SLOVENSKI STANDARD
oSIST prEN 321:2024

01-junij-2024

Lesne plošče – Ugotavljanje odpornosti proti vlagi pri cikličnih pogojih

Wood-based panels - Determination of moisture resistance under cyclic test conditions

Holzwerkstoffe - Bestimmung der Feuchtebeständigkeit durch Zyklustest

Panneaux à base de bois - Détermination de la résistance à l'humidité selon essais cycliques

Ta slovenski standard je istoveten z: **prEN 321**

ICS:

79.060.01	Lesne plošče na splošno	Wood-based panels in general

oSIST prEN 321:2024 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 321

April 2024

ICS 79.060.01

Will supersede EN 321:2001

English Version

Wood-based panels - Determination of moisture resistance under cyclic test conditions

Panneaux à base de bois - Détermination de la résistance à l'humidité selon essais cycliques

Holzwerkstoffe - Bestimmung der Feuchtebeständigkeit durch Zyklustest

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 112.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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Contents

Page

European foreword

This document (prEN 321:2024) has been prepared by Technical Committee CEN/TC 112 “Wood-based panels”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 321:2001.

prEN 321:2024 includes the following significant technical changes with respect to EN 321:2001:

— the wording of 7.2 has been changed to avoid misinterpretations;

— The Bibliography has been updated.

This standard is one of a series specifying methods of test for determining the behaviour of wood-based panels under the influence of moisture.

1 Scope

This document specifies a test method for the determination of the moisture resistance of wood-based panels under cyclic test conditions.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 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 319, *Particleboards and fibreboards — Determination of tensile strength perpendicular to the plane of the board*

EN 325, *Wood-based panels — Determination of dimensions of test pieces*

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

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Principle

Test pieces are exposed to three cycles, each comprising immersion in water, freezing, and drying at elevated temperature. After cyclic treatment, the test pieces are then reconditioned and their swelling in thickness and residual strength determined.

5 Apparatus

5.1 Water bath

A water bath which shall maintain water at a temperature of (20 ± 1) °C.

5.2 Freezing cabinet

A freezing cabinet which shall be capable of maintaining a temperature of between −12 °C and −25 °C. It shall also be capable of regaining this temperature within 1 h after inserting the test pieces.

5.3 Drying cabinet

A laboratory drying cabinet with forced, evenly distributed air ventilation, which shall maintain a temperature of (70 ± 2) °C and have (25 ± 5) air exchanges per hour. It shall be capable of reaching a temperature of (70 ± 2) °C within 2 h after inserting the test pieces.