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Geosynthetics - Determination of tensile properties of
Polymeric Geosynthetic Barriers

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 59.080.70

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 17323

May 2020

ICS 59.080.70

English Version

Geosynthetics - Determination of tensile properties of
Polymeric Geosynthetic Barriers

Géosynthétiques - Détermination des propriétés en
traction des géomembranes polymériques

Geokunststoffe - Geosynthetische
Kunststoffdichtungsbahnen - Bestimmung von
Zugeigenschaften

This European Standard was approved by CEN on 14 March 2020.

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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 17323:2020) 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of an identical text or by endorsement, at the latest by November 2020, and conflicting national standards shall be withdrawn at the latest by November 2020.

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.

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1 Scope

This document specifies test methods for the determination of tensile properties of polymeric geosynthetic barriers PE (e.g. PE-HD and PE-LLD), FPO (e.g. EVA, FPP, and PE-VLD), PVC-P and EPDM.

Method A is suitable for testing polymeric geosynthetic barriers (GBR-P), made of PVC-P, EPDM and FPO (e.g. EVA, FPP and PE-VLD), non-reinforced (including maximum 80 g/m² glass fleece) and without backing.

Method B is suitable for testing polymeric geosynthetic barriers (GBR-P) made of PE (e.g. PE-HD and PE-LLD), non-reinforced and without backing.

Method C is suitable for testing polymeric geosynthetic barriers (GBR-P), reinforced and/or with backing.

Method D is suitable for measuring modulus (if required) of all non-reinforced GBR-P.

NOTE For homogenous polymers not listed above, method A and D can be used.

2 Normative references

The following documents are referred to in the text 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.

EN 1849-2, *Flexible sheets for waterproofing - Determination of thickness and mass per unit area - Part 2: Plastics and rubber sheets for roof waterproofing*

EN ISO 7500-1, *Metallic materials - Calibration and verification of static uniaxial testing machines - Part 1: Tension/compression testing machines - Calibration and verification of the force-measuring system (ISO 7500-1)*

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

EN ISO 9863-1, *Geosynthetics - Determination of thickness at specified pressures - Part 1: Single layers (ISO 9863-1)*

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:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1

thickness

d
distance between the upper and lower surfaces of a geosynthetic, measured normal to the surfaces and under a specified pressure, expressed in mm

3.2

width

b
the initial dimension of the parallel sided portion of the specimen, expressed in mm