

## **Oriented Strand Boards (OSB) - Definitions, classification and specifications**

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classification and specifications

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 300:2006 sisaldab Euroopa standardi EN 300:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 30.08.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 300:2006 consists of the English text of the European standard EN 300:2006.</p> <p>This document is endorsed on 30.08.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This European Standard applies to Oriented Strand Boards (OSB). It defines terms, establishes a classification and specifies requirements. The values listed in this European Standard relate to product properties but they are not characteristic values to be used in design calculations.</p>	<p><b>Scope:</b> This European Standard applies to Oriented Strand Boards (OSB). It defines terms, establishes a classification and specifies requirements. The values listed in this European Standard relate to product properties but they are not characteristic values to be used in design calculations.</p>
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ICS 79.060.20

Võtmesõnad:

English Version

## Oriented Strand Boards (OSB) - Definitions, classification and specifications

Panneaux de lamelles minces, longues et orientées (OSB)  
- Définitions, classification et exigences

Platten aus langen, flachen, ausgerichteten Spänen (OSB)  
- Definitionen, Klassifizierung und Anforderungen

This European Standard was approved by CEN on 24 May 2006.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This document (EN 300:2006) has been prepared by Technical Committee CEN/TC 112 “Wood-based panels”, the secretariat of which is held by DIN.

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 January 2007, and conflicting national standards shall be withdrawn at the latest by January 2007.

This document supersedes EN 300:1997.

The following principal modifications have been made:

- a) thickness ranges for board types OSB/2, OSB/3 and OSB/4 have been extended;
- b) requirements for moisture resistance have been adapted;
- c) requirements for the marking of boards have been simplified, taking account of the fact that EN 13986 now describes the detailed requirements for CE marking of boards for use in construction;
- d) former Annexes E (list of approval numbers for option 2 board types with certain adhesives or adhesive systems) and F (A-deviations) have been deleted.

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, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## 1 Scope

This European Standard applies to Oriented Strand Boards (OSB). It defines terms, establishes a classification and specifies requirements.

The values listed in this European Standard relate to product properties but they are not characteristic values to be used in design calculations.

NOTE Test methods for determination of mechanical properties for structural purposes are given in EN 789. Determination of characteristic values of mechanical properties and density for structural purposes is given in EN 1058. Design characteristic values for OSB are given in EN 12369-1.

Information on supplementary properties is given in Annex C.

## 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 120, *Wood-based panels - Determination of formaldehyde content - Extraction method called the perforator method*

EN 310, *Wood-based panels - Determination of modulus of elasticity in bending and of bending strength*

EN 317, *Particleboards and fibreboards - Determination of swelling in thickness after immersion in water*

EN 318, *Wood-based panels - Determination of dimensional changes associated with changes in relative humidity*

EN 319, *Particleboards and fibreboards - Determination of tensile strength perpendicular to the plane of the board*

EN 320, *Fibreboards - Determination of resistance to axial withdrawal of screws*

EN 321, *Wood based panels - Determination of moisture resistance under cyclic test conditions*

EN 322, *Wood-based panels - Determination of moisture content*

EN 323, *Wood-based panels - Determination of density*

EN 324-1, *Wood-based panels - Determination of dimensions of boards - Part 1: Determination of thickness, width and length*

EN 324-2, *Wood-based panels - Determination of dimension of boards - Part 2: Determination of squareness and edge straightness*

EN 326-1, *Wood-based panels - Sampling, cutting and inspection - Part 1: Sampling and cutting of test pieces and expression of test results*

EN 326-2, *Wood-based panels - Sampling, cutting and inspection Part 2: Quality control in the factory*

EN 326-3, *Wood-based panels - Sampling, cutting and inspection - Part 3: Inspection of an isolated lot of panels*

EN 594, *Timber structures - Test methods - Racking strength and stiffness of timber frame wall panels*

EN 596, *Timber structures - Test methods - Soft body impact test of timber framed walls*

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

EN 789, *Timber structures - Test methods - Determination of mechanical properties of wood-based panels*

EN 1058, *Wood-based panels - Determination of characteristic values of mechanical properties and density*

EN 1087-1, *Particleboards - Determination of moisture resistance - Part 1: Boil test*

ENV 1156, *Wood-based panels - Determination of duration of load and creep factors*

EN 1195, *Timber structures - Test methods - Performance of structural floor decking*

EN 12369-1, *Wood-based panels - Characteristic values for structural design - Part 1: OSB, particleboards and fibreboards*

EN 12871, *Wood-based panels - Performance specifications and requirements for load bearing boards for use in floors, walls and roofs*

EN 13986:2004, *Wood-based panels for use in construction - Characteristics, evaluation of conformity and marking*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13986:2004 and the following apply.

#### 3.1

##### **Oriented Strand Board (OSB)**

multi-layered board mainly made from strands of wood together with a binder. The strands in the external layer are aligned and parallel to the board length or width. The strands in the internal layer or layers can be randomly orientated or aligned, generally at right angles to the strands in the external layers

#### 3.2

##### **strand**

piece of wood of a predetermined shape with a length of more than 50 mm and a typical thickness of less than 2 mm

#### 3.3

##### **major axis**

direction in the plane of the board in which the bending properties have the higher values

#### 3.4

##### **minor axis**

direction in the plane of the board at right angles to the major axis

#### 3.5

##### **dry conditions**

conditions corresponding to service class 1 of EN 1995-1-1 which is characterised by a moisture content in the material corresponding to a temperature of 20 °C and a relative humidity of the surrounding air only exceeding 65 % for a few weeks per year