

**SÕRMJÄTKATUD EHITUSLIK TÄISPUIT.
TEOSTUSNÕUDED JA TOOTMISELE ESITATAVAD
MIINIMUMNÕUDED**

**Structural finger jointed solid timber - Performance
requirements and minimum production requirements**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

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English Version

Structural finger jointed solid timber - Performance requirements and minimum production requirements

Bois massif de structure à entures multiples - Exigences de
performances et exigences minimales de fabrication

Keilgezinktes Vollholz für tragende Zwecke -
Leistungsanforderungen und Mindestanforderungen an die
Herstellung

This European Standard was approved by CEN on 6 February 2014.

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Foreword

This document (EN 15497:2014) has been prepared by Technical Committee CEN/TC 124 "Timber structures", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by October 2014, and conflicting national standards shall be withdrawn at the latest by January 2016.

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, along with EN 14080:2013, supersedes EN 385:2001.

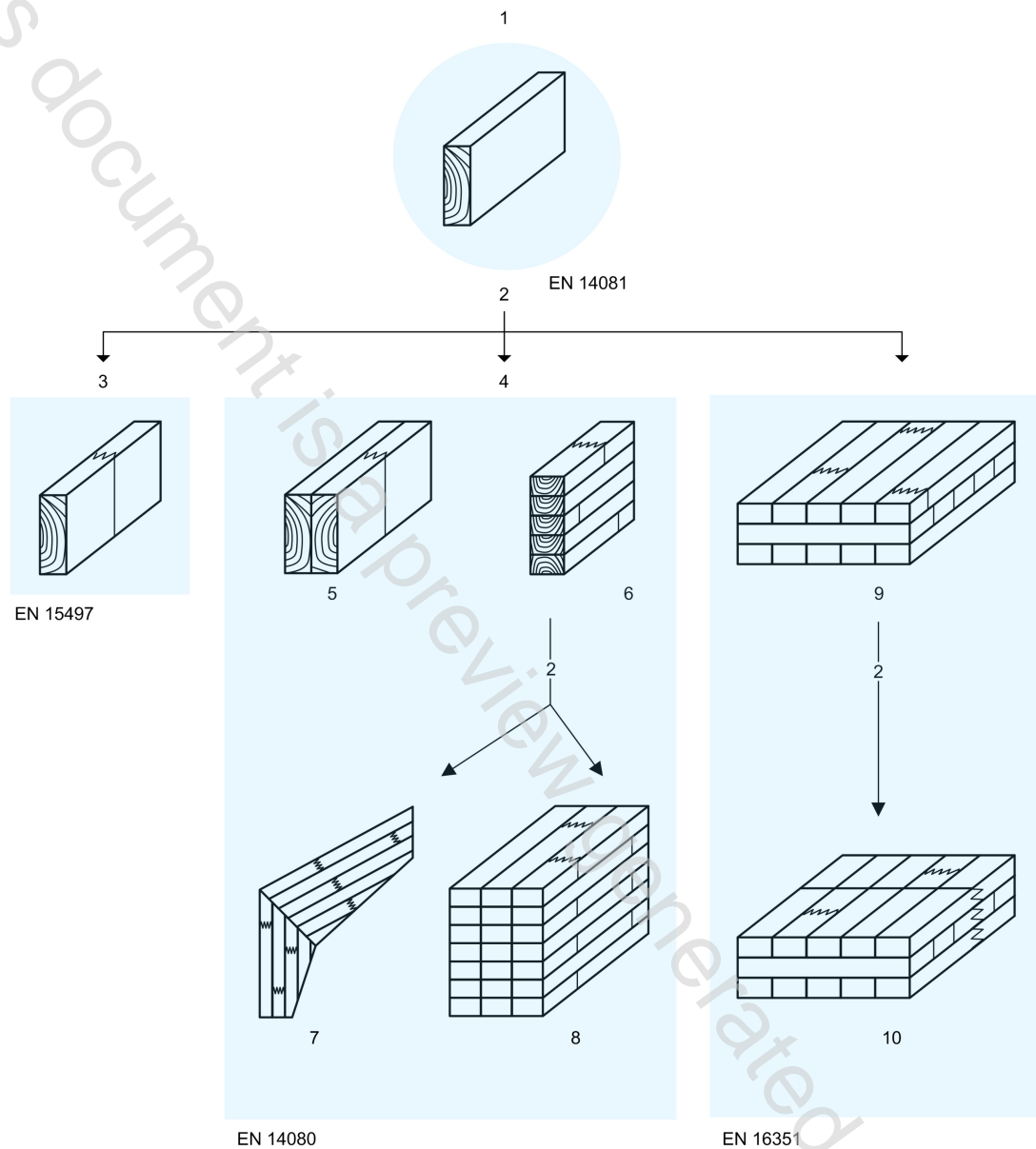
This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports basic work requirements of Regulation (EU) No 305/2011.

