



SLOVENSKI STANDARD

oSIST prEN 13647:2020

01-januar-2020

Lesene talne obloge in lesen opaž ter lesne obloge zidu - Ugotavljanje geometrijskih lastnosti

Wood flooring and wood panelling and cladding - Determination of geometrical characteristics

Holzfußböden und Wand- und Deckenbekleidungen aus Holz - Bestimmung geometrischer Eigenschaften

Planchers en bois, lambris et bardages en bois - Détermination des caractéristiques géométriques

[kSIST FprEN 13647:2021](https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-dc293f5e40ab/ksist-pr-en-13647-2020)

[https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-](https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-dc293f5e40ab/ksist-pr-en-13647-2021)

[dc293f5e40ab/ksist-pr-en-13647-2021](https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-dc293f5e40ab/ksist-pr-en-13647-2021)

Ta slovenski standard je istoveten z: prEN 13647

ICS:

79.080

Polizdelki iz lesa

Semi-manufactures of timber

97.150

Talne obloge

Floor coverings

oSIST prEN 13647:2020

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[kSIST FprEN 13647:2021](#)

<https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-dc293f5cb0ab/ksist-fpren-13647-2021>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 13647

November 2019

ICS 79.080

Will supersede EN 13647:2011

English Version

Wood flooring and wood panelling and cladding - Determination of geometrical characteristics

Planchers en bois, lambris et bardages en bois -
Détermination des caractéristiques géométriques

Holzfußböden und Wand- und Deckenbekleidungen
aus Holz - Bestimmung geometrischer Eigenschaften

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 175.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2->

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.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

	Page
European foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Principles	5
4.1 General.....	5
4.2 Dimensions.....	5
4.3 Angles	5
4.4 Warp	5
4.5 Lipping	8
5 Equipment	8
5.1 General.....	8
5.2 Equipment to measure the dimensions	8
5.3 Equipment to measure angle values	9
5.4 Equipment to measure warp.....	10
6 Procedure.....	12
6.1 Dimensions and shape	12
6.2 Conditioning.....	12
6.3 Measurement and recording.....	12
6.4 Dimensions.....	12
6.5 Additional dimensions, if relevant.....	13
6.6 Angles	15
6.7 Warp	16
7 Expression of results.....	17
7.1 Dimensions.....	17
7.2 Additional dimensions, if relevant.....	17
7.3 Angle measurement	18
7.4 Warp	19
8 Test report.....	19
Annex A (informative) Apparatus for square cut elements.....	20
Annex B (normative) Test rig to measure cup.....	21

European foreword

This document (prEN 13647:2019) has been prepared by Technical Committee CEN/TC 175 "Round and sawn timber", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 13647:2011.

Compared with EN 13647:2011, the following modifications have been made:

- a) in 6.2, the NOTE has been completed;
- b) 6.3 has been improved;
- c) new presentation of 6.5;
- d) new figures for 6.5.2 "Depth of the groove";
- e) new figures for 6.5.3 "Width of the tongue";
- f) new figures for "undercut";
- g) adding of accuracy of "length and width of the element" in 7.1.1;
- h) new values of "bow", in 7.4.2;
- i) new values of "spring" in 7.4.3. [ksIST FprEN 13647:2021](https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-dc293f5cb0ab/ksist-fpren-13647-2021)
<https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-dc293f5cb0ab/ksist-fpren-13647-2021>

Introduction

This document is one of a series of standards specifying requirements and test methods for wood flooring and wood panelling and cladding.

The measurements should be carried out as specified in this standard or with any other equipment or principles giving at least the same accuracy.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[kSIST FprEN 13647:2021](https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-dc293f5cb0ab/ksist-fpren-13647-2021)

<https://standards.iteh.ai/catalog/standards/sist/84bc6157-1484-4d90-bbf2-dc293f5cb0ab/ksist-fpren-13647-2021>

1 Scope

This document specifies methods of measuring the geometrical characteristics of wood flooring and wood panelling and cladding elements.

This document does not specify sampling, which is intended to be found in the product standards or test methods and it does not apply to elements which are installed.

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 13756:2018, *Wood flooring and parquet - Terminology*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13756:2018 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 <http://www.electropedia.org/>

4 Principles

4.1 General

The measurements shall be carried out only if relevant, taking the product standards into account.

4.2 Dimensions

The dimensions are determined by measuring any characteristic defined in the product standard and with appropriate tools.

4.3 Angles

Determine square angles by measuring the distance (maximum value) between an edge of the element and the side of a square whose other side is in line with an adjacent edge of the element.

Determine other angles by the use of a protractor.

