INTERNATIONAL STANDARD

ISO 3374

Second edition
1990-11-15

Textile glass mats — Determination of mass per unit area

Verre textile — Mats — Détermination de la masse surfacique ou "grammage"

Reference number
ISO 3374:1990(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 3374 was prepared by Technical Committee ISO/TC 61, *Plastics*.

This second edition cancels and replaces the first edition (ISO 3374:1980), of which it constitutes a technical revision.

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Textile glass mats — Determination of mass per unit area

1 Scope

This International Standard specifies a method for determining the mass per unit area of a glass mat (either chopped-strand mat or continuous-strand mat).

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 1886:1980, *Textile glass — Method of sampling applicable to batches.*

ISO 2602:1980, *Statistical interpretation of test results — Estimation of the mean — Confidence interval.*

ISO 3344:1977, *Textile glass products — Determination of moisture content.*

3 Definition

For the purposes of this International Standard, the following definition applies.

mass per unit area: The ratio of the mass of a piece of mat of specified dimensions to the area.

NOTE 1 This mass includes both the glass strands and the binder.

4 Principle

The mass of a test specimen of known surface area is determined, and the mass per unit area calculated. For products including more than 0,2 % moisture, this operation is preceded by a drying step in an oven.

5 Apparatus

5.1 Polished metal template, for preparing the test specimens. The preferred shape is a square with sides of 316 mm (i.e. 0,1 m^2) with a tolerance of $\pm$ 1 mm.

Other shapes of test specimen may be used as long as their surface area is 0,1 m^2, for example test specimens measuring 400 mm × 250 mm.

5.2 Suitable trimming tool, for example knife, scissors or cutting disc.

5.3 Specimen container, which provides optimum air circulation around the specimen, made from a heat-resistant material and such that there is no loss of the test product. This may be a basket constructed from stainless steel wire mesh.

5.4 Ventilated drying oven, with an air change rate of 20 to 50 times per hour, capable of maintaining a temperature of 105 °C $\pm$ 2 °C.

5.5 Desiccator, containing a suitable drying agent (for example silica gel, calcium chloride, phosphorus pentoxide).

5.6 Balance, graduated to 0,1 g.

5.7 Stainless steel tongs, for handling the specimen and specimen container.