For relationship with the EU Regulations, 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, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Figure 1 shows the relation of European Standards for structural timber products prepared by CEN/TC 124.



Key

- | | | | |
|---|----------------------------------|----|---|
| 1 | boards | 6 | glued laminated timber (glulam) |
| 2 | is a component for | 7 | glulam with large finger joints |
| 3 | structural finger jointed timber | 8 | block glued glulam |
| 4 | glued laminated products | 9 | cross laminated timber (X-Lam) |
| 5 | glued solid timber | 10 | cross laminated timber (X-Lam) with large finger joints |

Figure 1 — Relation of European Standards for structural timber products prepared by CEN/TC 124

1 Scope

This European Standard sets out provisions regarding the performance characteristics for structural finger jointed timber with rectangular cross section for use in buildings and bridges.

The use of structural finger jointed timber may be limited to certain service classes in some member states.

It also lays down minimum production provisions and procedures for Assessment and Verification of Constancy of Performance for structural finger jointed timber.

This European Standard is applicable to structural finger jointed timber made of coniferous timber species listed in this standard or poplar.

Although it may be possible to produce structural finger jointed timber made from specific broadleaf species based on some provisions of this European Standard, this standard is not applicable to these products.

This European Standard is only applicable to finger joints between timber sections of the same species.

This European Standard does not cover impressed (die-formed) finger joints.

This European Standard covers structural finger jointed timber untreated or treated against biological attack. Structural finger jointed timber treated with fire retardants is not covered.

2 Normative references

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

EN 301:2013, *Adhesives, phenolic and aminoplastic, for load-bearing timber structures — Classification and performance requirements*

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

EN 302-2:2013, *Adhesives for load-bearing timber structures — Test methods — Part 2: Determination of resistance to delamination*

EN 302-3:2013, *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 effects of wood shrinkage on the shear strength*

EN 302-5:2013, *Adhesives for load-bearing timber structures — Test methods — Part 5: Determination of maximum assembly time under referenced conditions*

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

EN 338, *Structural timber — Strength classes*

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

EN 13183-1, *Moisture content of a piece of sawn timber — Part 1: Determination by oven dry method*

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

EN 13183-3, *Moisture content of a piece of sawn timber — Part 3: Estimation by capacitance method*

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

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 14081-1:2005+A1:2011, *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 15228:2009, *Structural timber — Structural timber preservative treated against biological attack*

EN 15416-3, *Adhesives for load bearing timber structures other than phenolic and aminoplastic — Test methods — Part 3: Creep deformation test at cyclic climate conditions with specimens loaded in bending shear*

EN 15425:2008, *Adhesives — One component polyurethane for load bearing timber structures — Classification and performance requirements*

3 Terms and definitions

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

3.1

bonding strength

structural effectiveness of adhesives between timber components when subjected to stresses

3.2

finger angle

inclination α of each side of the fingers of a finger joint

Note 1 to entry: See Figure 2.

3.3

finger joint

interlocking end joint formed by machining a number of similar, tapered, symmetrical fingers in the ends of timber members using a finger joint cutter and then bonded together