

Textile floor coverings — Tests using the Lisson Tretrad machine

The European Standard EN 1963 : 1997 has the status of a
British Standard

ICS 59.080.60

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National foreword

This British Standard is the English language version of EN 1963 : 1997.
The UK participation in its preparation was entrusted to Technical Committee PRI/3, Textile floor coverings, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

When the standard was at the Formal Vote stage the UK voted against it because it considers that the test is expensive and difficult and produces results of dubious value. There is no evidence that the test results relate to in-use wear of textile floor coverings. The UK also pointed out that the slip resistance of the Tretrad soles is not specified and casts doubts on the reproducibility of the test, which cannot be properly assessed since there is no precision statement.
A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled 'International Standards Correspondence Index', or by using the 'Find' facility of the BSI Standards Electronic Catalogue.
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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 10, an inside back cover and a back cover.

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English version

Textile floor coverings — Tests using the Lisson Tretrad machine

Revêtements de sol textiles — Essais utilisant la machine Lisson

Textile Bodenbeläge — Prüfungen mit dem Tretradgerät System Lisson

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CEN

European Committee for Standardization
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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 134, Resilient and textile floor coverings, the Secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 1998, and conflicting national standards shall be withdrawn at the latest by April 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies four methods of test of textile floor coverings (with or without an underlay, see clause 9) using the Lisson Tretrad machine.

- Test A: Determination of mass loss of textile floor coverings, also used to assess fibre bind of synthetic cut pile carpets.
- Test B: Determination of stair nosing appearance change of textile floor coverings.
- Test C: Determination of fibre bind on synthetic loop pile carpets.
- Test D: Determination of fibre bind (hairiness) on needled floor coverings.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

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| EN 984 | <i>Determination of the mass per unit area of the use surface of needled floorcoverings</i> |
| EN 1307 | <i>Textile floor coverings — Classification of pile carpets</i> |
| EN 1470 | <i>Textile floorcoverings — Classification of needled floor coverings except for needled pile floor covering</i> |
| EN 1471 | <i>Textile floor coverings — Assessment of changes in appearance</i> |
| EN 20139 | <i>Textiles — Standard atmospheres for conditioning and testing (ISO 139 : 1973)</i> |
| ISO 1765 | <i>Machine-made textile floor coverings — Determination of thickness</i> |
| ISO 1766 | <i>Textile floor coverings — Determination of thickness of pile above the substrate</i> |
| ISO 1957 | <i>Machine-made textile floor coverings — Sampling and cutting specimens for physical tests</i> |
| ISO 2424 | <i>Textile floor coverings — Vocabulary</i> |
| ISO 4919 | <i>Textile floor coverings — Determination of tuft withdrawal force</i> |
| ISO 8543 | <i>Textile floor coverings — Methods for determination of mass</i> |

3 Definitions

For the purpose of this European Standard, the following definitions, in addition to those in ISO 2424, apply.

3.1 mass loss per unit area, m_v

The difference between the sample mass before and after the test, related to the tested area, (see clause 10).

3.2 relative mass loss m_{TV} for pile carpets

The ratio of the mass loss per unit area m_v as a percentage of the mass of pile per unit area above the substrate (according to ISO 8543).

3.3 relative mass loss m_{TV} for homogeneous needled floor coverings with or without pile

The ratio of the mass loss per unit area m_v as a percentage of the total mass per unit area (according to ISO 8543).

3.4 relative mass loss m_{TV} for heterogeneous needled floor coverings without pile

The ratio of the mass loss per unit area m_v as a percentage of the use surface mass per unit area (according to EN 984).

3.5 relative mass loss m_{TV} for heterogeneous needled floor coverings with pile

The ratio of the mass loss per unit area m_v as a percentage of the use surface mass per unit area).¹⁾

3.6 I_{TR}

An index calculated according to the following equation:

$$I_{TR} = 0,19 \sqrt{m_{AP}} \times \left(\frac{100 - m_{TV}}{100} \right)$$

where:

- m_{AP} is the mass per unit area above the substrate in grams per metre squared, determined according to ISO 8543;
- m_{TV} is the relative fibre loss in percentage.

3.7 stair suitability

The suitability of a textile floor covering for use on stair nosings in different use classes (as described in EN 1307 and EN 1470).

3.8 fibre bind

Anchorage of the fibres of the use surface of a textile floor covering by mechanical or chemical means. A poor fibre bind leads to the protrusion of fibres above the normal level after testing on the Lisson Tretrad (hairiness, fuzzing, mass loss, etc.).

¹⁾ See the classification of needled pile floor coverings (in preparation).