
**Resilient floor coverings —
Determination of dimensional stability
and curling after exposure to heat**

*Revêtements de sol résilients — Détermination de la stabilité
dimensionnelle et de l'incurvation après exposition à la chaleur*



This document is a preview generated by ERS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
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	1
4.1 Dimensional stability	1
4.2 Curling	1
5 Apparatus	2
6 Test specimens	4
7 Conditioning	5
8 Test procedure	5
8.1 Test specimen preparation	5
8.2 Initial measurement	6
8.2.1 Curling	6
8.2.2 Linear dimensions	6
8.3 Heat exposure	6
8.4 Reconditioning	7
8.5 Final measurement	7
8.5.1 General	7
8.5.2 Curling	7
8.5.3 Linear dimensions	7
9 Calculation and expression of results	7
9.1 For curling	7
9.2 For dimensional stability	7
10 Test report	8
Annex A (informative) Measurement of size change due to heat	9
Bibliography	11

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 219, *Floor coverings*.

This second edition cancels and replaces the first edition (ISO 23999:2008), which has been technically revised.

The main changes compared to the previous edition are as follows:

- cross-references within the document have been updated;
- minor editorial changes have been made;
- the scope has been broadened to allow testing of planks;
- the possibility of additional testing temperatures has been introduced;
- the specimen dimensions have been specified;
- an appendix has been added to allow for dimensional changes immediately after exposure to specified heated exposure conditions.

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 www.iso.org/members.html.

Resilient floor coverings — Determination of dimensional stability and curling after exposure to heat

1 Scope

This document specifies a method for determining dimensional stability and curling of resilient floor coverings, in the form of sheets, tile or planks after exposure to heat.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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/>

3.1

dimensional stability

ability of a resilient floor covering to retain its original dimensions after exposure to heat, under specified conditions

3.2

curling

vertical deformation appearing on the specimen after exposure to a heat treatment, under specified conditions

3.3

domed material

area of specimen that does not lie flat against support plate when centred

4 Principle

4.1 Dimensional stability

The relative change in distance between marks or a specific location on a test specimen is measured before and after exposure to a heat treatment, under specified conditions. In the case of tiles and planks, measurements may be made using a block and dial gauge assembly and marking of the test specimen is not necessarily required.

4.2 Curling

The vertical deformations are measured in the test specimen after the specified heat treatment.

Test specimens are placed in an oven at an elevated temperature, after which curling and dimensional stability are determined. In the case of domed material or where material exhibits negative curling, turn the test specimen over to measure inverted or with the back of the sample facing up. Measure curling and mark appropriately as negative curling.