Australian Standard®

Geotextiles—Methods of test
Method 6: Determination of seam strength

1 SCOPE

This Standard sets out the method for determining the seam strength of geotextiles.

2 APPLICATION

The method may be used for testing any type of seam or joint, either from manufactured rolls or joints made in situ, whether by stitching, heat-bonding or other means.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS
3704 Geotextiles—Glossary of terms
3706 Geotextiles—Methods of test
3706.1 Method 1: General requirements, sampling, conditioning, basic physical properties and statistical analysis
3706.2 Method 2: Determination of tensile properties—Wide-strip method

4 PRINCIPLE

A specimen containing the seam is gripped across the entire width in the jaws of a tensile testing machine, which is operated at a prescribed rate of extension. A force (perpendicular to the seam axis) is applied to the specimen until the joint/seam of the geotextile ruptures. A corresponding specimen of unseamed material is tested by the wide strip method (see AS 3706.2). The strength of the seamed specimen, as a percentage of that of the unseamed specimen, gives the seam efficiency.

5 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 3704 and those below apply.

5.1 Seam strength

The maximum resistance of the junction formed by stitching or joining two pieces of geotextile.

5.2 Seam efficiency

The tensile strength of a joint or seam between two pieces of geotextile, expressed as a percentage of the tensile strength of the unseamed specimen, as determined by this test.

6 APPARATUS AND REAGENTS

The apparatus and reagents shall be in accordance with AS 3706.2.