

Australian Standard™

Geosynthetics—Glossary of terms

This Australian Standard was prepared by Committee CE-020, Geosynthetics. It was approved on behalf of the Council of Standards Australia on 2 February 2005. This Standard was published on 21 April 2005.

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Australian Geomechanics Society
Australian Industry Group
Australian Water Association
CSIRO Textile and Fibre Technology
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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 3704—2005

Geosynthetics — Glossary of terms

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NOTES

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PREFACE

This Standard was prepared by the Standards Australia Committee CE-020, Geosynthetics, to supersede AS 3704—1990.

The objective of this Standard is to provide all users of geosynthetics with a comprehensive glossary of terms specifically relating to the subject.

In the preparation of the Standard, reference was made to ASTM and draft ISO test procedures and to glossaries published by CEN and the IGS. These include the terms used in the AS 3706 series, *Geotextiles—Methods of test*, and HB 154, *Geosynthetics—Guidelines on durability*.

The Standard lists alphabetically the terms used in the geosynthetics industry, but it is not exhaustive. The format of the glossary is as follows:

- (a) Preferred terms accompanied by definitions are printed in bold type.
- (b) Where the meanings of terms relating to a common subject are under an appropriate headword, the individual words are cross-referenced to that headword. For example, ‘chemical bonding’ is cross-referenced to ‘bonding’ under which headword the definition appears.
- (c) Non-preferred terms are printed in light type, and are a cross-referred to the appropriate preferred words.

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STANDARDS AUSTRALIA

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1 DEFINITIONS

Term	Definition
abnormal test result	A result that lies more than three standard deviations from the mean.
abrasion	The wearing away of any part of a material by the action of friction or rubbing.
abrasion resistance	The ability of a material to resist wear due to friction or rubbing.
absorption	A mechanism by which a fluid is assimilated by or taken up into a material or its constituents or both.
anisotropic	Having directionally variable physical properties.
antioxidant	A substance designed to retard or prevent oxidative degradation of a material.
apparent opening size	<i>See</i> opening size.
basecloth	A textile fabric, normally woven, which may be included in a needle felt to provide dimensional stability and strength and in some cases to facilitate the needle-punching operation.
batch	A defined quantity of a geosynthetic manufactured, produced, or stored under conditions presumed to be uniform, or a quantity purchased or offered for sale or for sampling at the one time. (<i>See also</i> order and sample.)
batt	Single or multiple sheets of fibre used in non-woven fabric production.
binder	An additive used to bind fibres together. A binder may be of a chemical, adhesive, resinous, or fibrous nature.
binder content	The mass of binder added as a percentage of the total mass of the geotextile.
bonding	The process by means of which one or more sheets, webs, or batts of fibre are held together. Bonding may be accomplished by mechanical, chemical, thermal, or solvent means, or combinations thereof.
chemical bonding	A process that uses suitable chemical products to achieve bonding.
mechanical bonding	A process that uses suitable mechanical methods to achieve bonding.
needle bonding	A mechanical process that uses barbed needles mounted in a needle loom to entangle the fibres of a web or batt by reorientation of some of the fibres within its structure.
needle felting	
needle punching	
needling	