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Irish Standard  
I.S. EN 12369-3:2009

# Wood-based panels - Characteristic values for structural design - Part 3: Solid-wood panels

## I.S. EN 12369-3:2009

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## **Wood-based panels - Characteristic values for structural design - Part 3: Solid-wood panels**

Panneaux à base de bois - Valeurs caractéristiques pour la  
conception des structures - Partie 3: Bois panneautés

Holzwerkstoffe - Charakteristische Werte für die  
Berechnung und Bemessung von Holzbauwerken - Teil 3:  
Massivholzplatten

This European Standard was approved by CEN on 12 October 2008.

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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 CEN Management Centre has the same status as the official versions.

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# Contents

Page

<b>Foreword</b> .....	<b>3</b>
<b>1 Scope</b> .....	<b>4</b>
<b>2 Normative references</b> .....	<b>4</b>
<b>3 Terms and definitions and symbols</b> .....	<b>4</b>
3.1 Terms and definitions .....	4
3.2 Symbols .....	5
3.2.1 Main Symbols .....	5
3.2.2 Subscripts .....	6
<b>4 General</b> .....	<b>6</b>
<b>5 Characteristic values for solid wood panels</b> .....	<b>6</b>
5.1 Introduction .....	6
5.2 Load-bearing panels for use in all service classes .....	7
<b>Annex A (informative) Presentation of characteristic values</b> .....	<b>9</b>
<b>Bibliography</b> .....	<b>10</b>

## **Foreword**

This document (EN 12369-3:2008) 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of an identical text or by endorsement, at the latest by May 2009, and conflicting national standards shall be withdrawn at the latest by May 2009.

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 European Standard is intended to be used in conjunction with EN 1995-1-1.

This European Standard is one of a series specifying characteristic values of wood-based panels for structural design. The other parts of this series are listed in the Bibliography.

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, Bulgaria, 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 the United Kingdom.

## 1 Scope

This European Standard provides information on the characteristic values for use in designing structures incorporating wood-based panels. The characteristic values given are as defined in EN 1995-1-1.

This European Standard includes the characteristic values of the mechanical properties and of the raw density for solid-wood panels complying with EN 13353:2008 technical classes SWP/1 S, SWP/2 S, SWP/3 S.

## 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 338, *Structural timber — Strength classes*

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

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

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

EN 13017-1, *Solid wood panels — Classification by surface appearance — Part 1: Softwood*

EN 13017-2, *Solid wood panels — Classification by surface appearance — Part 2: Hardwood*

EN 13353:2008, *Solid wood panels (SWP) — Requirements*

## 3 Terms and definitions and symbols

### 3.1 Terms and definitions

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

#### 3.1.1 characteristic values

##### 3.1.1.1 characteristic strength value

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

##### 3.1.1.2 characteristic stiffness value

either the population 5-percentile or the mean value obtained of tests with a duration of 300 s at an equilibrium moisture content of the test pieces relating to a temperature of 20 °C and a relative humidity of 65 %

NOTE The stiffness values given in the Tables are mean values as these are most commonly used in design. A note in Annex A explains how to calculate the 5-percentile value.

##### 3.1.1.3 characteristic density

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

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