



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

ILNAS-EN 14434:2023

**Writing boards for educational
institutions - Ergonomic, technical and
safety requirements and their test
methods**

Wandtafeln für Bildungseinrichtungen -
Ergonomische, technische und
sicherheitstechnische Anforderungen
und Prüfverfahren

Tableaux pour établissements
d'enseignement - Exigences
ergonomiques, techniques et de sécurité
et méthodes d'essai correspondantes

11/2023



National Foreword

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**Writing boards for educational institutions - Ergonomic,
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Exigences ergonomiques, techniques et de sécurité et
méthodes d'essai correspondantes

Wandtafeln für Bildungseinrichtungen - Ergonomische,
technische und sicherheitstechnische Anforderungen
und Prüfverfahren

This European Standard was approved by CEN on 22 October 2023.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 14434:2023) 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of an identical text or by endorsement, at the latest by May 2024, and conflicting national standards shall be withdrawn at the latest by May 2024.

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 14434:2010.

EN 14434:2023 includes the following significant technical changes with respect to EN 14434:2010:

- a) Insertion of 3 new types of writing boards (definitions in Clause 3);
- b) Insertion of dynamic stability for all mobile boards (6.3);
- c) Insertion of castor test (9.7);
- d) Insertion of requirements for white projecting boards (Annexes B and C);
- e) Insertion of requirements for interactive systems (Annexes D and E);
- f) Insertion of requirements for interactive screens (Annexes F and G);
- g) Insertion of surface flatness test (7.6 and Annex H);
- h) Insertion of vibration test (9.6 and Annex I).

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, Türkiye and the United Kingdom.

1 Scope

This document specifies ergonomic, technical and safety requirements for wall-mounted and free-standing writing boards, white projecting boards, interactive systems and interactive screens for use in rooms for educational and training purposes, e.g. classrooms, lecture theatres for schools, universities, etc.

This document applies to units after installation. Safety depending on the structure of the building is not included, e.g. the strength of wall-mounted boards includes only the board and its parts. The wall and the wall attachment are not included.

This document does not apply to technical aspects of connected hardware, such as computers, speakers, video cameras.

Requirements concerning electrical safety are not included.

Annex A (normative) Assessment scale for the ability to write – Five levels chalk scale

Annex B (normative) Test methods and requirements for white projecting boards

Annex C (informative) Additional test methods and requirements for white projecting boards

Annex D (normative) Test methods and requirements for interactive systems

Annex E (informative) Additional test methods and requirements for interactive systems

Annex F (normative) Test methods and requirements for interactive screens

Annex G (informative) Additional test methods and requirements for interactive screens

Annex H (normative) Surface flatness test

Annex I (informative) Vibration test

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 438-2:2016+A1:2018, *High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (usually called laminates) - Part 2: Determination of properties*

EN 1023-3:2000, *Office furniture - Screens - Part 3: Test methods*

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

3 Terms and definitions

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

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

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1**board attachment**

element by which the board is attached to the rail

Note 1 to entry: See Figure 1.

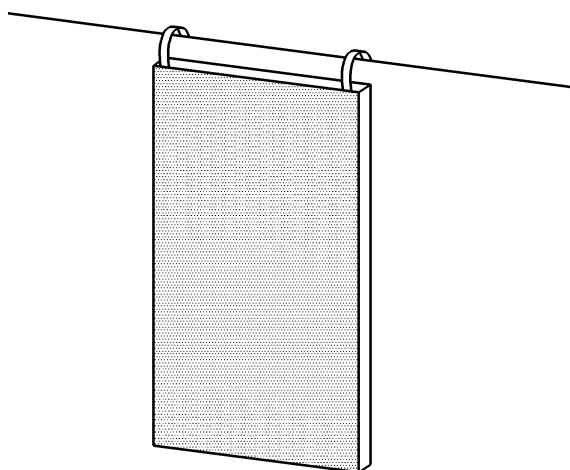


Figure 1 — Board attachment

3.2**chalkboard**

writing board with a writing surface to be used for chalk

3.3**fixing element**

joint by which the rail is mounted to the wall

3.4**flipchart**

one-sided board placed or fixed on an easel or a rail with the facility to attach a paper pad

Note 1 to entry: See Figure 2.

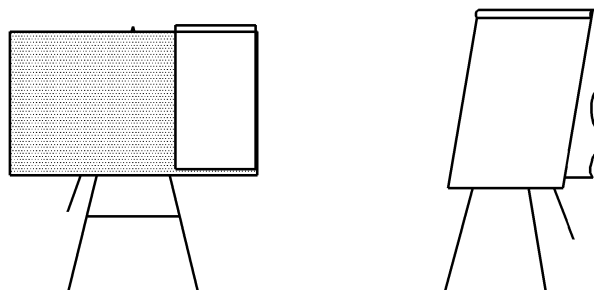


Figure 2 — Flipcharts