



# SLOVENSKI STANDARD

## SIST EN 994:2012

01-marec-2012

Nadomešča:  
SIST EN 994:1999

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**Tekstilne talne obloge - Ugotavljanje stranske dolžine, ravnosti robov in pravokotnosti plošč**

Textile floor coverings - Determination of the side length, squareness and straightness of tiles

Textile Bodenbeläge - Bestimmung der Länge und Geradheit der Kanten und der Rechtwinkligkeit von Fliesen

Revêtements de sol textiles - Détermination de la longueur des arêtes, de l'équerrage et de la rectitude des dalles

**Ta slovenski standard je istoveten z: EN 994:2012**

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**ICS:**

59.080.60      Tekstilne talne obloge      Textile floor coverings

**SIST EN 994:2012**      en,fr,de

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 994**

January 2012

ICS 59.080.60

Supersedes EN 994:1995

English Version

## Textile floor coverings - Determination of the side length, squareness and straightness of tiles

Revêtements de sol textiles - Détermination de la longueur  
des arêtes, de l'équerrage et de la rectitude des dalles

Textile Bodenbeläge - Bestimmung der Länge und  
Geradheit der Kanten und der Rechtwinkligkeit von Fliesen

This European Standard was approved by CEN on 20 November 2011.

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, 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.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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<b>Contents</b>	<b>Page</b>
Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
3 Principle .....	4
4 Apparatus .....	4
4.1 Length .....	4
4.1.1 Measurement device .....	4
4.1.2 Support plate .....	4
4.1.3 Rigid plate .....	4
4.2 Squareness .....	4
4.2.1 Precision square .....	4
4.2.2 Flat surface .....	5
4.2.3 Rigid plate .....	5
4.2.4 Shims .....	5
5 Sampling and preparation of test specimens .....	5
6 Conditioning.....	5
7 Test method.....	5
7.1 Length .....	5
7.2 Squareness and straightness.....	5
8 Calculation and expression of results.....	7
8.1 Length .....	7
8.2 Straightness and squareness.....	7
9 Test report .....	7

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## Foreword

This document (EN 994:2012) has been prepared by Technical Committee CEN/TC 134 "Resilient, textile and laminate floor coverings", the secretariat of which is held by BSI.

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 July 2012, and conflicting national standards shall be withdrawn at the latest by July 2012.

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 994:1995.

The following is a list of significant technical changes between this European Standard and the previous edition:

- the text has been technically revised,
- Figure 1 and Figure 3 have been revised, and
- the normative references have been updated.

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, 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.

**EN 994:2012 (E)****1 Scope**

This European Standard specifies a method for determining the length and straightness of the edges and the squareness of floor coverings in the form of right-angled tiles.

**2 Normative references**

The following referenced documents are indispensable for the application 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 ISO 139:2005, *Textiles – Standard atmospheres for conditioning and testing (ISO 139:2005)*

**3 Principle**

The plane dimensions of a tile are measured at different points for each direction. In addition, at each corner of the tile the maximum deviation from the right angle is measured.

**4 Apparatus****4.1 Length****4.1.1 Measurement device**

Device which can be used to measure a dimension to an accuracy of 0,05 mm such as a slide gauge, comparator table with stop or an opto-electronic system.

**4.1.2 Support plate**

Flat support plate, on to which the test specimen is placed for measurement. It shall be slightly bigger than the test specimen.

**4.1.3 Rigid plate**

Rigid metal or glass plate, slightly smaller than the tile or any other device which can be used to hold the tile flat during measurement.

**4.2 Squareness****4.2.1 Precision square**

Precision square or any other device, for example an opto-electronic system which can be used to measure a right angle or angular deviation to an accuracy of at least 0,2 mm. If a square is used, it shall meet the following requirements:

- a) The length of one of the straight edges shall be at least equal to the largest dimension of the tile to be checked, the second straight edge being not greater than 2/3 of this dimension;
- b) The linearity error of the straight edges shall be less than or equal to 0,01 mm;
- c) The angular error shall be less than or equal to 0,02 mm at 300 mm.

#### 4.2.2 Flat surface

Flat surface as described in 4.1.2.

#### 4.2.3 Rigid plate

Rigid plate as described in 4.1.3.

#### 4.2.4 Shims

Set of shims, including 0,2 mm to 2,0 mm shims.

### 5 Sampling and preparation of test specimens

Take at least five tiles from each sample to represent the test specimens. If the sample comprises a pack of tiles, ensure that the first and last tiles are not used as test specimens.

### 6 Conditioning

Condition the tiles in the standard atmosphere for testing textiles as defined in EN ISO 139 for at least 24 h.

Conduct the tests in this atmosphere.

### 7 Test method

#### 7.1 Length

Hold the test specimen flat using, the rigid plate described in 4.1.3. Measure the distance between the edges parallel to the direction of manufacture, then between the edges perpendicular to the direction of manufacture, in at least two different points.

If a different device is used, proceed as appropriate.

#### 7.2 Squareness and straightness

Place the tile with its back against the flat support plate.

Place one edge of test specimen against a straight edge of the square or appropriate device and slide it until it makes contact with the other straight edge, then position the rigid plate without moving the tile.

Select the thickest shim which can be easily inserted between the second straight edge of the square and the end of the edge of the tile to evaluate the squareness deviation (see Figures 1 and 2). Find the thickest shim which can easily be inserted at any point between the second straight edge of the square and the tile to evaluate the straightness of the edges (see Figure 3).

Repeat this procedure for the three other test specimen edges.

If a different device is used, proceed as appropriate.

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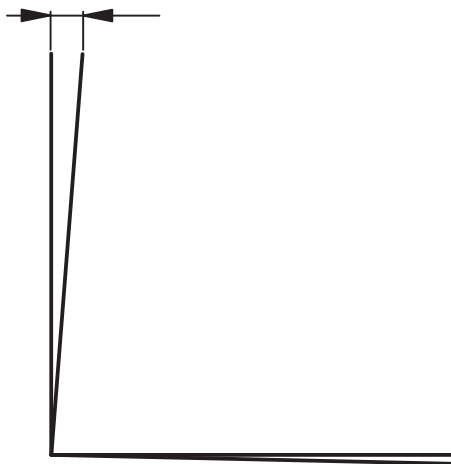


Figure 1 — Squareness



Figure 2 — Squareness

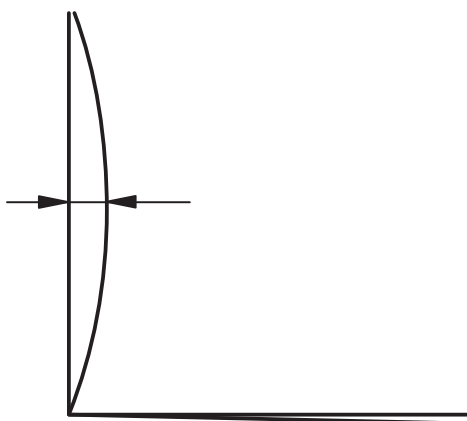


Figure 3 — Straightness