

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

ILNAS-EN 14074:2004

Office furniture - Tables and desks and storage furniture - Test methods for the determination of strength and durability of moving parts

Mobilier de bureau - Tables de travail de bureau et meubles de rangement -Méthodes d'essai pour la détermination de la résistance et de la durabilité des

Büromöbel - Büro-Arbeitstische und Büroschränke - Prüfverfahren für die Bestimmung der Festigkeit und der Dauerhaltbarkeit beweglicher Teile

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National Foreword

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Office furniture - Tables and desks and storage furniture - Test methods for the determination of strength and durability of moving parts

Mobilier de bureau - Tables de travail de bureau et meubles de rangement - Méthodes d'essai pour la détermination de la résistance et de la durabilité des parties mobiles

Büromöbel - Büro-Arbeitstische und Büroschränke -Prüfverfahren für die Bestimmung der Festigkeit und der Dauerhaltbarkeit beweglicher Teile

This European Standard was approved by CEN on 27 May 2004.

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Foreword

This document (EN 14074:2004) 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of an identical text or by endorsement, at the latest by February 2005, and conflicting national standards shall be withdrawn at the latest by February 2005.

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

1 Scope

This document specifies test methods for the determination of strength and durability of moving parts of desks, tables and storage furniture.

This document does not apply to high density mechanized filing systems, rotary filing systems or plan files.

The tests are intended to simulate normal functional use, as well as misuse that might reasonably be expected to occur.

Safety requirements can be found in EN 14073-2.

Assessment of ageing is not included.

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.

Not applicable – no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

catch device

device, which keeps or pulls a component in place, but does not require a second action in order to release it, e.g. a magnetic catch or a self-closing-mechanism

3.2

locking mechanism

mechanism that limits access to the interior of a unit or a storage element. It requires a key or a combination in order to operate it or to make it possible to operate it.

4 General test conditions

4.1 Preliminary preparation

The tests specified in this Standard are designed to be applied to an item of furniture that is fully assembled and ready for use.

The tests refer to furniture parts with conventional functions. Combination of tests may be necessary to cover the properties of multi-function parts, e.g. a shelf that can be pulled out on runners shall be tested for strength of shelf supports as well as for strength as an extension element.

Before any of the tests are commenced, the item shall be old enough to ensure that it has developed its full strength.

The furniture shall be tested as delivered. Ready to Assemble furniture shall be assembled according to the instructions supplied with it. If the furniture can be assembled or combined in different ways, the most adverse combination shall be used for each test. This is also applicable to units that can be combined with other units or components.

Wall or screen mounted units shall be installed according to the manufacturers instructions.

Free standing units shall be placed on the floor surface (5.2) with stops (5.4) around each leg or base.

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

Tighten any assembly fittings before testing. Further re-tightening shall not take place unless it is specifically required by the manufacturer.

4.2 Test equipment

The forces in the static load tests shall be applied sufficiently slowly to ensure that the influence of dynamic load is negligible. Unless otherwise stated, the static loads shall be maintained for (10 ± 2) s.

The forces in durability tests shall be applied sufficiently slowly to ensure that heating does not occur. Unless otherwise stated, the durability loads shall be maintained for (2 ± 1) s.

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

The test equipment shall be capable of following the deformations that may occur during the tests.

4.3 Tolerances

Unless otherwise stated:

- forces shall have an accuracy of ± 5% of the nominal force;
- dimensions an accuracy of ± 1,0 mm of the nominal dimension;
- masses an accuracy of ± 0,5% of the nominal mass;
- velocities an accuracy of ± 5% of the nominal velocity;
- angles an accuracy of ± 2° of the nominal angle.

The accuracy for the position of loading pads shall be \pm 5 mm.

The relationship 10N = 1 kg may be used.

4.4 Sequence of testing

The tests shall be carried out on the same unit. The tests shall be carried out on the same part and in the specified sequence, but it is not necessary to test the different parts of the item in the sequence of the clauses.

For any unit fitted with more than one flap, door or extension element that is identical in every respect excluding the direction of opening, it is only necessary to test one of the relevant flaps, doors or extension elements. For an item fitted with flaps, doors or extension elements which are not identical, the flap, door or extension element producing the most adverse conditions shall be tested.