

Referral edition

2023-09-11

**Möbelfakta's requirements specification,
part 1 Quality**

Referral until 2023-09-29

Instruction

This document contains proposals for Möbelfakta's requirements specification part 1, Quality.

- **Yellow-highlighted text** indicates new requirements or changes in requirements.

Information on proposals for the new and updated quality requirements

The proposal has been developed through Möbelfakta's criteria council and its working groups, discussions with furniture manufacturers and suppliers in the industry. The proposal concerns the following amendments and additions to the following sections

1.4 Educational environment

1.1.4.1 Seating and 1.1.4.3 Table

- Introduction of updated standard SS-EN 1729-2:2023 adopted in June 2023

1.1.2 Public environment and 1.1.3 Office environment

- Introduction of new product category "Furniture ensembles and enclosures"

1.3. Surface resistance

1.3.2 Outdoor user environments

- Introduction of new additional metal surfaces

1.4. Fire

1.4.1 Upholstered seating and 1.4.2 Sleeping furniture and mattresses

- Extended fire requirement

1.6. Acoustics

- Include specification for speech noise reduction

Please, leave your comments

If you have comments on the criteria, you can download the form at <https://www.mobelfakta.se/Vara-krav.html>. Please send your suggestions to info@mobelfakta.se by September 29, 2023.

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EN 14434:2010	<p>Writing boards for educational institutions - Ergonomic, technical and safety requirements and their test methods</p> <p>When testing whiteboards in accordance with EN 14434:2010 the whiteboards should meet the standard requirements and minimum level 2 should achieved in terms of:</p> <ul style="list-style-type: none"> - 7.2.3 Ability to write and erase - 7.3.2 Scratching - 7.4.2 Staining - 7.5.2 Colour degradation <p>When testing whiteboards in accordance with EN 14434:2010 the whiteboards should meet the standard requirements and minimum level 2 should achieved in terms of</p> <ul style="list-style-type: none"> - 8.3.3 Ability to write - 8.4.2 Scratching - 8.5.2 Staining - 8.6.2 Colour degradation
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1.1.2.12 Furniture ensembles and enclosures (NEW REQUIREMENT)

This section describes the requirements that furniture ensembles and enclosures must meet and includes general safety requirements, stability and acoustic performance.

Furniture ensembles and enclosures are defined by being self-contained, mobile and soundproof.

Furniture ensembles and enclosures reduce the speech level of the occupant speaking inside the product. Does not refer to individual components used in workstations, such as a screen, storage unit, table, lighting fixture, cabinet, bookshelf, standard chair, wall covering, or ceiling panel. The product must not be permanently part of the construction work.

If the product is equipped with permanently mounted fittings, these must in themselves meet the requirements of Möbelfakta. In cases where the product falls under one or more applicable directives or regulations that require CE marking, such as e.g. The Machinery Directive (MD) or the Low Voltage Directive (LVD) must be presented with the CE declaration.

For stability requirements, the following shall be tested and certified:

The product shall not tip over when placed on an inclined plane of 10 degrees, the test shall be carried out in the most unfavorable configuration for the product.

Spoken sound reduction requirements for furniture ensembles and enclosures

Speech sound reduction, DS,A [dB], when reported shall be presented in the form of a graph in accordance with ISO 23351 (2020). This is a requirement for the category furniture ensembles and enclosures. Complete documentation of measurements and calculations carried out in accordance with the above standard shall be available when speech noise reduction is reported. The classification (A+, A, B, C or D) where A+ is the highest rating shall be given in the measurement protocol. Unclassified products cannot be labelled with Möbelfakta in this category.

EN 16121 5.2	General safety requirements (chapter 5.2) from EN 16121:2013+A1:2017 Non-domestic storage furniture. Requirements for safety, strength, durability and stability
ISO 23351 (2020)	Acoustics – Measurements of speech level reduction of furniture ensembles and enclosures. Part 1: Laboratory method

1.1.3.8 Furniture ensembles and enclosures (NEW REQUIREMENT)

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1.1.4 Educational environments

School environment refers to the educational environment such as classrooms including preschool

For other types of furniture – not in classrooms – following applies:

Workplaces: 1.1.3 Office environment

Others: 1.1.2 Non-domestic

1.1.4.1 Seating furniture

The following standards set the requirements for chairs/seating furniture intended for use in school environments.

