TECHNICAL REPORT

Textile floor coverings — Determination of wear — Castor chair test

Revêtements de sol textiles — Détermination de l'usure — Essai à l'appareil à roulettes

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.

The main task of technical committees is to prepare International Standards, but in exceptional circumstances a technical committee may propose the publication of a Technical Report of one of the following types:

— type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;

— type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;

— type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/TR 4918, which is a Technical Report of type 3, was prepared by Technical Committee ISO/TC 38, *Textiles*.

From 1977, when it was formed by ISO/TC 38/SC 12, Working Group WG 7 worked towards the development of a castor chair test within its terms of reference "to develop a method or methods of test for determining the behaviour of textile floor coverings under castor chairs alone, with particular reference to applicability to all types of textile floor coverings." The basis for the work was the castor chair test method which was then a standard in Austria, the Federal Republic of Germany and Switzerland.

(This method was also used in Belgium, Denmark, France and the Netherlands.)

In the first interlaboratory trials to investigate the test variables, a poor correlation of the test with practical experience was found. In spite of the extended and more detailed investigations and trials described in this report, no satisfactory correlation of the test with practical experience of floor trials was found for various reasons. As a result of the various studies, the group was able to establish the important properties required of carpets installed in castor chair wear areas, which are as follows:

adequate durability;

good appearance retention;

sufficient tuft retention and

backings which do not delaminate or break down with use.

The group found that, for the assessment of results, it was better to take the overall assessment procedure similar to that described in TR 9405 instead of assessing the change in individual parameters.

For the foregoing reasons, it was agreed by ISO/TC 38/SC 12 that the test could not be advanced to an International Standard and that the work should be reported in a type 3 (state-of-the-art) Technical Report. Accordingly, this Technical Report is such a type 3 document.