## **EESTI STANDARD**

Rubber- or plastics-coated fabrics - Physical and mechanical tests - Determination of flex resistance by the flexometer method (ISO 32100:2018)



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 32100:2018 sisaldab Euroopa standardi EN ISO 32100:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 32100:2018 consists of the English text of the European standard EN ISO 32100:2018.		
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.		
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 28.11.2018.	Date of Availability of the European standard is 28.11.2018.		
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.		
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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# EN ISO 32100

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Supersedes EN ISO 32100:2010

**English Version** 

## Rubber- or plastics-coated fabrics - Physical and mechanical tests - Determination of flex resistance by the flexometer method (ISO 32100:2018)

Supports textiles revêtus de caoutchouc ou de plastique - Essais physiques et mécaniques -Détermination de la résistance à la flexion à l'aide d'un flexomètre (ISO 32100:2018) Mit Kautschuk oder Kunststoff beschichtete Textilien -Physikalische und mechanische Prüfungen -Bestimmung der Dauerbiegefestigkeit nach dem Flexometer-Verfahren (ISO 32100:2018)

This European Standard was approved by CEN on 13 September 2018.

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, Serbia, 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: Rue de la Science 23, B-1040 Brussels

## **European foreword**

This document (EN ISO 32100:2018) has been prepared by Technical Committee ISO/TC 45 "Rubber and rubber products" in collaboration with Technical Committee CEN/TC 248 "Textiles and textile products" 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 May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

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 32100:2010.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Endorsement notice**

The text of ISO 32100:2018 has been approved by CEN as EN ISO 32100:2018 without any modification.

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## 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 <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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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 45, *Rubber and rubber products*, Subcommittee SC 4, *Products other than hoses*.

This second edition cancels and replaces the first edition (ISO 32100:2010), which has been technically revised:

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

- the list of apparatus has been updated;
- the procedure has been amended;
- in <u>7.12</u>, an additional procedure has been added;
- the Bibliography has been updated.

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 <u>www.iso.org/members.html</u>.

# Rubber- or plastics-coated fabrics — Physical and mechanical tests — Determination of flex resistance by the flexometer method

## 1 Scope

This document specifies a test method for determining the flex resistance of rubber- or plastics-coated fabrics in the folded condition. The test method is applicable only to products which can be clamped in the test apparatus used and to products with which the fold made in the test specimen can be caused to move back and forth along the specimen during the test.

The appearance of the test specimen, after completion of either the flex number (see 3.1) or a specified number of flex cycles, is taken as a measure of the flex resistance in the folded condition.

## 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.

ISO 2231, Rubber- or plastics-coated fabrics – Standard atmospheres for conditioning and testing

## 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 <u>https://www.iso.org/obp</u>
- IEC Electropedia: available at <u>http://www.electropedia.org/</u>

## 3.1

### flex number

number (agreed between the interested parties) of *flex cycles* (3.2) to which the test specimen is subjected, the specimen being subsequently examined using a magnifying lens with ×6 magnification to determine whether any damage or other visible change is observable

#### 3.2

#### flex cycle

cycle comprising one forward and one backward (i.e. a complete to-and-fro) movement of the moveable clamp of the test apparatus

## 4 Principle

One end of a test piece is folded with the surface to be tested facing inwards and clamped in an upper (moveable) clamp and the other end of the test piece is folded with the surface to be tested facing outwards and clamped in a lower (fixed) clamp. The upper clamp is then moved in such a way that the fold is caused to run along the test piece. The test piece is examined periodically for damage or any other visible change.