

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

**ILNAS-EN 716-2:2008** 

# Furniture - Children's cots and folding cots for domestic use - Part 2: Test methods

Meubles - Lits à nacelle fixes et pliants à usage domestique pour enfants - Partie 2 : Méthodes d'essai

Möbel - Kinderbetten und Reisekinderbetten für den Wohnbereich -Teil 2: Prüfverfahren

#### **National Foreword**

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## EUROPEAN STANDARD ILNAS-EN 716-2:2008 EN 716-2 NORME EUROPÉENNE

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#### **English Version**

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#### **Foreword**

This document (EN 716-2:2008) has been prepared by Technical Committee CEN/TC 207 "Furniture", 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of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 716-2:1995.

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

Significant technical differences between this edition and EN 716-2:1995 are as follows:

- a) Following items were made more concrete or introduced: Test equipment (3.2), Application of forces (3.3), Tolerances (3.4) and under Test equipment (4), Test mattress (4.3), Device for bite test (4.11), Template for foot hold (4.13), Head probes (4.14), Testing device for V-shaped openings (4.15) and Retaining block (4.12);
- b) Elaboration and specification of the test procedures (5), Assembly and inspection (5.1), for the measurements of closed openings testing with at test probe (5.3.2.1) and measurement of V-shaped openings testing with a test probe (5.3.2.2) were introduced, Small parts (5.4), Bite test (5.5), Strength of sides and ends (5.7), Snag points (5.9) and Locking mechanisms (5.11);
- c) Testing of brakes of the rollers and test chain with disc were deleted;
- d) Revised editorially and with regard to content.

#### 1 Scope

This part of EN 716 specifies test methods for assessing the safety of children's cots and folding cots for domestic use.

It applies to children's cots and folding cots with an internal length greater than 900 mm but not more than 1 400 mm.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 2439:2000, Flexible cellular polymeric materials - Determination of hardness (indentation technique) (ISO 2439:1997, including Technical Corrigendum 1:1998)

ISO 7619-2, Rubber, vulcanized or thermoplastic — Determination of indentation hardness — Part 2: IRHD pocket meter method

#### 3 General test conditions

#### 3.1 Preliminary preparation

The tests are designed to be applied to a cot that is fully assembled and ready for use.

The test unit shall be stored in indoor ambient conditions for at least one week immediately prior to testing. Any deviation from this procedure shall be stated in the test report.

Before testing, any fabrics intended to be removable shall be cleaned or washed twice in accordance with the manufacturer's instructions. If no instructions are supplied, the manner of washing/cleaning shall be stated in the test report.

The tests shall be carried out under indoor ambient conditions, but if during a test the atmospheric temperature is outside the range 15 °C to 25 °C, the maximum and/or minimum temperature shall be recorded in the test report.

The cot shall be tested as delivered. If the cot is a knock down type, it shall be assembled according to the manufacturer's instructions supplied with the cot. If the cot can be assembled, combined or adjusted in different ways, the most adverse combination shall be used for each test.

Knock-down fittings shall be tightened before testing. Further re-tightening shall not take place unless this is specifically required by the manufacturer.

In the case of designs not catered for in the test procedures, the tests shall be carried out as far as possible as described, and a list made of the deviations from the test procedures.

#### 3.2 Test equipment

Unless otherwise specified, the tests may be applied by any suitable device because results are dependent only upon correctly applied forces and loads and not upon the apparatus.

The equipment shall not inhibit the deformation of the cot during testing. It shall be able to move so that it can follow the deformation of the cot during testing, so that the loads are always applied at the specified point and in the specified direction.

All loading pads shall be capable of pivoting in relation to the direction of the applied force. The pivot point shall be as close as practically possible to the load surface.

#### 3.3 Application of forces

The forces in the static load tests shall be applied sufficiently slowly enough to ensure that negligible dynamic force is applied.

The forces in durability tests shall be applied at a rate to ensure that excessive heating does not occur.

#### 3.4 Tolerances

Unless otherwise stated, the following tolerances apply:

— Forces:  $\pm$  5 % of the nominal force;

— Masses:  $\pm$  0,5 % of the nominal mass;

Dimensions: ± 1,0 mm of the nominal dimension;

Angles: ± 2° of the nominal angle;

— Positioning of loading pads: ± 5 mm;

– Duration of forces: (  $2 \pm 1$ ) s for durability tests

 $(10 \pm 2)$  s for static load tests, including tension, torque and bite tests.

The tests are described in terms of the application of forces. Masses can, however, be used. The relationship 10 N = 1 kg shall be used for this purpose.

#### 3.5 Test sequence

The tests shall be carried out in the order laid down in this standard and on the same cot.

#### 3.6 Prevention of movement during test

If the cot tends to slide or roll during the tests specified in clause 5, it shall be restrained by stops (4.6).

#### 4 Test apparatus

#### 4.1 Measuring probes

Probes made of plastics or other hard, smooth material mounted on a force-measuring device.

There shall be one probe with a diameter of 7 mm (-0,1/+0 mm), see Figure 1a.

There shall be five probes with an angle of  $30^{\circ} \pm 0.5^{\circ}$  with diameters of 25 mm (0/+0,1 mm), 45 mm (0/+0,1 mm), 60 mm (0/+0,1 mm), 65 mm (0/+0,1 mm) and 85 mm (0/+0,1 mm) with conical ends, see Figure 1b.