber - Sizes - Permissible deviations

EN 408, Timber structures – Structural and glued laminated timber – Determination of some physical and mechanical properties

EN 717-1, Wood-based panels – Determination of formaldehyde release – Part 1: Formaldehyde emission by the chamber method

EN 1194:1999, Timber structures – Glued laminated timber – Strength classes and determination of characteristic values

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

EN 13238, Reaction to fire tests for building products – Conditioning procedures and general rules for selection of substrates

EN 14358, Timber structures - Fasteners and wood-based products - Calculation of characteristic 5-percentile values and acceptance criteria for a sample

prEN 15228, Structural timber – Structural timber preservative treated against biological attack

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 385:2001, EN 386:2001 and EN 387:2001 together with the following apply.

3.1

characteristic density

population lower 5-percentile value with mass and volume corresponding to equilibrium moisture content at a temperature of 20 °C and a relative humidity of 65 %

3.2

characteristic strength

population lower 5-percentile value obtained from the results of tests with a duration of 300 s using test pieces at an equilibrium moisture content resulting from a temperature of 20 °C and a relative humidity of 65 %

3 3

characteristic bending strength of glued laminated timber

strength related to a depth of 600 mm

3.4

characteristic tensile strength of glued laminated timber

strength parallel to the grain related to a width of 600 mm

3.5

characteristic compression strength of glued laminated timber strength parallel to the grain

3.6

characteristic shear strength of glued laminated timber

strength related to a specimen with a uniformly stressed volume of 0,000 5 m³

3.7

characteristic modulus of elasticity of glued laminated timber

population mean value obtained under the same climate conditions as defined in 3.1