

GEOTEKSTIILID JA ANALOOGSE FUNKTSIOONIGA  
TOOTED. NÕUTAVAD OMADUSED KASUTAMISEKS  
EROSIOONI TÕKESTAVATEL E HITUSTÖÖDEL (KALDA-  
JA NÕLVAKINDLUSTISED)

Geotextiles and geotextile-related products -  
Characteristics required for use in erosion control  
works (coastal protection, bank revetments)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|   |  |
|---|--|
| See Eesti standard EVS-EN 13253:2016 sisaldab Euroopa standardi EN 13253:2016 ingliskeelset teksti.                 | This Estonian standard EVS-EN 13253:2016 consists of the English text of the European standard EN 13253:2016.                      |
| 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 12.10.2016. | Date of Availability of the European standard is 12.10.2016.   |
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English Version

**Geotextiles and geotextile-related products -  
Characteristics required for use in erosion control works  
(coastal protection, bank revetments)**

Géotextiles et produits apparentés - Caractéristiques  
requis pour l'utilisation dans les ouvrages de lutte  
contre l'érosion (protection côtière et revêtement de  
berge)

Geotextilien und geotextilverwandte Produkte -  
Geforderte Eigenschaften für die Anwendung in  
Erosionsschutzanlagen (Küstenschutz, Deckwerksbau)

This European Standard was approved by CEN on 4 June 2016.

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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## European foreword

This document (EN 13253:2016) 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 April 2017, and conflicting national standards shall be withdrawn at the latest by July 2018.

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 13253:2014+A1:2015.

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 Regulation No 305/2011.

For relationship with Regulation (EU) Nr. 305/2011, see informative Annex ZA, which is an integral part of this document.

Annex D provides details of significant technical changes between this European Standard and the previous edition.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

This European Standard allows manufacturers to describe geotextiles and geotextile-related products on the basis of declared values for characteristics relevant to the intended use and if tested to the specified method. It also includes procedures for the assessment and verification of constancy of performance and factory production control.

This European Standard may also be used by designers, end-users and other interested parties to define which functions and conditions of use are relevant.

The term “product” used in this European Standard refers to a geotextile or geotextile-related product.

This European Standard is part of a series of standards, addressing the requirements for geotextiles and geotextile-related products when used in a specific application. Annex C provides guidance on how to select the appropriate standard.

## 1 Scope

This European Standard specifies the relevant characteristics of geotextiles and geotextile-related products used in erosion control works for preventing the migration of fine-graded material into layers of coarser material due to alternating hydraulic gradients, and the appropriate test methods to determine these characteristics.

This European Standard covers applications in coastal protection and bank revetment. This European Standard does not cover surface erosion, where the geotextile or geotextile-related product is located at the surface.

The intended use of these geotextiles or geotextile-related products is to fulfil one or more of the following functions: filtration, separation and reinforcement. The separation function will always occur in conjunction with filtration or reinforcement, and hence will not be specified alone.

This European Standard is not applicable to geosynthetic barriers, as defined in EN ISO 10318-1.

This European Standard provides for the assessment and verification of constancy of performance of the product to this European Standard and for factory production control procedures.

Particular application cases may contain requirements regarding additional properties and – preferably standardized – test methods, if they are technically relevant.

This European Standard may be used to derive design values by taking into account factors within the context of the definitions given in EN 1997-1 (Eurocode 7), e.g. factors of safety. The design life of the product should be determined, since its function may be temporary, as a construction expediency, or permanent, for the lifetime of the structure.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12224, *Geotextiles and geotextile-related products - Determination of the resistance to weathering*

EN 12226, *Geosynthetics - General tests for evaluation following durability testing*

EN 12447, *Geotextiles and geotextile-related products - Screening test method for determining the resistance to hydrolysis in water*

EN ISO 1043-1, *Plastics - Symbols and abbreviated terms - Part 1: Basic polymers and their special characteristics (ISO 1043-1)*

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

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

EN ISO 10318-1, *Geosynthetics - Part 1: Terms and definitions (ISO 10318-1)*

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

EN ISO 10320, *Geotextiles and geotextile-related products - Identification on site (ISO 10320)*

EN ISO 10321, *Geosynthetics - Tensile test for joints/seams by wide-width strip method (ISO 10321)*



EN ISO 10722, *Geosynthetics - Index test procedure for the evaluation of mechanical damage under repeated loading - Damage caused by granular material (ISO 10722)*

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

EN ISO 12236, *Geosynthetics - Static puncture test (CBR test) (ISO 12236)*

EN ISO 12956, *Geotextiles and geotextile-related products - Determination of the characteristic opening size (ISO 12956)*

EN ISO 12957-1, *Geosynthetics - Determination of friction characteristics - Part 1: Direct shear test (ISO 12957-1)*

EN ISO 12957-2, *Geosynthetics - Determination of friction characteristics - Part 2: Inclined plane test (ISO 12957-2)*

EN ISO 13426-1, *Geotextiles and geotextile-related products - Strength of internal structural junctions - Part 1: Geocells (ISO 13426-1)*

EN ISO 13426-2, *Geotextiles and geotextile-related products - Strength of internal structural junctions - Part 2: Geocomposites (ISO 13426-2)*

EN ISO 13431, *Geotextiles and geotextile-related products - Determination of tensile creep and creep rupture behaviour (ISO 13431)*

EN ISO 13433, *Geosynthetics - Dynamic perforation test (cone drop test) (ISO 13433)*

EN ISO 13438, *Geotextiles and geotextile-related products - Screening test method for determining the resistance to oxidation (ISO 13438)*

ISO 10390, *Soil quality — Determination of pH*

ASTM D4603 — 03(2011)e1, *Standard Test Method for Determining Inherent Viscosity of Poly(Ethylene Terephthalate) (PET) by Glass Capillary Viscometer*

ASTM D7409 — 15, *Standard Test Method for Carboxyl End Group Content of Polyethylene Terephthalate (PET) Yarns*

### **3 Terms, definitions and abbreviations**

#### **3.1 Terms and definitions**

For the purposes of this document, the terms and definitions given EN ISO 10318-1 and the following apply.

##### **3.1.1**

##### **product**

geotextile or geotextile-related product

##### **3.1.2**

##### **specification**

document in which the work, functions and specific conditions of use of the product are described