SLOVENSKI STANDARD
SIST EN 13252:2014/kFprA1:2014

01-september-2014

Geotekstilije in geotekstilijam sorodni izdelki - Značilnosti, ki se zahtevajo pri drenažnih sistemih

Geotextiles and geotextile-related products - Characteristics required for use in drainage systems

Ta slovenski standard je istoveten z: **EN 13252:2014/FprA1**

ICS:

59.080.70	Geotekstilije	Geotextiles
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English Version

Geotextiles and geotextile-related products - Characteristics required for use in drainage systems

Géotextiles et produits apparentés - Caractéristiques requises pour l'utilisation dans les systèmes de drainage

Geotextilien und geotextilverwandte Produkte - Geforderte Eigenschaften für die Anwendung in Dränanlagen

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 189.

This draft amendment A1, if approved, will modify the European Standard EN 13252:2014. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents

Foreword

This document (EN 13252:2014/FprA1:2014) has been prepared by Technical Committee CEN/TC 189 “Geosynthetics”, the secretariat of which is held by NBN.

This document is currently submitted to the Unique Acceptance Procedure.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

NOTE Due to fact that the Framework Partnership Agreement between the Commission and CEN & CENELEC is not signed yet, there are currently no New Approach Consultants in place for 2014. Therefore the provisions of CEN-CENELEC Guide 15 cannot be met.

This shall not prevent the processing of draft standards nor the offering of harmonized standards to the Commission. In particular, draft standards can be sent to vote without Consultant assessment.

This note will be removed from the Foreword of the finalized publication.

1 Modification to Clause 2

Add the following reference:

"EN ISO 3696, *Water for analytical laboratory use — Specification and test methods (ISO 3696)*".

2 Modification to Annex B

Replace Annex B with the following:

"

Annex B
(normative)

Durability aspects

B.1 General

B.1.1 Service life

The provisions and assessment methods of this annex are based upon the intended use of geosynthetics, as specified in the scope of this European Standard, and their foreseen service life in years. They are based upon the current state of the art, knowledge and experience. The service life refers to the period during which the geosynthetic retains the required properties of this annex, assuming it was properly installed, used and maintained.

For a geosynthetic which satisfies the requirements of this annex the service life represents a minimum indication. The real service life, for normal conditions of use, may turn out to be considerably longer without major degradation affecting the essential requirements of the works defined in the CPR.

The indicated service life of the geosynthetic cannot be interpreted as a guarantee given by the manufacturer but should be regarded only as a tool for selecting a product suitable for the anticipated working life.

The tests described in this annex do not allow the determination of reduction factors. The tests described in this annex are screening tests to show the ability of a product to serve for a certain time. The reference strength and retained strength of products investigated in this Annex B shall be determined in the same way in accordance with EN 12226.

B.1.2 Initial and repeat testing of durability

A product shall be submitted to an initial testing of its durability in accordance with this annex.

A product that is unchanged shall be tested again after 5 years. A product is considered unchanged if the raw material supply, the production technology and the process and stabilization of the product have not been subject to a significant process change.

If a product has been subject to a significant process change, then it shall be tested in the same manner as a new product.

A significant process change is defined as any of the following:

— a change in the chemical formulation (CAS No);

— reduced active ingredient concentration levels of raw materials in the polymer recipe;

— substitution of any polymer in the recipe, irrespective of any change in concentration.

Testing of a changed product may be exempted for products with a service life of more than 5 years if the producer can demonstrate by means of regular assessment, including analyses of the process and of long-term stabilizers, that the type of active ingredients has remained the same and that the content of these ingredients is not lower than that in the material used in the initial durability testing.

B.1.3 Use of rework material

Rework material can be used without limitations, if the original raw material meets the requirements of this annex and no pelletizing is done in the rework process.

If pelletizing is done in the re-work process, rework material from the same production or source can be used, if the final product meets the requirements of this annex. If the original raw material meets the requirements of this annex, a maximum of 10 % pelletized rework material is acceptable without further proof.

