ILNAS

Institut luxembourgeois de la normalisation
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ILNAS-EN 13150:2020

Workbenches for laboratories in educational institutions - Dimensions, safety and durability requirements and test methods

Paillasses de laboratoire dans les établissements d'enseignement - Dimensions, spécification de sécurité et de durabilité et méthodes d'essai

Arbeitstische für Laboratorien in Bildungseinrichtungen - Maße, Anforderungen an die Sicherheit und Dauerhaltbarkeit und Prüfverfahren

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National Foreword

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EUROPEAN STANDARD
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English Version

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This European Standard was approved by CEN on 27 October 2019.

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

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European foreword

This document (EN 13150:2020) 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of an identical text or by endorsement, at the latest by August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

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

This document supersedes EN 13150:2001.

Compared to EN 13150:2001, the following modifications have been made:

a) scope has been restricted to the workbenches in educational institutions;

b) removal of Annex A (normative) containing detailed test methods;

c) this document refers to other relevant EN standards such as EN 1730, EN 16122 for the applicable test methods;

d) no terms and definitions are listed in this document;

e) removal of Annex B (informative) containing optional durability tests. Durability test requirements are now in the main body of this document.

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

1 Scope

This document applies to workbenches, movable science tables and workbench shelves designed for use in educational institutions and similar laboratories. It does not apply to workbenches and working tables for industrial laboratories, institutes and universities or similar research institutions. It does not apply to fume cupboards.

This document specifies safety and durability requirements and test methods and gives dimensions.

Requirements and test methods related to the fire safety of workbenches and to the resistance of the work surface are not included in this document.

Requirements concerning electrical safety and media services (e.g. water, gas, wastewater, compressed air) are not included in this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 527-1:2011, *Office furniture — Work tables and desks — Part 1: Dimensions*

EN 1729-1:2015, *Furniture — Chairs and tables for educational institutions — Part 1: Functional dimensions*

EN 1730:2012, *Furniture — Tables — Test methods for the determination of stability, strength and durability*

EN 12600, *Glass in building — Pendulum test — Impact test method and classification for flat glass*

EN 13722, *Furniture — Assessment of the surface gloss*

EN 16121, *Non-domestic storage furniture — Requirements for safety, strength, durability and stability*

EN 16122:2012, *Domestic and non-domestic storage furniture — Test methods for the determination of strength, durability and stability*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

4 General test conditions

4.1 Preliminary preparation

The furniture shall be tested as delivered. Knock-down furniture shall be assembled according to the instructions supplied. If the instructions allow the furniture to be assembled or combined in different ways, the most adverse combination shall be used for each test. Knock-down fittings shall be tightened before testing. Further tightening shall not take place unless specifically required by the manufacturer.

For workbenches/work tables that are designed to be fixed to the structure of a building, the unit shall be mounted according to the manufacturer's instructions to a structure representative of the service installation. This structure shall be sufficiently strong and stiff to eliminate the possibility of it affecting the results of the test.

Unless otherwise specified by the manufacturer, the sample for test shall be stored in indoor ambient conditions for at least 24 h immediately prior to testing.

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

4.2 Tolerances

Unless otherwise stated the following tolerances apply:

— Masses: ± 0,5% of the nominal mass;

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

— Angles: ± 2° of the nominal angle;

— Forces: ± 5% of the nominal force.

4.3 Test installation

For the structural tests in Clause 6, the product shall be installed according to the manufacturer's instructions.

5 Dimensions

5.1 General

Workbenches shall fulfil the relevant dimensional requirement given in 5.2, 5.3 and 5.4.

5.2 Heights

5.2.1 Work surface height (h_1)

The nominal heights h_1 as shown in Figure 1 shall be as specified in Table 1. Levelling devices shall be provided with all freestanding furniture allowing adjustment in the range of nominal height +/- 10 mm.

For seated work, the relationship between seat height and work surface height is critical. The guidance for this is provided in EN 1729-1:2015, Annex E.