SLOVENSKI STANDARD
SIST EN 424:2002

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Nadomeġļa:
SIST EN 424:1999

Netekstilne talne obloge - Ugotavljanje uļinka simuliranega premikanja noge pohiġtva

Resilient floor coverings - Determination of the effect of simulated movement of a furniture leg

Elastische Bodenbeläge - Bestimmung des Verhaltens bei der Simulation des Verschiebens eines Möbelfußes

Revetements de sol résilients - Détermination de l'action du déplacement simulé d'un pied de meuble

Ta slovenski standard je istoveten z: **EN 424:2001**

ICS:

97.150	Netekstilne talne obloge	Non-textile floor coverings

SIST EN 424:2002 **en**

EUROPEAN STANDARD

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EN 424

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ICS 97.150

Supersedes EN 424:1993

English version

Resilient floor coverings - Determination of the effect of simulated movement of a furniture leg

Revêtements de sol résilients - Détermination de l'action du déplacement simulé d'un pied de meuble

Elastische Bodenbeläge - Bestimmung des Verhaltens bei einer nachgeahmten Verschiebung eines Möbelfußes

This European Standard was approved by CEN on 15 November 2001.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN 424:2001 E

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of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

This European Standard supersedes EN 424:1993.

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 a method for determining the resistance of an installed resilient floor covering to the mechanical stress resulting from the simulated movement of a furniture leg.

2 Principle

The resistance of an installed floor covering to the movement of a furniture leg with rounded edges and different loadings is assessed for deterioration in surface flatness, surface damage, cuts of varying depths and penetrating edges.

3 Apparatus (see Figures 1 to 3)

3.1 A frame, comprising two guide rails fixed relative to the test piece supporting the motor and the control capstan, diameter 100 mm. The unladen peripheral speed shall be 300 mm/s.

3.2 A carriage, supported and guided by rails and having a wheel base designed to prevent jerky movements. The traction device is fixed to the carriage in such a way as to ensure that it remains perfectly stable during the test.

3.3 A force-indicating device, linked to the cable and to the carriage that permits identification of the maximum tensile stress value.

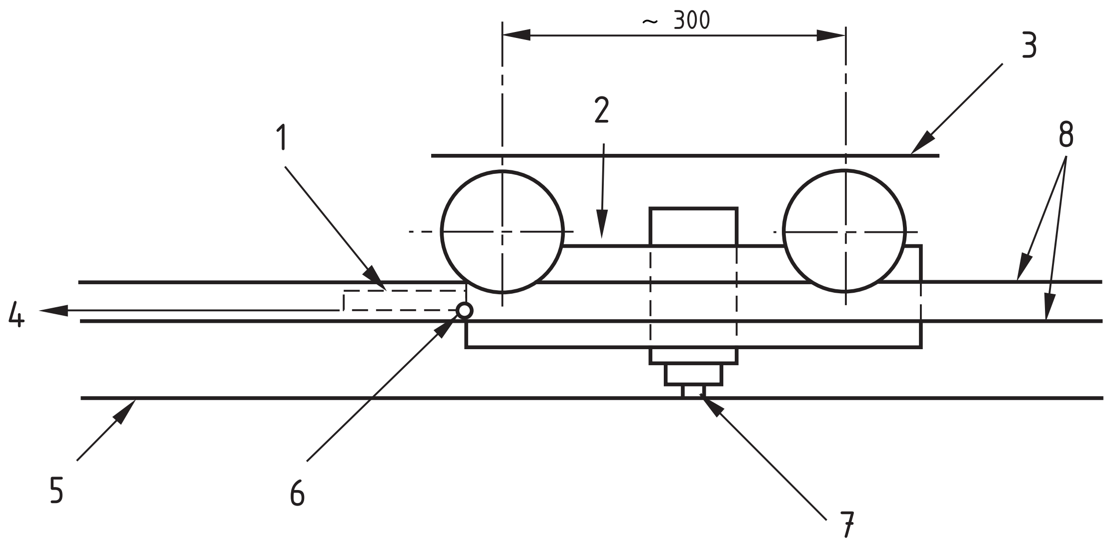
3.4 A platform that can be weighted using a total mass of 32 kg, 70 kg or 100 kg, sliding vertically in the carriage with slight friction and resting on the test piece by means of one of the feet described in **3.5.**

