
**Resilient floor coverings — Determination
of mass per unit area**

Revêtements de sol résilients — Détermination de la masse surfacique



Reference number
ISO 23997:2007(E)

© ISO 2007

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

.....



COPYRIGHT PROTECTED DOCUMENT

© ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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 23997 was prepared by Technical Committee ISO/TC 219, *Floor coverings*.

Resilient floor coverings — Determination of mass per unit area

1 Scope

This International Standard describes a method for determining the mass per unit area of a resilient floor covering.

2 Terms and definitions

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

2.1

mass per unit area

quotient of mass and area

NOTE Mass per unit area is expressed in grams per square metre.

3 Principle

A number of specimens of defined size are taken from a resilient floor-covering sample. The specimens are weighed and, from this, the mass per unit area of the floor covering is calculated.

4 Apparatus

4.1 **Balance**, capable of weighing a specimen to the nearest 10 mg.

4.2 **Calliper gauge**, capable of measuring the size of the specimen to the nearest 0,05 mm.

5 Atmosphere for conditioning and testing

Condition the specimen at a temperature of 23 ± 2 °C and a relative humidity of 50 ± 5 % for a minimum of 24 h. Maintain these conditions when carrying out the test.

6 Sampling and selection of specimens

Take a representative sample from the available material. Take five specimens, at equal distances from the sample, the distance between the outer edge of the sample and the nearest edge of the specimen being at least 100 mm, either square or round of at least 0,01 m² in area, or from individual tiles. If necessary, clean the edges of the specimen.

Full tiles may also be used.

7 Test procedure

For each specimen, measure and record the surface dimensions to the nearest 0,1 mm. Weigh each specimen separately and record the mass to the nearest 10 mg.

8 Calculation and expression of results

Calculate the mass per unit area, in grams per square metre, using the following formula:

$$\frac{m}{A}$$

where

m is the mass of the specimen, in grams;

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

For results up to and equal to 1 000 g/m², express to the nearest 5 g/m². For results over 1 000 g/m², express to the nearest 10 g/m².

Calculate the mean value for the mass per unit area for the five specimens, expressed to the nearest gram.

9 Precision statement

A round-robin test will be conducted to determine the precision of this method

10 Test report

The test report shall contain the following information:

- a) a statement that the tests were performed in accordance with this International Standard (ISO 23997);
- b) complete identification of the product tested, including type, source, colour and manufacturer's reference numbers;
- c) previous history of the sample;
- d) the mean value for the mass per unit area;
- e) any deviation from this International Standard, which may have affected the results.

.....

ICS 97.150

Price based on 2 pages