SWEDISH STANDARDS INSTITUTE

SVENSK STANDARD
SS-EN 318

Fastställd 2002-11-01

Utgåva 2

Träbaserade skivor – Hygroskopiska måttförändringar – Provning

Wood-based panels – Determination of dimensional changes associated with changes in relative humidity

ICS 79.060.01

Språk: engelska

Tryckt i december 2002

Europastandarden EN 318:2002 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 318:2002.

The European Standard EN 318:2002 has the status of a Swedish Standard. This document contains the official English version of EN 318:2002.

Dokumentet består av 10 sidor.

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 318

March 2002

ICS 79.060.01

Supersedes EN 318:1993

English version

Wood based panels - Determination of dimensional changes associated with changes in relative humidity

Panneaux à base de bois - Détermination des variations dimensionnelles sous l'influence de variations de l'humidité relative

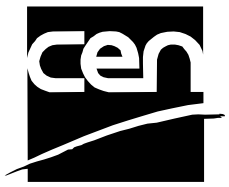
Holzwerkstoffe - Bestimmung von Maßänderungen in Verbindung mit Änderungen der relativen Luftfeuchte

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

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Ref. No. EN 318:2002 E

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Foreword

This document (EN 318:2002) 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 September 2002, and conflicting national standards shall be withdrawn at the latest by September 2002.

This document supersedes EN 318:1993.

Compared to the version EN 318:1993 the following modifications have been made:

a) The scope has been extended from fibre boards to wood-based panels

b) The conditioning procedure 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.

1 Scope

This European Standard specifies a method for the determination of dimensional changes in wood-based panels, due to changes in the relative humidity of the air.

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 322, *Wood-based panels — Determination of moisture content.*

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

3 Principle

Because variations in relative humidity affect the moisture content of a panel and result in changes to its dimensions, test pieces are measured after conditioning to different levels of relative humidity.

The equilibrium moisture content of panel products is dependent on the history of moisture change. Higher equilibrium moisture contents for any one relative humidity are achieved in desorption compared with adsorption; this gives rise to a hysteresis effect.

In order to obtain the true dimensional change, this is measured between 65 % relative humidity and 85 % relative humidity in adsorption and 65 % relative humidity and 30 % relative humidity in desorption.

4 Apparatus

4.1 Balance

Balance as described in EN 322.

4.2 Measuring instruments for length and thickness

Instruments for measuring length and thickness with an accuracy of ± 0,01 mm. An example of a length measuring equipment is shown in Figure 1.

4.3 Calibration bar

Corrosion resistant metal bar of sufficient length and shape to calibrate the length measuring equipment. The length of the calibration bar shall be known to within 0,01 mm.

4.4 Climate chamber

Climate chamber(s) capable of maintaining the required temperature to ± 1 °C and relative humidity to ± 3 %.