ICS 97.150 SLOVENSKÁ TECHNICKÁ NORMA Máj 2026

STN	**Pružné podlahové krytiny Stanovenie rozmerovej stálosti a zvlnenia (vertikálna deformácia) po vystavení teplu (ISO 23999: 2025)**	**STN EN ISO 23999** 91 7822

Resilient floor coverings - Determination of dimensional stability and curling (vertical deformation) after exposure to heat (ISO 23999:2025)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/26

Obsahuje: EN ISO 23999:2025, ISO 23999:2025

Oznámením tejto normy sa ruší
STN EN ISO 23999 (91 7822) z marca 2022

141981

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 23999

December 2025

ICS 97.150

Supersedes EN ISO 23999:2021

English Version

Resilient floor coverings - Determination of dimensional stability and curling (vertical deformation) after exposure to heat (ISO 23999:2025)

Revêtements de sol résilients - Détermination de la stabilité dimensionnelle et de l'incurvation (déformation verticale) après exposition à la chaleur (ISO 23999:2025)

Elastische Bodenbeläge - Bestimmung der Maßhaltigkeit und Schüsselung (vertikale Verformung) nach Wärmeeinwirkung (ISO 23999:2025)

This European Standard was approved by CEN on 23 November 2025.

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

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

Ref. No. EN ISO 23999:2025 E

Contents

Page

European foreword..... 3

European foreword

This document (EN ISO 23999:2025) has been prepared by Technical Committee ISO/TC 219 "Floor coverings" in collaboration with Technical Committee CEN/TC 134 “Resilient, textile, laminate and modular mechanical locked floor coverings” the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by June 2026, and conflicting national standards shall be withdrawn at the latest by June 2026.

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 ISO 23999:2021.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 23999:2025 has been approved by CEN as EN ISO 23999:2025 without any modification.

International Standard

ISO 23999

Resilient floor coverings — Determination of dimensional stability and curling (vertical deformation) after exposure to heat

Revêtements de sol résilients — Détermination de la stabilité dimensionnelle et de l'incurvation (déformation verticale) après exposition à la chaleur

Fourth edition
2025-11

Reference number
ISO 23999:2025(en)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword ... **iv**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Principle ... **2**
4.1 General ... 2
4.2 Dimensional stability ... 2
4.3 Curling (vertical deformation) ... 2

5 Apparatus ... **2**
5.1 Oven ... 2
5.2 Support plates ... 3

6 Measuring devices ... **3**
6.1 Measurement devices for determination of curling (vertical deformation) ... 3
6.2 Measurement devices for determination of linear dimension changes ... 3
6.2.1 General ... 3
6.2.2 Scoring device ... 3
6.2.3 Rigid steel plate ... 3
6.2.4 Block and dial gauge apparatus (for tiles and planks) ... 4

7 Test specimens ... **6**
7.1 Specimen preparation from sheet or roll material ... 6
7.2 Specimen preparation from tiles and planks ... 8

8 Conditioning ... **8**

9 Test procedure ... **8**
9.1 Initial measurement ... 8
9.1.1 Curling (vertical deformation) ... 8
9.1.2 Linear dimensions ... 9
9.2 Heat exposure ... 10
9.3 Reconditioning ... 10
9.4 Final measurement ... 10
9.4.1 Curling (vertical deformation) ... 10
9.4.2 Linear dimensions ... 10

10 Calculation and expression of results ... **11**
10.1 Curling (vertical deformation) ... 11
10.2 Dimensional change ... 11

11 Test report ... **12**

Annex A (informative) **Measurement of dimensional change due to heat** ... **13**

Annex B (informative) **Calculation and expression of results** ... **14**

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see http://www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at http://www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see http://www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 219, *Floor coverings,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 134 *Resilient, textile, laminate and modular mechanical locked floor coverings,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 23999:2021), which has been technically revised.

The main changes are as follows:

— revision of terms and definitions;

— clarification on the deviation between devices used for either sheet or roll, or both, materials and rectangular shaped elements (squared tiles or long panels);

— inclusion of an explanation on the use of the so called “block and dial gauge apparatus” and minor changes to the figures and a new figure was added;

— inclusion of description of the preparation distinguishing sheet, roll materials and rectangular shaped elements (squared tiles or long panels);

— detailed calculation and expression of results can be found in new Annex B.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at http://www.iso.org/members.html.

International Standard ISO 23999:2025(en)

Resilient floor coverings — Determination of dimensional stability and curling (vertical deformation) after exposure to heat

1 Scope

This document specifies methods for determining dimensional stability and curling (vertical deformation) of resilient floor coverings in all forms (e.g. of sheets, tiles, panels, planks or in rolls) after exposure to either heat or after reconditioning, or both.

2 Normative references

There are no normative references in this document.