

BS EN 1910:2016



BSI Standards Publication

# Wood flooring and wood panelling and cladding — Determination of dimensional stability

**National foreword**

This British Standard is the UK implementation of EN 1910:2016. It supersedes BS EN 1910:2013 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/543, Round and sawn timber.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2016.  
Published by BSI Standards Limited 2016

ISBN 978 0 580 87957 9

ICS 79.080

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2016.

**Amendments/corrigenda issued since publication**

Date	Text affected
------	---------------

---

EUROPEAN STANDARD

**EN 1910**

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2016

ICS 79.080

Supersedes EN 1910:2013

English Version

## Wood flooring and wood panelling and cladding - Determination of dimensional stability

Planchers en bois et lambris et bardages en bois -  
Détermination de la stabilité dimensionnelle

Holzfußböden und Wand- und Deckenbekleidungen  
aus Holz - Bestimmung der Dimensionsstabilität

This European Standard was approved by CEN on 20 February 2016.

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.

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



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>	<b>Page</b>
European foreword.....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions .....	5
4 Principle .....	5
5 Test equipment.....	5
5.1 Conditioning room or enclosure.....	5
5.2 Stabilizing room or enclosure .....	6
5.3 Trays .....	6
5.4 Measuring equipment .....	6
5.5 Scales .....	6
5.6 Oven .....	6
6 Test specimens.....	6
6.1 Dimensions and shape .....	6
6.2 Sampling.....	7
6.3 Conditioning.....	7
7 Measurements.....	7
7.1 Mass.....	7
7.2 Dimensions of the test specimen.....	7
7.3 Warp .....	7
7.3.1 General.....	7
7.3.2 Twist .....	7
7.3.3 Procedure.....	7
7.3.4 Expression of results.....	9
7.4 Moisture content .....	9
8 Procedure.....	9
8.1 Initial measurements.....	9
8.2 Exposure to the humid climate .....	9
8.3 Measurements after stabilization in the humid climate.....	9
8.4 Exposure to the dry climate .....	9
8.5 Measurements after stabilization in the dry climate.....	10
8.6 Oven drying .....	10
9 Calculation and expression of the results of a test specimen .....	10
9.1 Moisture content .....	10
9.2 Dimensional changes.....	10
9.3 Warp .....	10
9.3.1 Cup.....	10
9.3.2 Spring .....	11
9.3.3 Bow.....	11
9.3.4 Twist .....	11
10 Accuracy of the 10 test specimens .....	11
10.1 Dimensional changes.....	11
10.2 Warp .....	11

<b>11</b>	<b>Test report .....</b>	<b>11</b>
<b>Bibliography .....</b>		<b>13</b>

## European foreword

This document (EN 1910:2016) 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 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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

This document supersedes EN 1910:2013.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies a method of test to determine the dimensional changes and warp of the elements of wood flooring and wood panelling and cladding.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13183-1, *Moisture content of a piece of sawn timber — Part 1: Determination by oven dry method*

EN 13183-2, *Moisture content of a piece of sawn timber — Part 2: Estimation by electrical resistance method*

EN 13647, *Wood flooring and wood panelling and cladding — Determination of geometrical characteristics*

EN 13756:2002, *Wood flooring — Terminology*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13756:2002 and the following apply.

### 3.1

#### **twist**

deformation of the element lengthwise with a helical pattern

[SOURCE: EN 844-3:1995]

## 4 Principle

Measure the dimensional changes of the test specimen after initial conditioning in a standard atmosphere and again after conditioning in a specified climate. The test specimen shall be lying in horizontal position in the test chamber. Express the results as a percentage of variation of the relevant dimension measured in the initial standard climatic conditions.

Record the warp and relate to the basis of measurement.

## 5 Test equipment

### 5.1 Conditioning room or enclosure

The conditioning room or enclosure shall be equipped with monitoring thermometers and hygrometers. It shall be suitable to condition the test specimen either in:

— climate A, defined by a relative humidity of  $(65 \pm 5)$  % and a temperature of  $(20 \pm 2)$  °C;

or

— climate B, defined by a relative humidity of  $(50 \pm 5)$  % and a temperature of  $(23 \pm 2)$  °C.