

INTERNATIONAL STANDARD

**ISO
9864**

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Geotextiles — Determination of mass per unit area

Géotextiles — Détermination de la masse surfacique



Reference number
ISO 9864:1990(E)

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.

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.

International Standard ISO 9864 was prepared by Technical Committee ISO/TC 38, *Textiles*.

Geotextiles — Determination of mass per unit area

1 Scope

1.1 This International Standard specifies a method for the determination of the mass per unit area of geotextiles for identification purposes and for use in technical data sheets.

1.2 The method is applicable to all geotextiles.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 554:1976, *Standard atmospheres for conditioning and/or testing — Specifications*.

ISO 9862:1990, *Geotextiles — Sampling and preparation of test specimens*.

3 Principle

The mass per unit area is calculated by weighing small square or circular specimens of known dimensions.

4 Specimens

The specimens shall be cut in such a way that they are representative of the material to be tested.

Cut not less than ten specimens in accordance with ISO 9862 and to a nominal size of 100 cm², unless the structure of the geotextile is such that a 100 cm² specimen is not representative, in which case a larger specimen size shall be used.

Condition the specimens in accordance with ISO 554 for a period of 24 h unless it can be shown that the results are not affected by omitting this procedure.

5 Procedure

Determine the area of each specimen to an accuracy of 0,5 %.

Weigh each specimen to an accuracy of 0,1 %.

6 Expression of results

Calculate the mass per unit area ρ_A of each specimen, expressed in grams per square metre, using the equation

$$\rho_A = \frac{m \times 10^4}{A}$$

where

m is the mass, in grams, of the specimen;

A is the area, in square centimetres, of the specimen.

Calculate the average mass per unit area, rounding the result to the nearest gram per square centimetre, and the coefficient of variation.

7 Test report

The test report shall include the following particulars:

- a statement that the test was performed in accordance with this International Standard;
- the number of specimens tested;
- the conditioning atmosphere used;
- in the case of a specimen size larger than 100 cm², give the size used, and a description (words or sketch) of the structure;