

Glued laminated timber - Large finger joints - Performance requirements and minimum production requirements

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 387:2001 sisaldab Euroopa standardi EN 387:2001 ingliskeelset teksti.	This Estonian standard EVS-EN 387:2001 consists of the English text of the European standard EN 387:2001.
Käesolev dokument on jõustatud 19.12.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 19.12.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: This Standard specifies requirements for large finger joints and minimum requirements for the production of these in structural members of glued laminated timber also with corner pieces of laminated veneer lumber or plywood with a finger length of at least 45 mm.	Scope: This Standard specifies requirements for large finger joints and minimum requirements for the production of these in structural members of glued laminated timber also with corner pieces of laminated veneer lumber or plywood with a finger length of at least 45 mm.
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Võtmesõnad: delivery c, finger joints, laminated wood, laminates, management, minimum requirements, performance, production, quality control, specification (approval), specifications, structural timber, timber construction, timber joints, type tests, wedge spike joint, wood

English version

Glued laminated timber - Large finger joints - Performance requirements and minimum production requirements

Bois lamellé collé - Aboutages à entures multiples de grandes dimensions - Exigences de performance et exigences minimales de fabrication

Brettschichtholz - Universal-Keilzinkenverbindungen - Leistungsanforderungen und Mindestanforderungen an die Herstellung

This European Standard was approved by CEN on 3 September 2001.

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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
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Foreword

This European Standard 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 April 2002, and conflicting national standards shall be withdrawn at the latest by April 2002.

This European Standard supersedes ENV 387:1999.

Annex A is informative.

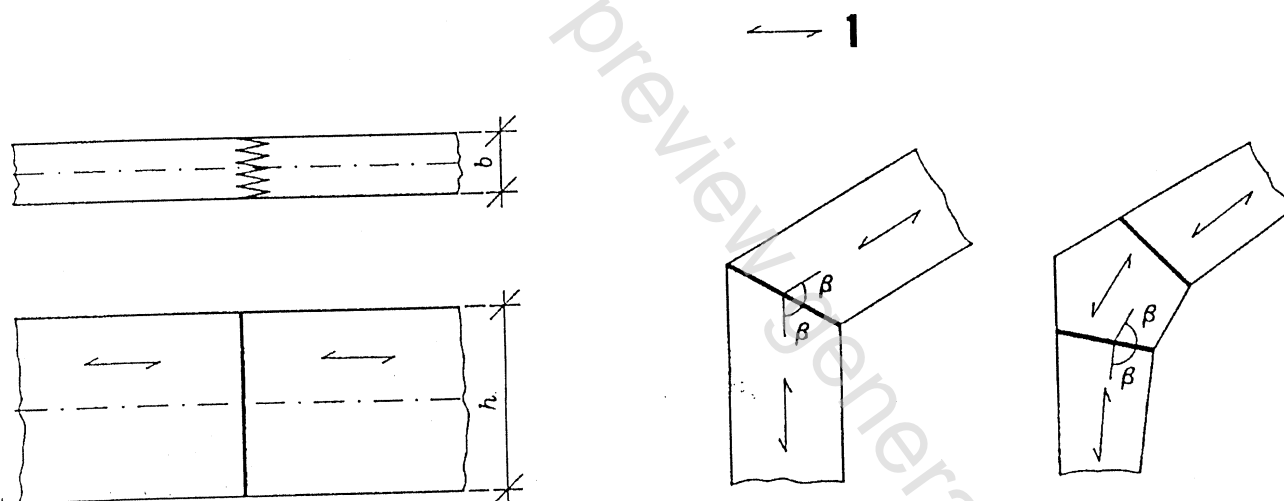
According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal,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

Introduction

This standard concerns the production of large finger joints, which are finger joints across the whole cross section of a structural member of glued laminated timber also with corner pieces of laminated veneer lumber or plywood. The requirements are to ensure the production of reliable and durable bonding, so that large finger joints may be used in timber structures of service classes 1 or 2. For timber structures of service class 3 special precautions should be taken, among these only adhesives of the phenolic resin type, which meet the requirements for adhesive type I of EN 301 should be used. It is assumed that the production of large finger joints will take place at a factory in order to ensure a stable and reliable product.

1 Scope

This standard specifies requirements for large finger joints and minimum requirements for the production of these in structural members of glued laminated timber also with corner pieces of laminated veneer lumber or plywood with a finger length of at least 45 mm. The glued laminated timber and the laminated veneer lumber shall be made from conifers and poplar. Such finger joints may be employed for joints in straight beams or for frame corners, see Figure 1.



Key

- 1 Direction of grain

Figure 1 - Large finger joints in a beam and at frame corners

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 301, *Adhesives, phenolic and aminoplastic, for load-bearing timber structures - Classification and performance requirements.*

EN 386:2001, *Glued laminated timber - Performance requirements and minimum production requirements.*

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

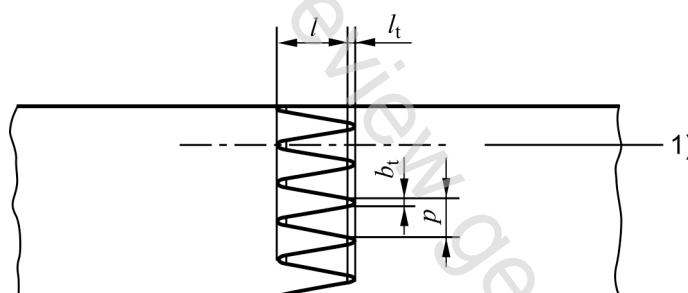
3 Terms and definitions

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

3.1

large finger joint

finger joint through the full cross-sectional area at the ends of glulam members bonded together at any angle including corner pieces of laminated veneer lumber or plywood



Key

l Finger length

p Pitch

b_t Tip width

l_t Tip gap

1) Finger symmetry direction

Figure 2 - Typical profile of finger joint

3.2

finger length

distance between the slot base and the tip of the finger, measured along the centre line of the finger, see Figure 2

3.3

glued laminated timber (glulam)

structural member formed by bonding together timber laminations with the grain running essentially parallel