SLOVENSKI STANDARD
SIST EN 984:1999

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Ugotavljanje ploščinske mase uporabne površine iglanih talnih oblog

Determination of the mass per unit area of the use surface of needled floor coverings

Bestimmung des Nutzschichtgewichts genadelter Bodenbeläge

Détermination de la masse surfacique utile de la couche d'usage des revetements de sol aiguilletés plats

Ta slovenski standard je istoveten z: **EN 984:1995**

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59.080.60 Tekstilne talne obloge Textile floor coverings

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English version

Determination of the mass per unit area of the use surface of needled floor coverings

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

Foreword

This European Standard has been prepared by the 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of an identical text or by endorsement, at the latest by October 1995, and conflicting national standards shall be withdrawn at the latest by October 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, 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 a method for the determination of the mass per unit area of the use surface of non-homogeneous flat needled floor coverings in which the use surface can be distinguished visually from the substrate.

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.

EN 20139	Textiles - Standard atmospheres for conditioning and testing
ISO 1957	Machine-made textile floor coverings - Sampling and cutting specimens for physical tests.

3 Principle

The mass of a defined area of flat needled floor covering is determined before and after shearing off the use surface with a band knife.

4 Apparatus

4.1 Rule, graduated in millimetres.

4.2 Device to cut out test specimens of minimum dimensions (200 x 200) mm.

NOTE : suitable devices are a die cutter and press, hand or electric knife or scissors.

4.3 Band knife machine enabling the use surface to be shorn off level with the substrate.

4.4 Balance, accurate to ± 0,01 g.

5 Sampling and preparation of test specimens

For each sample, cut at least 8 square specimens of minimum dimensions (200 x 200) mm so that their sides are respectively parallel to and perpendicular to the direction of manufacture of the needled floor covering following the procedure in ISO 1957.

6 Conditioning

Condition the test specimens in the standard atmosphere for testing textiles defined in EN 20139 for a minimum of 24 h.

7 Procedure

Shear one test specimen progressively until the substrate is visible and use it as a guide for shearing the other specimens.

Weigh the remaining specimens to determine the mass, m_1, to the nearest 0,01 g.

Measure the dimensions of each test specimen in four places for each side to determine them to the nearest millimetre.

Use the band knife to shear the use surface from each of the remaining seven test specimens. Shear progressively until the surface of the shorn test specimen shows approximately 50 % of the substrate (coating layer or resin) using the original test specimen produced as a guide.

Select the five test specimens that appear to meet the 50 % substrate/50 % use surface fibre criteria and recondition them in the standard atmosphere to constant mass[(1)]

Weigh the five shorn test specimens to determine their mass, m2, to the nearest 0,01 g.

8 Calculation and expression of results

Calculate the area, S, of each test specimen and express in mm^2.

Calculate the mass of the use layer for each test specimen using the following expression :

$$\text{mass of use layer} = m_1 - m_2$$

(1) Mass obtained when successive weighings carried out every hour during a period of 3 h shall not indicate a variation of mass of more than 1 %.

Calculate the mass per unit area of the use layer for each test specimen using the following expression :

$$\text{Use surface mass / unit area} = \frac{(m_1 - m_2)}{S} \times 10^6 \text{ g / m}^2$$

Calculate the mean and coefficient of variation of the results.

9 Test report

The test report shall contain the following information :

a) a reference to this standard, i.e. EN 984 ;

b) a 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 and coefficient of variation of the use surface mass/unit area ;

e) any deviation from this standard which may have affected the results.