



SLOVENSKI STANDARD
SIST EN 12132-1:2000

01-december-2000

Feather and down - Methods of testing the down proof properties of fabrics - Part 1: Rubbing test

Feather and down - Methods of testing the down proof properties of fabrics - Part 1: Rubbing test

Federn und Daunen - Verfahren für die Prüfung der Daunendichtigkeit von Geweben - Teil 1: Simulierte Kissenbeanspruchung

Plumes et duvets - Méthodes d'essai des tissus pour l'étanchéité aux plumes et duvets - Partie 1: Essai par frottement

[SIST EN 12132-1:2000](https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-4bcf-a6a7-d78281b3e904/sist-en-12132-1-2000)

[https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-4bcf-a6a7-](https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-4bcf-a6a7-d78281b3e904/sist-en-12132-1-2000)

[d78281b3e904/sist-en-12132-1-2000](https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-4bcf-a6a7-d78281b3e904/sist-en-12132-1-2000)

Ta slovenski standard je istoveten z: EN 12132-1:1998

ICS:

59.040 Pomožni materiali za tekstilije Textile auxiliary materials

SIST EN 12132-1:2000

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 12132-1:2000

<https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-4bcf-a6a7-d78281b3e904/sist-en-12132-1-2000>

EUROPEAN STANDARD

EN 12132-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 1998

ICS 59.040

Descriptors: stuffings, feathers, woven fabrics, tests, leak tests, friction, testing conditions, specimen preparation, procedure

English version

Feather and down - Methods of testing the down proof properties of fabrics - Part 1: Rubbing test

Plumes et duvets - Méthodes d'essai des tissus pour l'étanchéité aux plumes et duvets - Partie 1: Essai par frottement

Federn und Daunen - Verfahren für die Prüfung der Daunendichtigkeit von Geweben - Teil 1: Simulierte Kissenbeanspruchung

This European Standard was approved by CEN on 24 July 1998.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. 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.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-4bcf-a6a7-d78281b3e904/sist-en-12132-1-2000>



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 Technical Committee CEN/TC 222 "Feather and down as filling material for any article, as well as finished articles filled with feather and down", the secretariat of which is held by UNI.

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 1999, and conflicting national standards shall be withdrawn at the latest by February 1999.

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.



iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 12132-1:2000

<https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-4bcf-a6a7-d78281b3e904/sist-en-12132-1-2000>

1 Scope

This standard describes a method for the determination of down and/or feather penetration through the primary tick fabric of a specimen containing feather and/or down filling using a rubbing apparatus.

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 139 : 1973)

EN 20187 Paper, board and pulps - Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples (ISO 187 : 1990)

3 Principle

A cushion of specified dimensions is made from the fabric to be tested for its downproof properties and filled with a given amount of feather and down material or its mixtures. The cushion is mounted in an apparatus and undergoes a specified number of rubbings. The number of down and/or feather particles which have passed or protruded from the primary tick fabric is counted.

(standards.iteh.ai)

4 Apparatus

SIST EN 12132-1:2000

4.1 Rubbing apparatus

<https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-4bcf-a6a7-d78281b3e904/sist-en-12132-1-2000>

The apparatus (see figure 1) consists of two clamps A and B, in which the test cushion is secured. Clamp A is fixed to the bottom plate. Clamp B is fastened to a wheel, C, which enables clamp B to rotate in an ellipse-like path. The clamps are spaced (44 ± 1) mm apart. The distance between the centre of the wheel and the attachment point of clamp B is $(25 \pm 0,5)$ mm.

Other dimensions are shown in figure 2.

The wheel shall rotate at 135 r/min and the apparatus shall be provided with a revolution counter.

4.2 Plastic bag

The bag shall consist of low density polyethylene (PE-LD), thickness (25 ± 1) μm , and be without a pleat.

The bag shall have the following inner dimensions:

width (150 ± 10) mm

length (240 ± 10) mm

4.3 Balance

The balance shall be accurate to within 0,1 g.

5 Atmosphere for conditioning and testing

Conditioning of test specimen and testing is carried out in an atmosphere according to EN 20139 and the temperature and relative humidity are measured according to EN 20187.

6 Preparation of test cushions

At least two test specimens are taken of the fabric each measuring (140 ± 5) mm \times (420 ± 10) mm. One specimen is taken with its longer side in the warp direction and one in the weft direction. From these specimens two test cushions are sewn (with lockstitch). Stitch length in the seam is 1 mm.

Fold the fabric in the middle, parallel to the short side, with its back outside and sew the longer side, 10 mm from the edge; then turn inside out in order that the back be inside.

Sew the shorter sides, 20 mm from the edges, taking care to leave on the side an opening for filling.

Fill in the test cushion obtained with the filling material, with the required mass based on composition according to table 1 and complete the sewing on the shorter side avoiding to leave some filling material in this area.