3.5 Three square brass feet conforming to the dimensions given in Table 1.

Table 1 — Dimensions of feet

Type	Applied mass kg	Horizontal edge radius RH mm	Vertical edge radius RV mm	Distance between opposite vertical faces mm
3	$70\ ^{0}_{+0,5\%}$	3 ± 0,05	0,1 ± 0,05	34,6 ± 0,05
2	$100\ ^{0}_{+0,5\%}$	2 ± 0,05	0,1 ± 0,05	33,6 ± 0,05
0	$32\ ^{0}_{+0,5\%}$	0,1 ± 0,05	0,1 ± 0,05	31,7 ± 0,05

Dimensions in millimetres



Key

1 Force indicating device
2 Carriage
3 Platform
4 Traction device
5 Floor covering
6 Attachment to traction device
7 Furniture leg
8 Rails

Figure 1 — Side view of apparatus

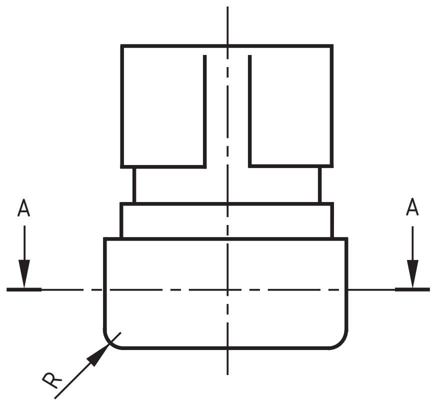


Figure 2 — Feet of apparatus

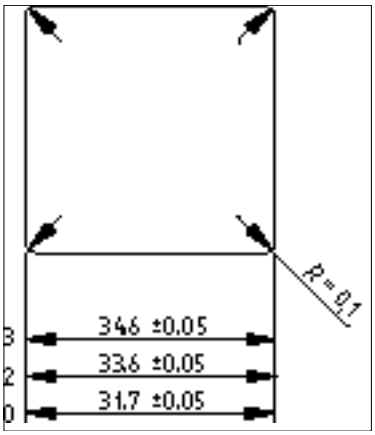


Figure 3 — Horizontal section A-A

4 Sampling and preparation of test piece

Take a representative sample from the available material.

Prepare or select a smooth, flat base with a tolerance no greater than 1,5 mm over a distance of 600 mm.

NOTE The base may be a sand-cement screed, or a concrete slab finished with a smoothing coat, if necessary, or a fibre-cement board at least 6 mm thick resting on a rigid stand.

Take one test piece approximately 1 m^2 in area, which shall be fitted in accordance with the manufacturer's instructions.

5 Conditioning

Condition the test piece after fitting at a temperature of (23 ± 2) °C and relative humidity of (50 ± 5) % for a minimum of five days.

Maintain these conditions when carrying out the test.

6 Procedure

6.1 Test paths

Ensure that the test paths are at least 100 mm from the edge of the test piece. Choose two separate test paths where the structure of the floor covering could cause different results for tests in different directions, i.e. longitudinal and transverse direction, or the principal relief lines in the pattern for sheet floor coverings, or parallel to the edge and diagonally for tiles laid alternately.

6.2 Testing

Check the test piece and guide rails to ensure that they are horizontal. Remove any dust on the test piece.

Fix the appropriate foot under the platform with two edges parallel to the frame rails. Place the carriage and the platform on the rails and the test piece, and then place the mass on the platform.

After 1 min, pull the free end of the cable (which is turned once round the capstan), without exceeding a force of 1 kN, to move the entire unit horizontally at a speed of 150 mm/s to 200 mm/s over a distance of approximately 700 mm.

Repeat the test twice on two test paths in each direction for a distance of at least 700 mm.

Record the damage caused for each test path. Ignore any damage arising beyond the first 600 mm of each test path, any damage at the end of the path if the tensile force exceeds 1 kN and any scuffing of the surface.

7 Expression of results

Express the principal types of damage for each test path as follows:

a) deterioration in the flatness of the surface;

b) damage which partially destroys the surface;

c) cuts of varying depths;

d) penetrating edges;

e) in the case of an open joint floor covering, a joint opening greater or equal to 1 mm;

f) in the case of a treated or welded joint, its failure.

8 Test report

The test report shall contain the following information:

a) a reference to this standard, i.e. EN 424;

b) a complete identification of the product tested, including type, source and manufacturer's reference numbers;

c) previous history of the sample;

d) the type of foot used;

e) the results for each test path;

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