



# SLOVENSKI STANDARD SIST EN ISO 11058:2019

01-september-2019

Nadomešča:  
SIST EN ISO 11058:2011

---

**Geotekstilije in geotekstilijam sorodni izdelki - Ugotavljanje prepustnosti za vodo pravokotno na ravnino, brez obremenitve (ISO 11058:2019)**

Geotextiles and geotextile-related products - Determination of water permeability characteristics normal to the plane, without load (ISO 11058:2019)

Geotextilien und geotextilverwandte Produkte - Bestimmung der Wasserdurchlässigkeit normal zur Ebene, ohne Auflast (ISO 11058:2019)

Géotextiles et produits apparentés - Détermination des caractéristiques de perméabilité à l'eau normalement au plan, sans contrainte mécanique (ISO 11058:2019)

**Ta slovenski standard je istoveten z: EN ISO 11058:2019**

---

**ICS:**

59.080.70      Geotekstilije      Geotextiles

**SIST EN ISO 11058:2019**      en,fr,de

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 11058:2019

<https://standards.iteh.ai/catalog/standards/sist/07afb8e8-bb5e-478a-849c-03011d0ade3d/sist-en-iso-11058-2019>

EUROPEAN STANDARD

**EN ISO 11058**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2019

ICS 59.080.70

Supersedes EN ISO 11058:2010

English Version

## Geotextiles and geotextile-related products - Determination of water permeability characteristics normal to the plane, without load (ISO 11058:2019)

Géotextiles et produits apparentés - Détermination des caractéristiques de perméabilité à l'eau normalement au plan, sans contrainte mécanique (ISO 11058:2019)

Geotextilien und geotextilverwandte Produkte - Bestimmung der Wasserdurchlässigkeit normal zur Ebene, ohne Auflast (ISO 11058:2019)

This European Standard was approved by CEN on 24 May 2019.

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.

**iTeh STANDARD PREVIEW**

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, Republic of North Macedonia, 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**

| Contents               | Page |
|------------------------|------|
| European foreword..... | 3    |

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 11058:2019](https://standards.iteh.ai/catalog/standards/sist/07afb8e8-bb5e-478a-849c-03011d0ade3d/sist-en-iso-11058-2019)

<https://standards.iteh.ai/catalog/standards/sist/07afb8e8-bb5e-478a-849c-03011d0ade3d/sist-en-iso-11058-2019>

## European foreword

This document (EN ISO 11058:2019) has been prepared by Technical Committee ISO/TC 221 "Geosynthetics" in collaboration with Technical Committee CEN/TC 189 "Geosynthetics" 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 December 2019, and conflicting national standards shall be withdrawn at the latest by December 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 11058:2010.

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, 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.

**iTeh STANDARD PREVIEW**  
**Endorsement notice**  
**(standards.iteh.ai)**

The text of ISO 11058:2019 has been approved by CEN as EN ISO 11058:2019 without any modification.

<https://standards.iteh.ai/catalog/standards/sist/07afb8e8-bb5e-478a-849c-03011d0ade3d/sist-en-iso-11058-2019>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 11058:2019

<https://standards.iteh.ai/catalog/standards/sist/07afb8e8-bb5e-478a-849c-03011d0ade3d/sist-en-iso-11058-2019>

INTERNATIONAL  
STANDARD

ISO  
11058

Third edition  
2019-05

---

---

**Geotextiles and geotextile-related  
products — Determination of water  
permeability characteristics normal to  
the plane, without load**

*Géotextiles et produits apparentés — Détermination des  
caractéristiques de perméabilité à l'eau normalement au plan, sans  
contrainte mécanique*

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

[SIST EN ISO 11058:2019](https://standards.iteh.ai/catalog/standards/sist/07afb8e8-bb5e-478a-849c-03011d0ade3d/sist-en-iso-11058-2019)

<https://standards.iteh.ai/catalog/standards/sist/07afb8e8-bb5e-478a-849c-03011d0ade3d/sist-en-iso-11058-2019>



Reference number  
ISO 11058:2019(E)

© ISO 2019

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 11058:2019

<https://standards.iteh.ai/catalog/standards/sist/07afb8e8-bb5e-478a-849c-03011d0ade3d/sist-en-iso-11058-2019>



### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2019

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](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland



# Contents

Page

|   |           |
|---|-----------|
| Foreword.....   | iv        |
| <b>1 Scope.....</b>   | <b>1</b>  |
| <b>2 Normative references.....</b>  | <b>1</b>  |
| <b>3 Terms and definitions.....</b>   | <b>1</b>  |
| <b>4 Test specimens.....</b>  | <b>1</b>  |
| 4.1 Handling.....   | 1         |
| 4.2 Selection.....  | 1         |
| 4.3 Number and dimensions.....  | 2         |
| 4.4 Specimen conditions.....  | 2         |
| <b>5 Constant head method.....</b>  | <b>2</b>  |
| 5.1 Principle.....  | 2         |
| 5.2 Apparatus.....  | 2         |
| 5.3 Procedure.....  | 3         |
| 5.4 Calculation and expression of results.....  | 4         |
| <b>6 Falling head method.....</b>   | <b>4</b>  |
| 6.1 Principle.....  | 4         |
| 6.2 Apparatus.....  | 5         |
| 6.3 Procedure.....  | 6         |
| 6.4 Calculation and expression of results.....  | 6         |
| <b>7 Test report.....</b>   | <b>7</b>  |
| <b>Annex A (informative) Determination of the correction factor, <math>R_T</math>, to a water temperature of 20 °C.....</b> | <b>11</b> |
| <b>Annex B (normative) Relationship between head loss and flow velocity.....</b>  | <b>13</b> |
| <b>Annex C (informative) Individual velocity index values for a head loss of 50 mm.....</b>                                 | <b>15</b> |
| <b>Annex D (informative) Experimental data and calculations.....</b>  | <b>16</b> |

## ISO 11058:2019(E)

### 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)).

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](http://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 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 221, *Geosynthetics*.

This third edition cancels and replaces the second edition (ISO 11058:2010), which has been technically revised.

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

- editorial modifications;
- formula corrections.

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).

# Geotextiles and geotextile-related products — Determination of water permeability characteristics normal to the plane, without load

## 1 Scope

This document specifies two test methods for determining the water permeability characteristics of a single layer of geotextile or geotextile-related product normal to the plane:

- a) the constant head method; and
- b) the falling head method.

## 2 Normative references

The following referenced documents are referred to 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 2854, *Statistical interpretation of data — Techniques of estimation and tests relating to means and variances*

ISO 5813, *Water quality — Determination of dissolved oxygen — Iodometric method*

ISO 9862, *Geosynthetics — Sampling and preparation of test specimens*

ISO 10320, *Geosynthetics — Identification on site*

## 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

#### velocity index

v-index

velocity corresponding to a head loss of 50 mm across a specimen, expressed to the nearest  $\pm 1$  mm/s

## 4 Test specimens

### 4.1 Handling

The sample shall not be folded and shall be handled as infrequently as possible to avoid disturbance to its structure. The sample shall be kept in a flat position without any load.

### 4.2 Selection

Test specimens shall be taken from the sample in accordance with ISO 9862.