In this way a test cushion is obtained, whose sizes are 120 mm \times 170 mm (see figure 3).

Table 1: Filling of test cushion

Down content %	Feather content %	Mass of filling g
over 70	below 30	$30 \pm 0,1$
30 to 70	70 to 30	$35 \pm 0,1$
below 30	over 70	$40 \pm 0,1$

<https://standards.iteh.ai/catalog/standards/sist/0645defc-45e2-41cf-a6a7-d78281b3e904/sist-en-12132-1-2000>

7 Procedure

Before testing the cushion is placed in the plastic bag (see 4.2). This permits a total collection of any particles that penetrate completely through the cushion's primary tick fabric.

The plastic bag containing the test cushion is then fastened in the clamps of the test apparatus. The cushion's flaps are placed in the clamps and the cushion is folded between these clamps. The counter is set for 2700 revolutions. The apparatus is started and after 2700 revolutions (approximately 20 min) it is automatically stopped by the counter.

Afterwards the cushion is taken out of the plastic bag. Any filling particles in the plastic bag shall be counted. The test cushion is placed under a suitable light source and the number of protruding visible particles > 2 mm shall be counted. If the number of filling particles in the plastic bag plus the number of filling particles protruding from the cushion is greater than 50, counting shall be stopped.

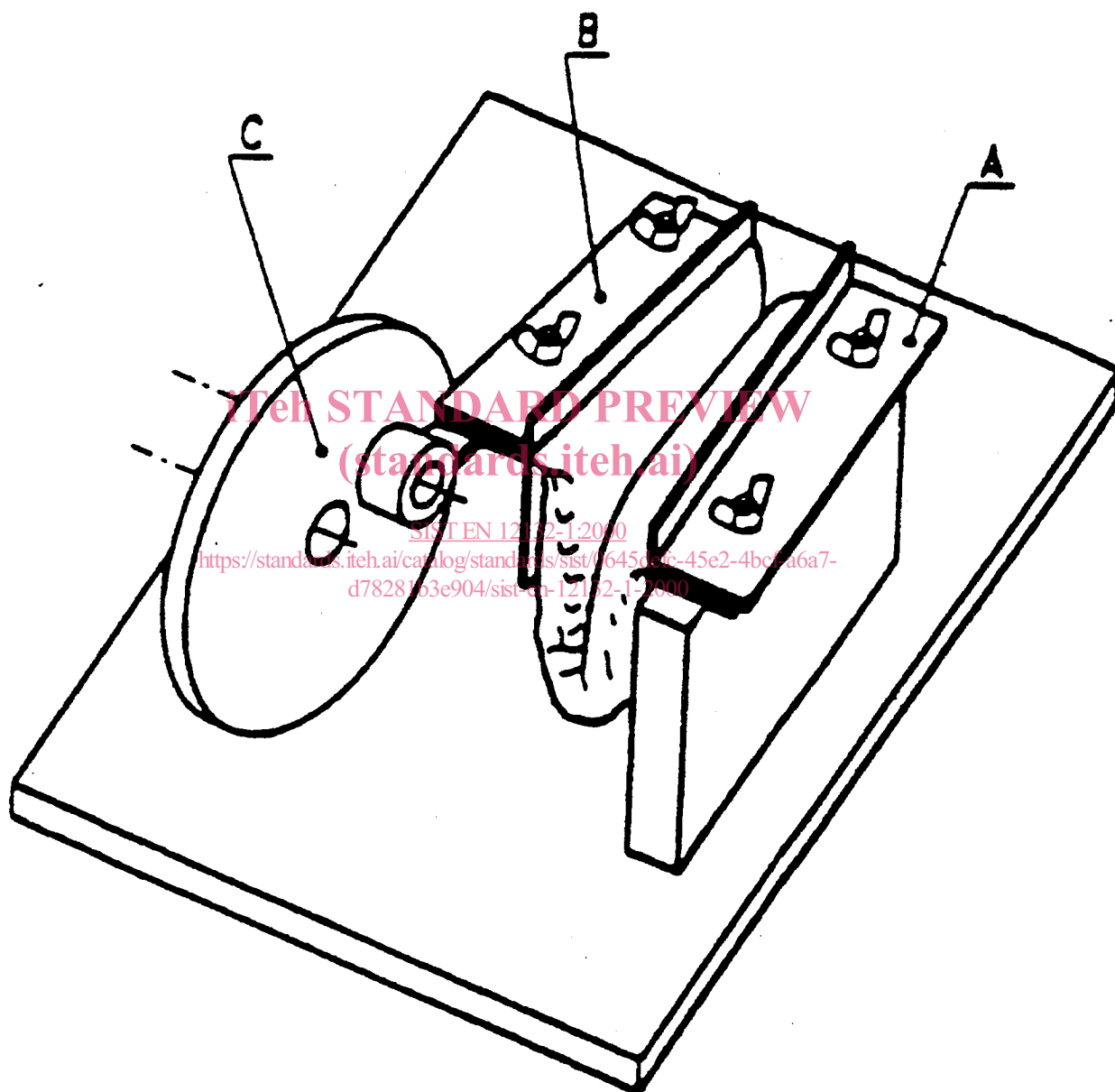
8 Test report

The test report shall indicate the following particulars for each test cushion:

- reference to this European Standard;
- type of apparatus;
- description and designation of the tested fabric;

- description of the filling material and mass;
- number of particles passed or protruded from the fabric;
- if the result is "more than 50" particles, then the result shall be stated as follows: "more than 50";
- any deviation from this European Standard and any incident likely to have affected the result.

