



SLOVENSKI STANDARD
oSIST prEN 14322:2020
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Lesne plošče - Z melaminom oplemenitene plošče za notranje prostore - Definicija, zahteve in klasifikacija

Wood-based panels - Melamine faced boards for interior uses - Definition, requirements and classification

Holzwerkstoffe - Melaminbeschichtete Platten zur Verwendung im Innenbereich - Definition, Anforderungen und Klassifizierung

Panneaux à base de bois - Panneaux surfacés mélaminés pour usages intérieurs - Définition, exigences et classification

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Ta slovenski standard je istoveten z: prEN 14322

ICS:

79.060.01	Lesne plošče na splošno	Wood-based panels in general
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 14322

April 2020

ICS 79.060.20

Will supersede EN 14322:2017

English Version

Wood-based panels - Melamine faced boards for interior uses - Definition, requirements and classification

Panneaux à base de bois - Panneaux surfacés
mélaminés pour usages intérieurs - Définition,
exigences et classification

Holzwerkstoffe - Melaminbeschichtete Platten zur
Verwendung im Innenbereich - Definition,
Anforderungen und Klassifizierung

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.

This draft European Standard was established by CEN 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-CENELEC Management Centre has the same status as the official versions.

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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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European foreword

This document (prEN 14322:2020) has been prepared by Technical Committee CEN/TC “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 14322:2017.

Compared to EN 14322:2017 the following modifications have been made:

- a) spatially resolved spectral measurement technology added as an option in 5.1 to determine colour matching.

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prEN 14322:2020 (E)**1 Scope**

This document specifies the surface requirements and dimensional tolerances for decorative melamine faced boards for interior use which are common for particleboards, extruded particleboards fibreboards and sandwich boards for furniture.

This document does not apply to boards laminated with so called priming foils or finish foils and laminates according to EN 438-1.

This document does not apply to laminate floor coverings.

Melamine faced wood-based boards in accordance with this document can be referred to as MFB.

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 311, *Wood-based panels — Surface soundness — Test method*

EN 320, *Particleboards and fibreboards — Determination of resistance to axial withdrawal of screws*

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

EN 14323, *Wood-based panels — Melamine faced boards for interior uses — Test methods*

EN ISO 12460-3, *Wood-based panels — Determination of formaldehyde release — Part 3: Gas analysis method (ISO 12460-3)*

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3 Terms and definitions

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

ISO and IEC maintain terminological 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/>

**3.1 melamine faced board
MFB**

board manufactured by directly applying uncured aminoplastic resin impregnated papers to one or both faces of board substrates and achieving bonding and curing in the same process using heat and pressure but without the use of an intermediate adhesive

Note 1 to entry: The resin of the surface layer is an aminoplastic resin (mainly melamine resin).

Note 2 to entry: The board surfaces can be smooth or structured on one or both faces and the outer surfaces having decorative colours or design.

4 Requirements

Melamine faced boards shall comply with the general requirements as listed in Table 1 when dispatched from the producing factory. Supplementary properties are given in Annex A.

Table 1 — General requirements at dispatch

No	Property	Test method	Unit	Requirement		
				Thickness range (mm, nominal)		
				< 15	≥ 15 to 20	> 20
1)	Tolerances on nominal dimensions — thickness t relative to nominal value — thickness t within the board	EN 14323	mm	±0,3 for class 1 and class 2 according to Table 2. + 0,5/- 0,3 for class 3A, 3B and class 4 according to Table 2 and all gloss finishes		±0,5
				$t_{\max} - t_{\min} \leq 0,6$		
	Length and width — commercially available size — pre-cut panels	EN 14323	mm	±5 ± 2,5		
2)	Flatness	EN 14323	mm/m	—	≤ 2 (only for balanced surfaces)	
3)	Edge damage — commercially available sizes — pre-cut panels	EN 14323	mm	≤ 10 ≤ 3		
4)	Surface defects	EN 14323	mm ² /m ² mm/m ²	points ≤ 2 length ≤ 20		
5)	Resistance to scratching	EN 14323	N	≥ 1,5		
6)	Resistance to staining	EN 14323	Rating	≥ 3		
7)	Resistance to cracking	EN 14323	Rating	≥ 3		
8)	Formaldehyde release (see Annex B)			Class E1 or Class E2		

NOTE 1 For the physical and dimensional properties, refer to the relevant standards from the series EN 622, EN 312, EN 14755 or CEN/TS 16526.

