

International Standard



2094

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Textile floor coverings — Determination of thickness loss under dynamic loading

Revêtements de sol textiles — Détermination de la perte d'épaisseur sous charge dynamique

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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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 2094 was prepared by Technical Committee ISO/TC 38, *Textiles*.

This second edition cancels and replaces the first edition (ISO 2094:1973), clauses 5, 8, 9 and 10 of which have been technically revised.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Textile floor coverings — Determination of thickness loss under dynamic loading

1 Scope and field of application

This International Standard specifies a method for the determination of the thickness loss of textile floor coverings under dynamic loading.

It is applicable to all types of textile floor coverings with a surface that is level in height and construction.

It does not apply to other textile floor coverings unless the areas of different thickness or construction can be tested separately.

2 References

ISO 139, *Textiles — Standard atmospheres for conditioning and testing*

ISO 1765, *Machine-made textile floor coverings — Determination of thickness*.

ISO 1957, *Machine-made textile floor coverings — Sampling and cutting specimens for physical tests*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 thickness (of a textile floor covering): The distance between a reference plate on which the specimen rests and a parallel presser-foot applying a given pressure to the specimen. Ordinarily the thickness of a textile floor covering without

compression is measured under the standard pressure of 2,0 kPa¹⁾ applied to a circle of area between 300 and 1000 mm² within a larger area.

3.2 thickness loss (of a textile floor covering under dynamic loading): The difference between the thickness of the textile floor covering, measured under the standard pressure, before and after it has received a stated number of standard impacts.

4 Principle

The specimen is subjected to a cyclic-loading treatment in which a weight-piece, with two steel feet on its underside, repeatedly drops freely on to the specimen. The specimen is slowly traversed so that vertical shearing forces produced by the edges of the feet act on the requisite area of the specimen.

The thickness of the specimen is measured, before and after treatment, by the procedure specified in ISO 1765, except that the requirement of ISO 1765 not to measure within 20 mm of a change in level is not applicable.

5 Apparatus

5.1 Dynamic loading machine, with the general principle as shown in the figure, and meeting the following requirements:

A weight-piece (A) has a plate with two steel feet of rectangular cross-section attached to its underside. The cam (B) is shaped such that a cantilever (F) pivoting at D firstly raises the weight-piece and then allows it to fall freely from a height of 63,5 mm on to the specimen approximately every 4,3 s. Each

1) Equivalent to 0,20 gf/mm²