

**Geotekstiilid ja geotekstiilipõhised tooted.
Nõutavad omadused kasutamisel katendites ja
asfaldikihtides**

Geotextiles and geotextile-related products -
Characteristics required for use in pavements and
asphalt overlays

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15381:2008 sisaldab Euroopa standardi EN 15381:2008 ingliskeelset teksti.

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English Version

Geotextiles and geotextile-related products - Characteristics required for use in pavements and asphalt overlays

Géotextiles et produits apparentés - Caractéristiques requises pour l'utilisation dans les chaussées et couches de roulement en enrobés

Geotextilien und geotextilverwandte Produkte - Eigenschaften, die für die Anwendung beim Bau von Fahrbahndecken und Asphaltdeckschichten erforderlich sind

This European Standard was approved by CEN on 18 July 2008.

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Foreword

This document (EN 15381:2008) has been prepared by Technical Committee CEN/TC 189 "Geosynthetics", the secretariat of which is held by IBN.

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of an identical text or by endorsement, at the latest by February 2009, and conflicting national standards shall be withdrawn at the latest by May 2010.

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 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.

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Introduction

This 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 evaluation of conformity and factory production control.

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

Performance and index tests for several characteristics are still under study and will be included when the standard is revised.

The term “product” which is used in this standard refers to geotextiles and geotextile-related products.

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.

1 Scope

This European Standard specifies the relevant characteristics of metallic and non-metallic geotextiles and geotextile-related products used in the construction of pavements and asphalt overlays and the appropriate test methods to determine these characteristics.

The intended use of these geotextiles and geotextile-related products is to fulfil one or more of the following functions: reinforcement, stress relief and barrier. The use of geotextiles and geotextile-related products is to be considered as a part of an interlayer and asphalt overlay system.

This standard is not applicable to geosynthetic barriers, as defined in EN ISO 10318.

This standard provides for evaluation of conformity of the product to this European Standard and for factory production control procedures.

This standard defines requirements to be met by manufacturers and distributors with regard to the presentation of product properties.

NOTE 1 Particular application cases or national specifications may contain additional requirements regarding product application or installation and specifying preferably standardized test methods, if they are technically relevant and not conflicting with European Standards.

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 1426, *Bitumen and bituminous binders – Determination of needle penetration*

EN 10002-1, *Metallic materials – Tensile testing – Part 1: Method of test at ambient temperature*

EN 10080, *Steel for the reinforcement of concrete – Weldable reinforcing steel – General*

EN 10223-3, *Steel wire and wire products for fences – Part 3: Hexagonal steel wire netting for engineering purposes*

EN 10244-2, *Steel wire and wire products – Non ferrous metallic coatings on steel wire – Part 2: Zinc or zinc alloy coatings*

prEN 10348, *Steel for the reinforcement of concrete – Galvanized reinforcing steel*

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

EN 14030, *Geotextiles and geotextile-related products – Screening test method for determining the resistance to acid and alkaline liquids (ISO/TR 12960:1998, modified)*

EN ISO 1043-1:2001, *Plastics – Symbols and abbreviated terms – Part 1: Basic polymers and their special characteristics (ISO 1043-1:2001)*

EN ISO 3146, *Plastics — Determination of melting behaviour (melting temperature or melting range) of semi-crystalline polymers by capillary tube and polarizing-microscope methods (ISO 3146:2000)*

EN ISO 9862, *Geosynthetics – Sampling and preparation of test specimens (ISO 9862:2005)*

EN ISO 10318:2005, *Geosynthetics – Terms and definitions (ISO 10318:2005)*

EN ISO 10319, *Geotextiles – Wide-width tensile test (ISO 10319:1993)*

EN ISO 10320, *Geotextiles and geotextile-related products – Identification on site (ISO 10320:1999)*

EN ISO 12236, *Geosynthetics – Static puncture test (CBR test) (ISO 12236:2006)*

EN ISO 13433, *Geosynthetics – Dynamic perforation test (cone drop test) (ISO 13433:2006)*

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 13934-1:1999)*

EN ISO 15630-2, *Steel for the reinforcement and prestressing of concrete — Test methods — Part 2: Welded fabric (ISO 15630-2:2002)*

ASTM A975-97 (2003), *Standard specification for double-twisted hexagonal mesh gabions andrevet mattresses (metallic-coated steel wire or metallic-coated steel wire with poly(vinyl chloride) (PVC) coating)*

ASTM D6637-01, *Standard test method for determining tensile properties of geogrids by the single or multi-rib tensile method*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 10318:2005 and the following apply:

3.1.1

asphalt overlay

upper layer of a pavement which is in contact with traffic

3.1.2

course

structural element of a pavement, laid in one or more layers

3.1.3

pavement

structure, composed of one or more courses, to support the passage of traffic

3.1.4

specification

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

3.1.5

interlayer system

geotextiles or geotextile-related products bonded in between two courses

3.1.6

tack coat

bituminous emulsion or hot bitumen, used to fix and/or impregnate a geotextile or geotextile-related product between the under- and overlay

3.1.7

stress relief

STR

function provided by a bitumen-saturated paving fabric (non-woven or purpose-built composite) which – when properly installed between a road surface and a new asphalt overlay – allows for slight differential movements