AS ISO 10318.1:2026
ISO 10318-1:2026

Australian STANDARD®

STANDARDS Australia

Geosynthetics

Part 1: Vocabulary



AS ISO 10318.1:2026

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Austroads
AWTA Product Testing (Testing Interests Australia)
Business Chamber Queensland
Department of Transport and Main Roads (QLD)
Engineers Australia
Engineers Australia / Australian Geomechanics Society
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Technical Textile and Nonwoven Association
Waste Management and Resource Recovery Association of Australia

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How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Standards Australia committee CE-020, Geosynthetics.

The objective of this document is to define terms related to the functions, products, and properties in geosynthetics, and terms used in International Standards on geosynthetics.

This document is identical to and has been reproduced from, ISO 10318-1:2026, *Geosynthetics — Part 1: Vocabulary.*

As this document has been reproduced from an international document, a comma is to be read as a full point when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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For an explanation of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 221, *Geosynthetics,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 189, *Geosynthetics,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10318-1:2015), which has been technically revised. It also incorporates the Amendment ISO 10318-1:2015/Amd 1:2018.

The main changes are as follows:

— modification of definitions for reinforcement (3.1.4) and stress relief (3.1.8);

— addition of the following new terms defining products: geomat (3.2.6.2), geospacer (3.2.6), geocuspate (3.2.6.1), geomembrane (3.2.8.2), geosynthetic clay liner (3.2.8.3.1), bituminous geomembrane (3.2.8.4.1), geosynthetic cementitious composite (3.2.11), and geofoam (3.2.12);

— addition of the following new definitions for properties: energy absorption (3.3.4.4) and energy absorption index (3.3.4.5).

A list of all parts in the ISO 10318 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Australian Standard®

Geosynthetics

Part 1: Vocabulary

1 Scope

This document defines terms related to the functions, products, and properties in geosynthetics, and terms used in International Standards on geosynthetics.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1 Terms related to functions

3.1.1
drainage
collection and transporting of either precipitation, ground water, or other fluids, or all three, in the plane of a geosynthetic material

3.1.2
filtration
restraining the uncontrolled passage of soil or other particles subjected to hydrodynamic forces, while allowing the passage of fluids into or across a geosynthetic material

3.1.3
protection
preventing or limiting local damage to a given element or material by the use of a geosynthetic material

3.1.4
reinforcement
use of the tensile stress-strain behaviour of a geosynthetic to improve the mechanical performance of a system or structure made of soil or other construction materials

3.1.5
separation
prevention from intermixing of adjacent dissimilar soils or fill materials by the use of a geosynthetic material

3.1.6
surface erosion control
use of geosynthetic materials to prevent or limit soil or other particle movements at the surface

Note 1 to entry: For example, a slope.

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