# Timber structures - Test methods - Load bearing stapled joints

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### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1381:2000 sisaldab Euroopa standardi EN 1381:1999 ingliskeelset teksti.

Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1381:2000 consists of the English text of the European standard EN 1381:1999.

This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

This standard specifies test methods for determining the strength and deformation characteristics of stapled joints in load-bearing timber structures. The methods assess joints with members of timber or wood-based products in the combination proposed for use in service and using all types of staples up to 3 mm diameter for circular cross-section staples or 4 mm x 2 mm for rectangular or oval cross-section staples.

### Scope:

This standard specifies test methods for determining the strength and deformation characteristics of stapled joints in load-bearing timber structures. The methods assess joints with members of timber or wood-based products in the combination proposed for use in service and using all types of staples up to 3 mm diameter for circular cross-section staples or 4 mm x 2 mm for rectangular or oval cross-section staples.

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Võtmesõnad:

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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### **English version**

# Timber structures – Test methods Loadbearing stapled joints

Structures en bois – Méthodes d'essai – Assemblages agrafés porteurs Holzbauwerke – Prüfverfahren – Tragende Klammerverbindungen

This European Standard was approved by CEN on 1999-07-11.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

## CEN

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Contents

F	Foreword2			
1	Scope	3		
	Normative references			
	Definitions			
	Symbols			
5	Materials5 1 Timber	5		
	5.1 Timber 5.2 Wood-based products	5		
	5.3 Staples	5		
6	Test methods	5		
	6.1 General	5		
	6.2 Conditioning	5		
	6.4 Preparation of test pieces	6		
	6.5 Test procedure	6		
	6.6 Test results	8 g		

### **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 February 2000, and conflicting national standards shall be withdrawn at the latest by February 2000.

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.

This Standard is one of a series of standards for test methods for building materials and components. It was prepared by a working group under the convenorship of National Standards Authority of Ireland (NSAI).

The Standard is based on ISO/DIS 9708 'Timber structures - Joints with mechanical fasteners - Testing of joints with nails or staples'.

Page 3 EN 1381 : 1999

### 1 Scope

This standard specifies test methods for determining the strength and deformation characteristics of stapled joints in load-bearing timber structures.

The methods assess joints with members of timber (solid timber and glued laminated timber) or wood-based products in the combination proposed for use in service and using all types of staples up to 3 mm diameter for circular cross-section staples or 4 mm  $\times$  2 mm for rectangular or oval cross-section staples.

The methods determine load-slip characteristics and maximum load of joints with laterally loaded staples 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

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.

EN 322	Wood-based panels - Determination of moisture content
EN 323	Wood-based panels - Determination of density
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 3130	Wood - Determination of moisture content for physical and mechanical tests
ISO 3131	Wood - Determination of density for physical and mechanical tests

### 3 Definitions

For the purposes of this standard, the following definitions apply:

- 3.1 staple: Double-bent, u-shaped piece of round, square, rectangular or oval wire with pointed legs
- 3.2 staple crown: Connection between the two staple legs
- 3.3 staple leg diameter: Diameter of a round staple leg or the smaller dimension of a rectangular or oval staple leg
- 3.4 staple length: Length of each staple leg, including point
- 3.5 staple width: Width across the staple legs, see figure 1