



# SLOVENSKI STANDARD

## SIST EN 13647:2021

01-julij-2021

Nadomešča:  
SIST EN 13647:2011

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### Lesene talne, stenske in stropne obloge - 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

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Ta slovenski standard je istoveten z: **EN 13647:2021**

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#### ICS:

79.080	Polizdelki iz lesa	Semi-manufactures of timber
97.150	Talne obloge	Floor coverings

**SIST EN 13647:2021**

**en,fr,de**

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EUROPEAN STANDARD

EN 13647

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2021

ICS 79.080

Supersedes 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 European Standard was approved by CEN on 12 March 2021.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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## European foreword

This document (EN 13647:2021) has been prepared by Technical Committee CEN/TC 175 “Round and sawn timber”, the secretariat of which is held by AFNOR.

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 October 2021, and conflicting national standards shall be withdrawn at the latest by October 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13647:2011.

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

- in lipping measuring;
- in dimensions measuring: thickness of the element, thickness of the top layer, depth and width of the groove, thickness and width of the tongue.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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 the United Kingdom.

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**EN 13647:2021 (E)****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 document or with any other equipment or principles giving at least the same accuracy.

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## 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:

— IEC Electropedia: available at <http://www.electropedia.org/>

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

## 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

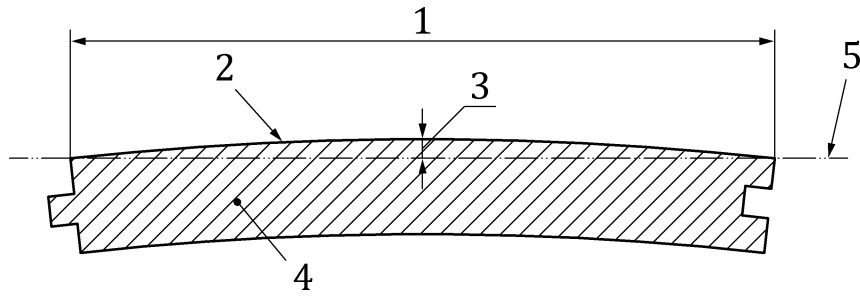
Determine cup by measuring, at the middle of the width of the element, the distance separating the face of the element from the straight reference line joining the top arises of the edges of the element, see Figures 1 and 2.

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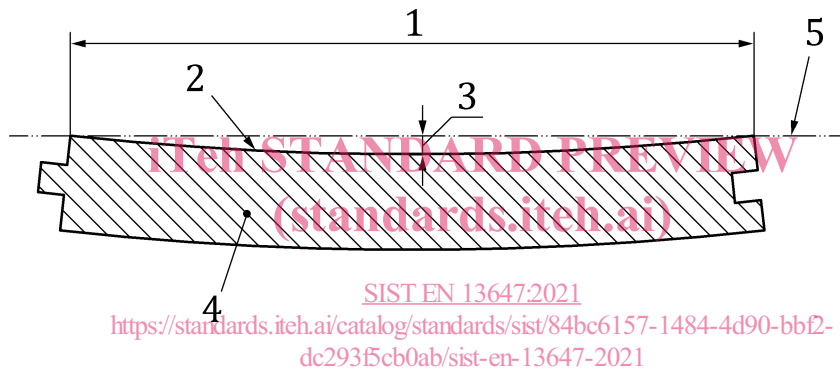
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## EN 13647:2021 (E)

**Key**

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

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

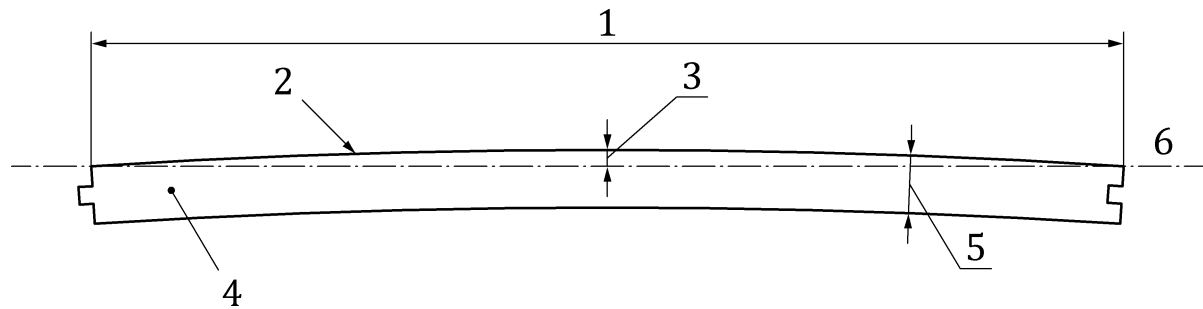
- 1 width
- 2 face
- 3 cup
- 4 cross section
- 5 reference line

**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

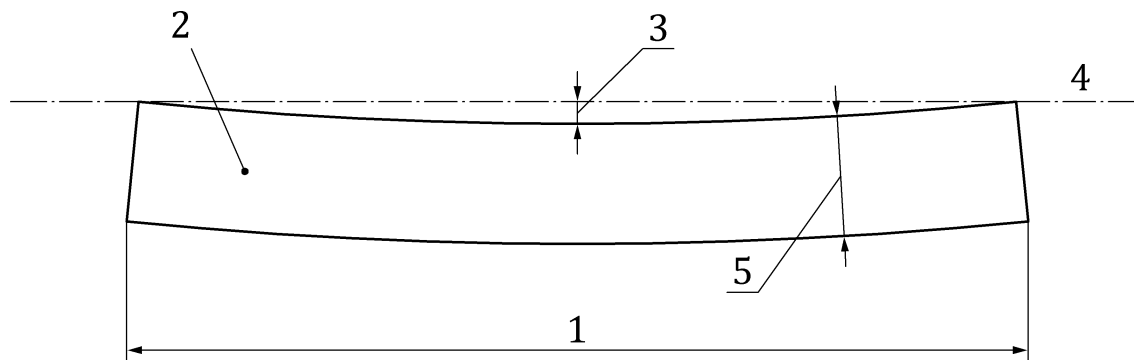
**Figure 4 — Example of concave bow**

#### 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.

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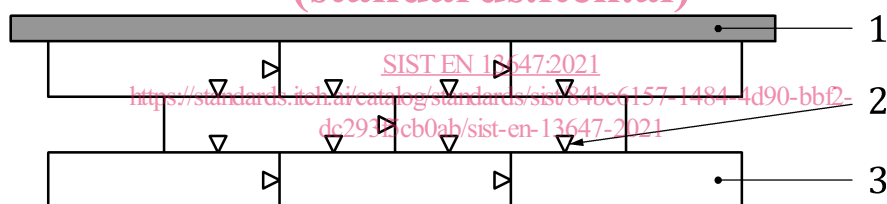
**Key**

- 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 document 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  $(10 \pm 1)$  mm.

It shall be used for measurement of total thickness.

NOTE 1 For the measurement of top layer thickness, the device mentioned in 5.2.4 and the procedure described in 6.5.9 are suitable.

NOTE 2 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  $\pm 1$  mm for longer lengths.

#### 5.2.4 Scale magnifier / Throat counter

It shall have a reticule and measuring scale with at least ten times magnification on a (usually foldable) frame for achieving a defined working distance. The measuring-scale shall have graduations of 0,01 mm. The measuring range shall be at least 10 mm (see Figure 7).



Figure 7 — Example of a scale magnifier

### 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.