SLOVENSKI STANDARD
SIST EN 424:1999

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Netekstilne talne obloge - Ugotavljanje uļ inka simuliranega premikanja noge pohiģtva

Resilient floor coverings - Determination of the effect of the 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

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English version

Resilient floorcoverings - Determination of the effect of the simulated movement of a furniture leg

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

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

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CEN

European Committee for Standardization
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Foreword

This European Standard was prepared by 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of an identical text or by endorsement, at the latest by February 1994, and conflicting national standards shall be withdrawn at the latest by February 1994.

The Standard was approved and in accordance with 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, United Kingdom.

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

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 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 figure 1)

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 the rails and which has a wheel base designed to prevent jerky movements.

3.3 A device between the cable and the carriage which permits an identification of the maximum tensile stress value.

3.4 A platform which 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 which shall comply with the dimensions given in table 1.

Table 1: Dimensions of feet

Type	Applied mass kg	Horizontal edge radius mm	Vertical edge radius mm	Distance between opposite vertical faces mm
3	70	3	0,1	(34,6 ± 0,05)
2	100	2	0,1	(33,6 ± 0,05)
0	32	0,1	0,1	(31,7 ± 0,05)

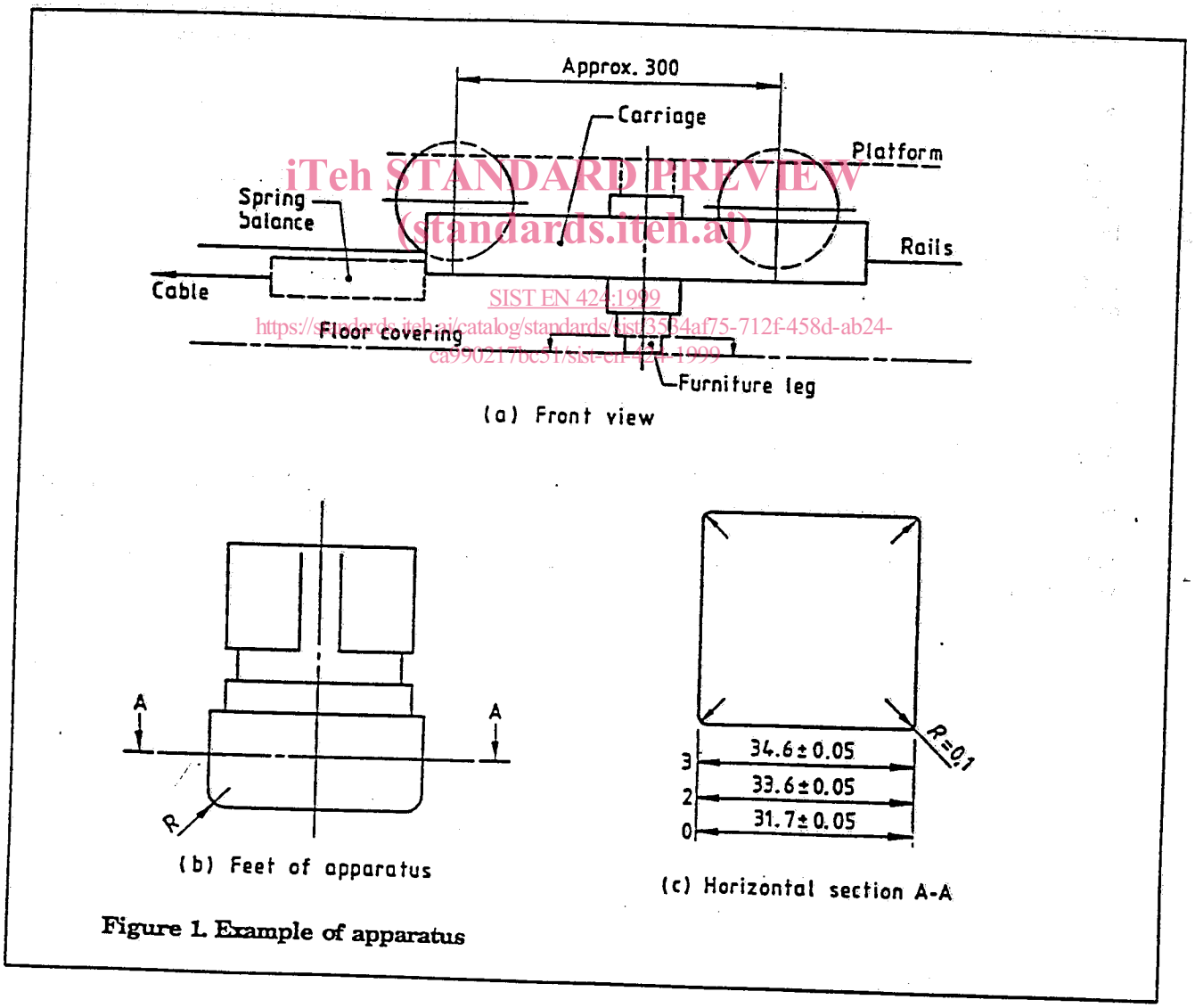

Figure 1. Example of apparatus

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 floorcovering 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 floorcoverings, 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 each test path 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 floorcovering, 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.