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**Geosynthetics — Determination of  
thickness at specified pressures —**

**Part 1:  
Single layers**

*Géosynthétiques — Détermination de l'épaisseur à des pressions  
spécifiées —*

*Partie 1: Couches individuelles*



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ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
www.iso.org

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 221, *Geosynthetics*.

This second edition cancels and replaces the first edition (ISO 9863-1:2005), which has been technically revised.

ISO 9863-1 consists of the following parts, under the general title *Geosynthetics — Determination of thickness at specified pressures*:

- *Part 1: Single layers*
- *Part 2: Procedure for determination of thickness of single layers of multilayer products*

# Geosynthetics — Determination of thickness at specified pressures —

## Part 1: Single layers

### 1 Scope

This part of ISO 9863 specifies a method for the determination of the thickness of geosynthetics at specified pressures and specified load plate areas or under specified point loads. It defines the pressures or the load at which the thickness is determined.

The test results are intended for identification purposes and for use in technical data sheets and/or as part of other test methods, e.g. tests of hydraulic properties.

The method is applicable to all geosynthetics.

### 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.

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

ISO 25619-1, *Geosynthetics — Determination of compressive behaviour — Part 1: Compressive creep properties*

### 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 <http://www.iso.org/obp>

#### 3.1

##### **thickness**

distance between a reference plate on which the specimen rests and the contacting face of a parallel pressure-foot applying a given pressure to the specimen or distance between two reference points applying a given load to the specimen

### 4 Principle

**4.1** The thickness of a number of individual specimens of a geosynthetic is measured as the distance between the reference plate on which the specimen rests and the contacting face of a parallel, circular presser-foot exerting a specified pressure on an area of defined size within a larger area of the specimen or the thickness of a number of individual specimens of a GBR-P or a GBR-B is measured as the distance between two pressure points.