4.4 Warp

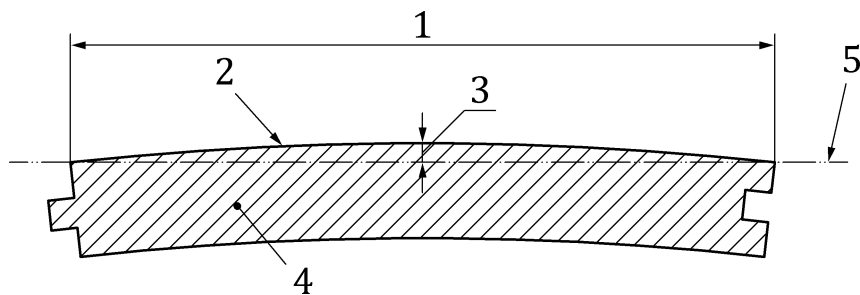
4.4.1 Cup

Determine cup by measuring, at the middle of the width of the element, the distance separating the face of the element from the straight reference line joining the top arises of the edges of the element, see Figures 1 and 2.

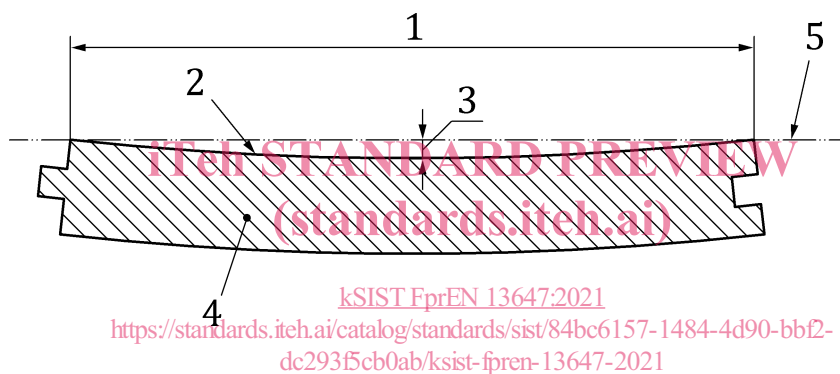
iteh STANDARD PREVIEW
(standards.iteh.ai)

kSIST prEN 13647:2021

<https://standards.iteh.ai/catalog/standards/sist/84b76157-1484-4d90-bb7c-dc293f5cb0ab/ksist-pr-en-13647-2021>

**Key**

- 1 width
- 2 face
- 3 cup
- 4 cross section
- 5 reference line

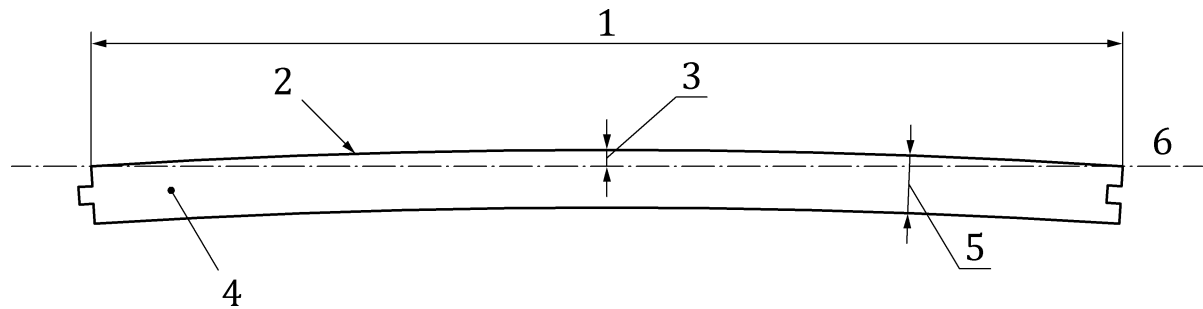
Figure 1 — Example of convex cup**Key**

- 1 width
- 2 face
- 3 cup
- 4 cross section
- 5 reference line

Figure 2 — Example of concave cup**4.4.2 Bow**

Determine bow by measuring, at the middle of the length of the element, the distance separating the face of the element from the straight reference line joining the end top arises of the element, see Figures 3 and 4.

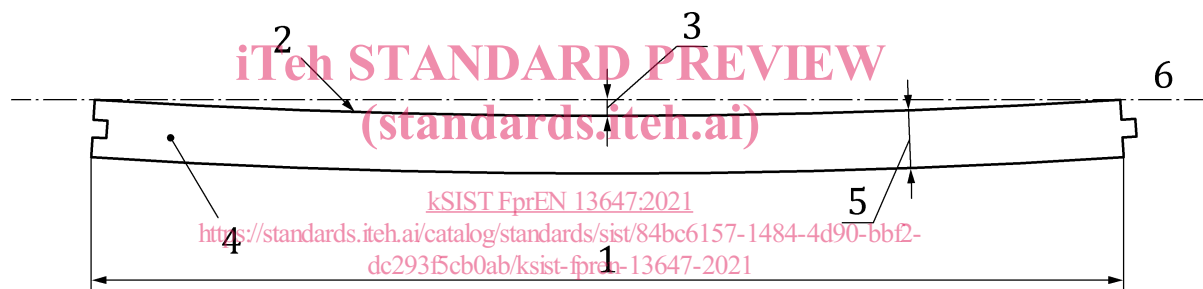
If the maximum bow is not in the middle of the length, the measurement can be carried out at the appropriate place and this should be mentioned in the report.

**Key**

- 1 length
- 2 face
- 3 bow
- 4 edge
- 5 thickness
- 6 reference line

For practical reasons, convex bow may be measured in the same way on the back of the element.

