

**Geosynthetics - General tests for evaluation following durability testing**

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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.
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English Version

## Geosynthetics - General tests for evaluation following durability testing

Géosynthétiques - Essais généraux d'évaluation après essais de durabilité

Geokunststoffe - Allgemeine Prüfverfahren zur Bewertung nach Beständigkeitsprüfungen

This European Standard was approved by CEN on 26 November 2011.

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.

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## Foreword

This document (EN 12226:2012) has been prepared by 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of an identical text or by endorsement, at the latest by July 2012, and conflicting national standards shall be withdrawn at the latest by July 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12226:2000.

The main changes compared to the previous edition are:

- a) the title and scope of the standard was extended from geotextiles and geotextile-related products to geosynthetics;
- b) normative references revised;
- c) new Table 1 "Sampling of specimens for tensile testing of geosynthetics after exposure" added;
- d) new subclause 5.4 "Compression properties" added;
- e) new subclause 6.3 "Change in compressive strength" added.

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

## 1 Scope

This European Standard specifies test methods for determining the change in specific properties of aged geosynthetics.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 12311-1, *Flexible sheets for waterproofing — Part 1: Bitumen sheets for roof waterproofing — Determination of tensile properties*

EN 29073-3, *Textiles — Test methods for nonwovens — Part 3: Determination of tensile strength and elongation*

EN ISO 527-3, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets (ISO 527-3)*

EN ISO 527-4, *Plastics — Determination of tensile properties — Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites (ISO 527-4)*

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

EN ISO 10318, *Geosynthetics — Terms and definitions (ISO 10318)*

EN ISO 10319, *Geosynthetics — Wide-width tensile test (ISO 10319)*

EN ISO 13934-1, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method (ISO 13934-1)*

EN ISO 25619-2, *Geosynthetics — Determination of compression behaviour — Part 2: Determination of short-term compression behaviour (ISO 25619-2)*

ISO/TS 13434, *Geosynthetics — Guidelines for the assessment of durability*

## 3 Principle

The test specimens are exposed to a durability test for geosynthetics. The exposure is followed by visual and, if required, microscopic inspection and by determination of changes in tensile or compressive properties, as appropriate.

NOTE For further information on relevant durability tests see ISO/TS 13434.

## 4 Specimens

### 4.1 Number of specimens

For each durability test the number of test and control specimens shall be a minimum of five, in both the machine and the cross-direction, unless the nature of the geosynthetic makes this inappropriate.