NOTE 2 Normally, unless otherwise specified, the particleboard grade used will be as required in EN 312 (P2), the MDF grade will be as described in EN 622-5 (MDF) and the hardboard grade will be as described in EN 622-2 (HB) the extruded particleboards will be as described in EN 14755.

NOTE 3 On request of the customer other values can be specified.

NOTE 4 Numerous factors including changes in temperature and relative humidity in storage and fabrication areas at building sites may cause boards and panels to bow or twist irreversibly.

5 Appearance

5.1 Colour matching

Where colour matching is required by the purchaser this can be checked by visual assessment (light box) or by assessment using spatially resolved spectral measurement technology. The tests are carried out in accordance with EN 14323.

For visual assessment there shall be only slight deviation (rating 4) between the reference sample and test piece under examination when inspected according to test method given in EN 14323. For mother of pearl and metallic finishes a rating 3 is permitted.

When assessing decorative surfaces using spatially resolved spectral measurement technology, a similarity index indicates the percentage of the specimen's conformity with the master sample. The indices are decoration-dependent; standard deviations of $\pm 3\%$ are permissible.

When plain colours and white are assessed using spatially resolved measurement technology, a key figure (Delta E 2000, dE value) indicates the deviation of the sample from the master sample (reference).

NOTE Customer-specific parameters can be agreed.

Since slight variations in colour will occur due to inherent variation in the surfacing papers and the core board, it is recommended that boards or panels to be used side by side should be selected from the same production batch where possible and matched to ensure colour compatibility before fabrication or installation.

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5.2 Surface texture

Where matching of surface texture is required by purchaser there shall be only slight deviation (rating 4) between the reference sample and test piece under examination when inspected according to test method given in EN 14323.

6 Classification by resistance to abrasion

Five classes are defined in the classification system based on the initial wear point (IP) as shown in Table 2. The number of revolutions for each classification is determined according to EN 14323.

Table 2 — Classification of MFB according to the initial wear point

Class	IP Revolutions
1	< 50
2	≥ 50
3A	≥ 150
3B	≥ 250
4	≥ 350

7 Verification of compliance

7.1 General

Verification of compliance with this document shall be carried out using the test methods specified in EN 14323.

7.2 Factory production control

The properties in Tables 1 and 2 shall be controlled by the producer. Sampling shall be carried out at random. Alternative test methods and/or unconditioned test pieces may be used for factory production control.

7.3 External control

If external control is deemed necessary, the test method listed in EN 14323 shall be used.

8 Marking

Each panel or package of panels shall be clearly marked by the manufacturer by indelible direct printing on the edge or by a label with at least the following information in this sequence:

- a) manufacturer's name, trade mark, or identification mark;
- b) number of the relevant specification EN of the substrate and the type;

Example: MFB EN 312 P2; MFB EN 622-5 MDF.

- c) nominal thickness; [oSIST prEN 14322:2020](https://standards.iteh.ai/catalog/standards/sist/117d47c3-a059-478e-8295-a9dcc8672464/osist-pren-14322-2020)
- d) formaldehyde class; <https://standards.iteh.ai/catalog/standards/sist/117d47c3-a059-478e-8295-a9dcc8672464/osist-pren-14322-2020>
- e) batch number.

Where the first purchaser is the user of the product and where he/she agrees that marking (other than on the package) is unnecessary, the marking of such individual panels in the package need not be undertaken.

Annex A (normative)

Supplementary properties

For certain applications, information on some of the properties listed in Table A.1 can be required. On request, this information shall be supplied by the MFB manufacturer, and in this case shall have been derived using the EN test methods listed in Table A1.

Table A.1 — Supplementary properties and test methods

Property	Test method
Resistance to axial withdrawal of screws	EN 320
Resistance to steam	EN 14323
Resistance to impact by large diameter steel ball	EN 14323
Resistance to colour change in xenon arc light	EN 14323
Gloss	EN 14323
Surface soundness	EN 311

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