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Hardware for furniture - Strength and loading capacity of wall attachment devices

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

**Hardware for furniture - Strength and loading capacity of
wall attachment devices**

Quincaillerie d'ameublement - Résistance mécanique et
capacité de charge des dispositifs de fixation au mur

Möbelbeschläge - Festigkeit und Tragfähigkeit von
Schrankaufhängern

This European Standard was approved by CEN on 22 July 2018.

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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 15939:2019) 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of an identical text or by endorsement, at the latest by December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

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 15939:2011+A1:2014.

Compared to EN 15939:2011+A1:2014 the following modifications were made:

- a) test frame B deleted;
- b) one reference test frame is supposed to be used as basis for the settings A, B and C;
- c) verification of functionality and top surface test added;
- d) Annex C (informative) "Approximate calculation of vertical and horizontal forces" added.

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1 Scope

This document specifies test methods for the verification of the loading capacity of all types of wall attachment devices for storage furniture and their components.

It does not apply to devices intended to prevent the overturning of storage furniture.

The tests consist of the application of loads and forces simulating normal functional use, as well as misuse that might reasonably be expected to occur.

With the exception of the corrosion test in 6.3, the tests are designed to evaluate properties without regard to materials, design/construction or manufacturing processes.

The tests can be applied to the part attached to the furniture alone or to the combination of the part attached to the furniture and the part attached to the wall. The attachment into the wall is not included.

The strength tests are carried out in a test frame with specified properties.

The test results are only valid for the devices tested. These results can be used to represent the performance of production model, provided that the tested model is representative of the production model.

With the exception of the corrosion test, ageing and influences of temperature and humidity are not included.

Annex A (normative) includes requirements for product information.

Annex B (informative) includes a method for the determination of loading capacity.

Annex C (informative) includes an approximate calculation of vertical and horizontal forces.

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 310, *Wood-based panels - Determination of modulus of elasticity in bending and of bending strength*

EN 319, *Particleboards and fibreboards - Determination of tensile strength perpendicular to the plane of the board*

EN 320, *Particleboards and fibreboards - Determination of resistance to axial withdrawal of screws*

EN 323, *Wood-based panels - Determination of density*

EN 10025-2:2004, *Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10230-1, *Steel wire nails - Part 1: Loose nails for general applications*

EN 10305-5, *Steel tubes for precision applications - Technical delivery conditions - Part 5: Welded cold sized square and rectangular tubes*

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

EN ISO 6270-2, *Paints and varnishes - Determination of resistance to humidity - Part 2: Condensation (in-cabinet exposure with heated water reservoir) (ISO 6270-2)*

EN 15939:2019 (E)

ISO 48-5, *Rubber, vulcanized or thermoplastic - Determination of hardness - Part 5: Indentation hardness by IRHD pocket meter method*

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