
**Geosynthetics — Index test procedure for
the evaluation of mechanical damage
under repeated loading — Damage
caused by granular material**

*Géosynthétiques — Mode opératoire d'essai pour évaluer
l'endommagement mécanique sous charge répétée —
Endommagement causé par des matériaux granulaires*



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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.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 10722 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 189, *Geosynthetics*, in collaboration with Technical Committee ISO/TC 221, *Geosynthetics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 10722 cancels and replaces ISO/TR 10722-1:1998.

Geosynthetics — Index test procedure for the evaluation of mechanical damage under repeated loading — Damage caused by granular material

1 Scope

This International Standard describes an index test procedure for simulating mechanical damage to geosynthetics, caused by granular material, under repeated loading. The damage is assessed visually and by the loss of tensile strength.

Other reference tests may be used to assess the damage caused by this test. The test method described is an index test procedure, using a standard granular material.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

ISO 554 *Standard atmospheres for conditioning and/or testing — Specifications*

ISO 10319, *Geosynthetics — Wide-width tensile test*

EN 933-1, *Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution — Sieving method*

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

3 Definitions

For the purpose of this document, the following terms and definitions apply.

3.1

reference test

test used to determine a particular property of the geosynthetic being damaged in this procedure

4 Principle

A geosynthetic specimen is placed between two layers of a synthetic aggregate and subjected to a period of dynamic loading. The geosynthetic specimen is then removed from the test apparatus, examined for any visual damage and then subjected to a mechanical or hydraulic test, to measure the change in mechanical or hydraulic properties. The result is expressed as the change (in percent) of the reference property. The visual damage is also reported.