

**Träbaserade skivor – Ythållfasthet –
Provning**

**Wood-based panels – Surface soundness –
Test method**

Europastandarden EN 311:2002 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 311:2002.

The European Standard EN 311:2002 has the status of a Swedish Standard. This document contains the official English version of EN 311:2002.

Dokumentet består av 10 sidor.

Upplysningar om **sakinnehållet** i standarden lämnas av SIS, Swedish Standards Institute, tel 08 - 555 520 00.

Standarder kan beställas hos SIS Förlag AB som även lämnar **allmänna upplysningar** om svensk och utländsk standard.

Postadress: SIS Förlag AB, 118 80 STOCKHOLM
Telefon: 08 - 555 523 10. *Telefax:* 08 - 555 523 11
E-post: sis.sales@sis.se. *Internet:* www.sis.se

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 311

May 2002

ICS 79.060.20

Supersedes EN 311:1992

English version

Wood-based panels - Surface soundness - Test method

Panneaux à base de bois - Arrachement de la surface -
Méthode d'essai

Holzwerkstoffe - Abhebefestigkeit der Oberfläche -
Prüfverfahren

This European Standard was approved by CEN on 24 February 2002.

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 Management Centre 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 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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions.....	4
4 Principle	4
5 Apparatus	4
6 Test pieces.....	5
6.1 Sampling and cutting	5
6.2 Preparing the groove in the test piece	5
6.2.1 Unfaced panels.....	5
6.2.2 Overlaid panels	5
6.3 Conditioning	5
7 Procedure	5
7.1 Bonding the steel pad to the surface.....	5
7.2 Determination of force at fracture.....	6
8 Expression of results	6
9 Test report	6

Foreword

This document EN 311:2002 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 November 2002, and conflicting national standards shall be withdrawn at the latest by November 2002.

This document supersedes EN 311:1992.

Compared to the version EN 311:1992 the following modifications have been made:

- a) The scope has been extended. The standard is now also applicable to overlaid wood-based panels, to wet and dry process fibreboards, and cement bonded particleboards.
- b) The number of test pieces has been changed from 10 to 8.
- c) The test procedure for boards thinner than 15 mm has been modified.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

EN 311:2002 (E)

1 Scope

This European Standard specifies a method of assessing the surface soundness of overlaid wood-based panels and unfaced particleboards, wet and dry process fibreboards and cement bonded particleboards.

NOTE The grid patterned face of wet processed hardboards cannot be tested according to this European Standard.

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

3 Terms and definitions

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

3.1 surface soundness
strength or quality of bonding between the particles or fibres at the surface of a board and the layer below (unfaced panels) or between the coating material and the underlying board (overlaid panels)

3.2 overlaid panel
panel surfaced with one or more overlay sheets or films, for example impregnated paper, plastics, resin film, metal, decorative veneer

4 Principle

Measurement of the tensile load required to pull off a defined surface area of overlaid or unfaced panel.

5 Apparatus

5.1 Devices to produce a groove as illustrated in Figure 1 within the tolerance specified in 6.2.

5.2 Steel mushroom-shaped pad with a diameter of $35,6 \pm 0,1$ mm and of a sufficient thickness to prevent bending during the test. A typical example is shown in Figure 2.

5.3 Centring frame with sufficient stiffness, shaped to fit the mushroom-shaped pad shown in Figure 2. An example of the frame is shown in Figure 3.

5.4 Tensile testing machine with a sufficient loading capacity, having an accuracy of 1 % of the applied load, and an adjustable loading rate.

5.5 Steel gimbal as illustrated in Figure 4.