NOTE Pelletizing is a thermal process whereby the polymer melt coming from an extruder is pressed through a die plate and cut by knives to make pellets. This process may affect the properties of the product.

B.2 Weathering (all products)

All products shall pass the accelerated weathering test described in EN 12224, unless they are to be covered on the day of installation. The strength retained at the end of this test, together with the intended application, will determine the length of time the product may be exposed on site. The maximum exposure times are given in Table B.1. Extended testing is necessary for products, which will be exposed for a longer duration.

Table B.1 — Maximum exposure times

Application	**Retained strength**	**Maximum time of exposure after installation**
Reinforcement or other applications where long-term strength is required	> 80 %	1 month
	60 % to 80 %	2 weeks
	< 60 %	1 day
Other applications (where long-term strength is not required)	> 60 %	1 month
	20 % to 60 %	2 weeks
	< 20 %	1 day

A product, which has not been tested for resistance to weathering, shall be covered on the day of installation.

For a range of products, which differ only in mass per unit area, only the product with the lowest mass per unit area shall be subjected to the tests. The results of the test may be applied for the other products in the range, unless they have been tested separately.

The product information shall state: "To be covered within (*duration*) after installation".

B.3 Products used in non-reinforcing applications and with service lives up to 5 years

A product may be considered sufficiently durable for a minimum service life of 5 years, provided it contains no biodegradable materials and it is used:

— in a non-reinforcing application, and

— in natural soils with a pH between 4 and 9 (determined in accordance with ISO 10390), and

— in a soil with temperature ≤ 25 °C.

Such product may contain PCM (Post Consumer Material) or PIM (Post Industrial Material).

The product information shall state: "Predicted to be durable a minimum of 5 years for non-reinforcing applications in natural soils with 4 ≤ pH ≤ 9 and soil temperatures ≤ 25 °C".

B.4 Other applications and service lives up to 25 years, 50 years and 100 years

B.4.1 General

A product, which consists of virgin or reworked polymers or a combination of these, may be considered sufficiently durable in natural soils with a pH between 4 and 9 and at a soil temperature ≤ 25 °C provided it passes the relevant material test(s) of B.4.2 for the specified service life.

After the durability tests specified in B.4.2 the test specimens are subjected to tensile tests given in EN 12226. The retained tensile strength is compared to the original tensile strength of reference specimens (result expressed in percentage retained strength).

A product consisting of more than one polymer shall be separated into its constituent parts which shall each pass the relevant tests of B.4.2. If it is not possible to separate the product into its constituent parts, samples of the constituent materials shall be submitted to the relevant tests of B.4.2.

The lightest product variant in a family shall be the variant selected for durability testing. If a manufacturer produces a lighter variant after the initial type testing, it is the responsibility of the manufacturer to decide whether the change is of sufficient magnitude to require the product to be tested as a new product. If the manufacturer decides the change is significant he shall test the light variant as a new product. If the manufacturer decides this change is not significant, he can use his existing durability data to make a statement for the new product. In either case, when the 5 year PTD repeat testing as defined in Table A.2 is required the new product shall be the variant selected for testing, it now being the lightest variant in the product family.

The product information shall state:

— "Predicted to be durable for (specify the service life) in natural soils with 4 ≤ pH ≤ 9 and soil temperatures ≤ 25 °C" on the basis of the results of test method (reference to the relevant section and test duration of B.4.2).

B.4.2 Tests for specific materials

B.4.2.1 Polyester (PET)

A non-reinforcing product consisting solely of PET shall be tested for resistance to internal hydrolysis following EN 12447 (CEG content [according to ASTM D 7409] and an average molecular weight (M_n) [according to ASTM D 4603] shall be evaluated), with the following modifications:

— Test temperature: 80 °C;

— Test duration:

— For service lives up to 25 years: 14 d;

— For service lives up to 50 years: 28 d;

— For service lives up to 100 years: 56 d.

The minimum retained strength shall be 50 %.