Dimensions in millimetres



- A Clamp fixed to the bottom plate
B Clamp fastened to the wheel
C Wheel

Figure 1: Rubbing test apparatus (see 4.1)

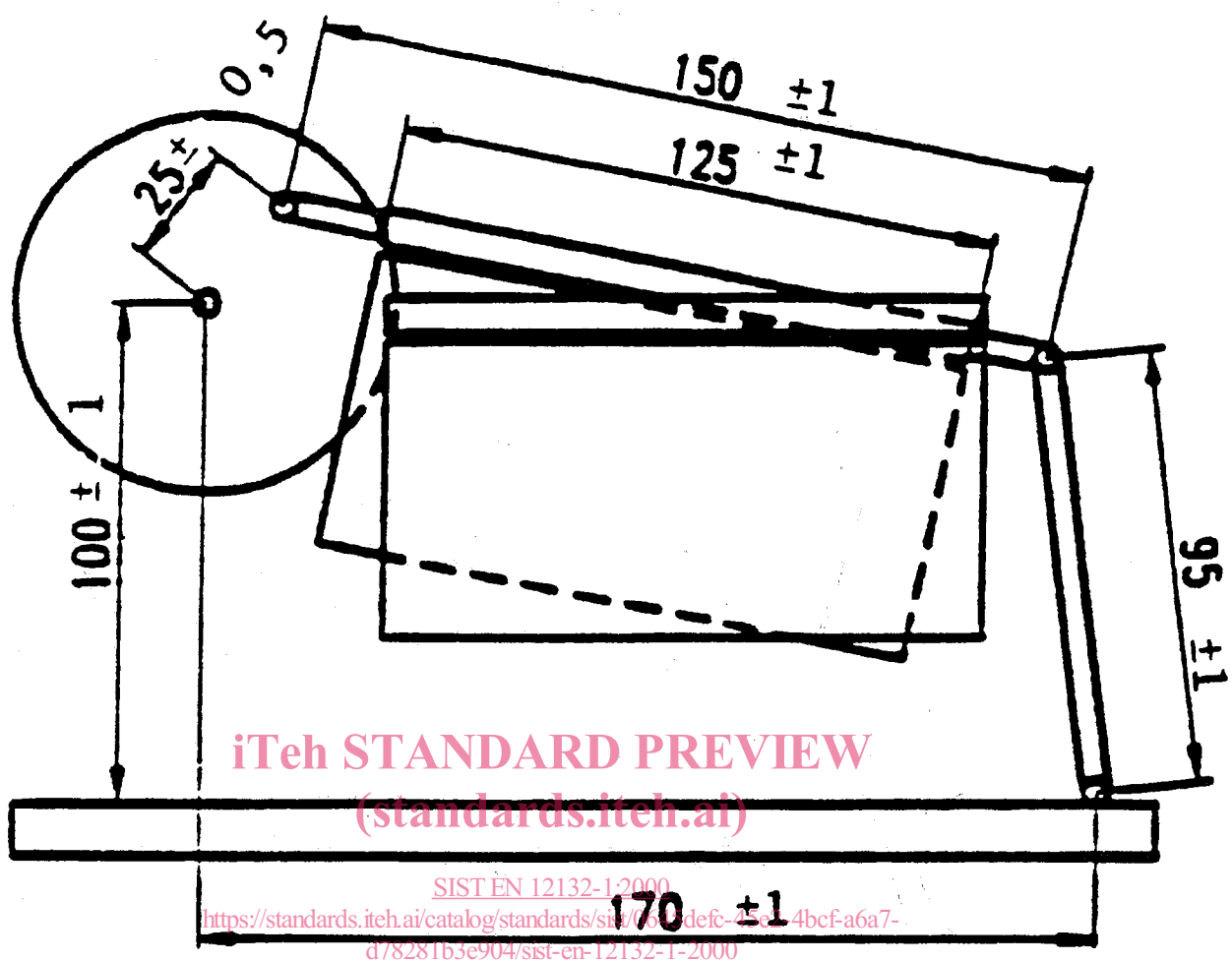


Figure 2: Main dimensions of apparatus

Dimensions in millimetres