Figure 3 — Example of convex bow

**Key**

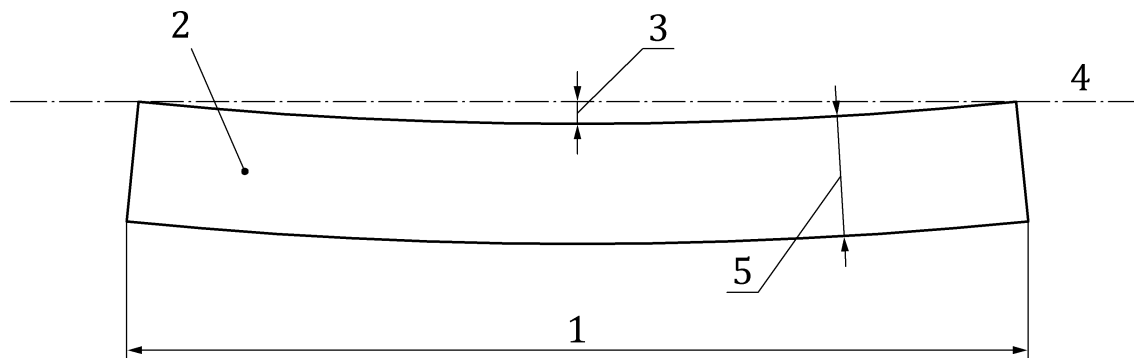
- 1 length
- 2 face
- 3 bow
- 4 edge
- 5 thickness
- 6 reference line

Figure 4 — Example of concave bow

4.4.3 Spring

Determine spring by measuring, at the middle of the length of the element, along the lengthwise edges of the element, the distance separating one edge from the straight reference line joining the two arises of that edge, see Figure 5.

NOTE The measurement is usually carried out on the edge bearing the groove.

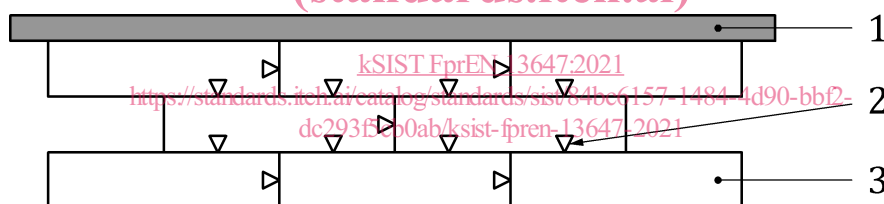
**Key**

- 1 length
- 2 face
- 3 spring
- 4 reference line
- 5 width

Figure 5 — Example of spring (element viewed from above)

4.5 Lipping

Determine lipping by measuring the difference in the levels of the face of two adjacent elements when they are assembled together, see Figure 6.

**Key**

- 1 ruler
- 2 measuring point
- 3 test specimen

Figure 6 — Test specimens assembled, with the 13 measuring points indicated by ∇

5 Equipment

5.1 General

The equipment specified in this standard is given as an indication. Any other equipment providing the same results with at least the same accuracy may be used.

5.2 Equipment to measure the dimensions

5.2.1 Calliper

It shall have an accuracy of $\pm 0,05$ mm.

If used to measure the characteristics of tongue and groove profiles, it shall have a built-in depth rod.

It shall also have a useful measuring length corresponding to the width of the elements to be measured.

5.2.2 Micrometer

It shall have a limit deviation of $\pm 0,05$ mm and two parallel flat circular feelers having a diameter of (10 ± 1) mm.

It shall be used for measurement of total thickness.

For the measurement of top layer thickness, the device mentioned in 5.2.4 and the procedure described in 6.5.9 is suitable.

NOTE Other similar optical devices, e.g. microscope are also suitable to be used.

5.2.3 Graduated rule

It shall be used when the dimensions to be measured are out of the calliper's range.

It shall have a limit deviation of $\pm 0,5$ mm up to a length of 2 m, and ± 1 mm for longer lengths.

5.2.4 Weaver's glass / Threat counter

It shall have a reticule and measuring scale with at least twelve times magnification on a (usually foldable) frame for achieving a defined working distance. The measuring-scale shall have graduations of 0,05 mm. The measuring range shall be at least 10 mm (see Figure 7).



Figure 7 — Example of a weaver's glass

5.3 Equipment to measure angle values

5.3.1 General

The design of the equipment shall be such as to allow the measurement as close as possible to the face of the element and preferably on the groove side if the element is tongued and grooved.

5.3.2 Equipment for square cut elements

- a reference square with its longer arm consistent with the length of the elements to be checked and shall not be less than 210 mm;
- each arm shall have a fixed feeler at about 10 mm from the corner;
- the longer arm shall have a second feeler, adjustable between 200 mm and 300 mm from the fixed feeler;
- the shorter arm shall have a gauge, readable to the nearest 0,01 mm, adjustable to the width of the element to be controlled;

NOTE An example of such a square is shown in Annex A, Figure A.1.

- a calibration square to set the gauge to 0.