

Textiles - Determination of the recovery from creasing of a folded specimen of fabric by measuring the angle of recovery - Part 1: Method of the horizontally folded specimen (ISO 2313-1:2021)

## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN ISO 2313-1:2021 sisaldab Euroopa standardi EN ISO 2313-1:2021 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 2313-1:2021 consists of the English text of the European standard EN ISO 2313-1:2021.
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 and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 02.06.2021.	Date of Availability of the European standard is 02.06.2021.
Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

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EUROPEAN STANDARD

EN ISO 2313-1

NORME EUROPÉENNE

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**Textiles - Determination of the recovery from creasing of a folded specimen of fabric by measuring the angle of recovery - Part 1: Method of the horizontally folded specimen (ISO 2313-1:2021)**

Textiles - Détermination de l'auto-défroissabilité d'une éprouvette d'étoffe pliée, par mesurage de l'angle rémanent après pliage - Partie 1: Méthode de l'éprouvette pliée horizontalement (ISO 2313-1:2021)

Textilien - Bestimmung des Knittererholungsvermögens eines Prüflings durch Messung des Knittererholungswinkels - Teil 1: Verfahren mit horizontaler Faltenkante des Prüflings (ISO 2313-1:2021)

This European Standard was approved by CEN on 18 May 2021.

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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.

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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 2313-1:2021) has been prepared by Technical Committee ISO/TC 38 "Textiles" 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 December 2021, and conflicting national standards shall be withdrawn at the latest by December 2021.

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 22313:1992.

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, Turkey and the United Kingdom.

## Endorsement notice

The text of ISO 2313-1:2021 has been approved by CEN as EN ISO 2313-1:2021 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 [www.iso.org/directives](http://www.iso.org/directives)).

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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 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 24, *Conditioning atmospheres and physical tests for textile fabrics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 248, *Textiles and textile products*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 2313-1 cancels and replaces ISO 2313:1972, which has been technically revised.

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

- changing the normative reference ISO/R 139 to ISO 139;
- adding the tolerance of the load on the specimen in [5.1 a](#));
- redrafting the description about "Sampling and preparation of specimens" to improve clarity of meaning in [Clause 6](#) (former Clause 6 and Clause 7);
- revising the distance from the selvedge while taking the specimen, i.e. from "not less than 50 mm" to "not less than 150 mm" in [6.2](#) (former 7.1);
- revising the requirement of atmosphere for conditioning and testing according to ISO 139 in [Clause 7](#) (former 7.4);
- giving two crease recovery angles, i.e. "rapid crease recovery angle" obtained at 15 s after removal of the creasing load, and "delay crease recovery angle" obtained at 5 min after removal of the creasing load in [Clause 3](#) and in [8.3](#).
- revising result expression from "Calculate the mean value to the nearest degree" to "Calculate the mean value rounded off to one decimal place" in [Clause 9](#).

A list of all parts in the ISO 2313 series can be found on the ISO website.

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](http://www.iso.org/members.html).

## Introduction

Creases in textile fabrics diminish at varying rates on the removal of the creasing forces. The magnitude of the crease recovery angle is an indication of the ability of a fabric to recover from accidental creasing.

The suitable method can be chosen according to the type or end-use of textile fabrics. The test results obtained by different methods are not comparable.

# Textiles — Determination of the recovery from creasing of a folded specimen of fabric by measuring the angle of recovery —

## Part 1: Method of the horizontally folded specimen

### 1 Scope

This document specifies a method for determining the angle of recovery of fabrics from creasing. The results obtained by this method for textile fabrics of very different kinds cannot be compared directly.

### 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 139, *Textiles — 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 <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

#### 3.1

##### crease recovery angle

angle formed between the two limbs of fabric specimen previously folded under prescribed conditions, at a specified time after removal of the creasing load

Note 1 to entry: In this method, rapid crease recovery angle is obtained at 15 s after removal of the creasing load.

Note 2 to entry: In this method, delay crease recovery angle is obtained at 5 min after removal of the creasing load.

### 4 Principle

A rectangular specimen of prescribed dimensions is horizontally placed in the flat surface and folded by means of a suitable device and maintained in this state for a specified time under a specified load. This creasing load is removed, the specimen is allowed to recover for a specified time, and then the crease recovery angle is measured.

Attention is drawn to the fact that for some types of fabrics, the limpness, thickness and tendency to curl of the specimen can give rise to very ill-defined crease recovery angles, and therefore an unacceptable lack of precision in making measurements. Many wool and wool mixture fabrics come under this heading.