- Student chairs in classrooms

EN 1729-2:
A1:2016*

Furniture - Chairs and tables for educational institutions - Part 2: Safety requirements and test methods.

*Test loading points in EN 1729-1:2015

*Tests carried out according to SS-EN 1729-2:2023 2012+ A1:2016 accepted until 2025-01-01

1.1.4.2 Seating for children

The following standard sets the requirements for seating for children in domestic use. The requirement is based on that the furniture is used by children that is able to sit and walk by themselves up to 14 years.

The requirements is divided into 3 seating sizes based on age and body height

Seating size 1: 1-3 years

Seating size 2: 4-7 years

Seating size 3: 8-14 years

It applies to the seating function only. If the seating has additional functions or can be converted into other products, other relevant European Standards may apply.

The standard is developed under a mandate from the EU-Commission, M/527 (Children seats).

Standarden är utarbetad under mandat från EU kommissionen M/527 (Childrens seats) and it is inteded to be published in the OJEC.

EN 17191:2021

Seating for children – Safety requirements and test methods

1.1.4.3 Tables

Here are the requirements that a student table in a classroom must meet. For other tables in classrooms, see public environment and offices.

Glass as a material is covered according to section 1.7.

EN 1729-2:
A1:2016*

Furniture - Chairs and tables for educational institutions - Part 2: Safety requirements and test methods.

*Tests carried out according to SS-EN 1729-2:2023 2012+ A1:2016 accepted until 2025-01-01

Supplementary requirements for metal surfaces

Applies to furniture in steel, untreated and surface-treated.

Corrosion testing with salt spray according to method Salt spray EN-ISO 9227

Use class	Furniture surface	Requirements
Camping	All	6 hours. ≥ 5 Assessment according to EN-ISO 10289:2001
Domestic environment	All	24 hours. ≥ 5 Assessment according to EN-ISO 10289:2001
Non-domestic environment	All	72 hours. ≥ 5 Assessment according to EN-ISO 10289:2001

Supplementary requirements for lacquered steel or galvanized steel surfaces (NYTT KRAV)

Applies to furniture in steel, lacquered

Corrosion testing with salt spray according to method Salt spray EN-ISO 9227

Substrate	Category	Exposure time (based on ISO 12944-6)	Environment	Requirements
Steel	C3-hög	480 h	Urban and industrial atmospheres	Delamination $d \leq 3$ mm on steel (EN-ISO-12944-6)
Galvade ståltytor	C3-hög	480 h	Urban and industrial atmospheres	Delamination $d \leq 8$ mm on zinc substrates (Qualisteelcoat)

Supplementary requirements for lacquered aluminum surfaces* (NYTT KRAV)

Applies to furniture in aluminum, lacquered

Corrosion test with acetic acid salt spray (AASS) according to SS-EN-ISO 9227

Exposure time (based on Qualicoat)	Requirements
1000 h	No blistering in excess of 2 (S2) according to ISO 4628-2. An infiltration of maximum 16 mm ² is allowed over a scratch length of 10 cm The length of any single infiltration shall not exceed 4 mm. (Qualicoat)

*Does not apply to cast aluminum

1.4 Fire

1.4.1 Upholstered seating furniture

The following standards set the requirements for upholstered seating furniture. The standard applies to all use environments except outdoor furniture explicitly for outdoor use only. As an alternative to a valid test report from an accredited laboratory, a certificate/product data sheet from the textile supplier is acceptable which proves that the textile has been tested and approved according to EN 1021:2014 with standard polyether (20-22 kg/m³) as padding. This requires the declared item of furniture to have polyether padding with a density equal to or greater than 22 kg/m³. Other upholstery materials must be tested according to current standards.

For public environments, the textile must also be tested and approved according to SS-EN 1021-2:2014. (NEW REQUIREMENT)

EN 1021-1:2014*	Furniture – Assessment of the ignitability of upholstered furniture – Part 1: Ignition source: Smouldering cigarette.
SS-EN 1021-2:2014	Furniture - Assessment of the ignitability of upholstered furniture - Part 2: Ignition source match flame equivalent

1.4.2 Reclining furniture and mattresses

The following standard sets the requirements for beds or mattresses. The standard applies to all use environments except outdoor furniture explicitly for outdoor use only.

For public environments, the textile must also be tested and approved according to SS-EN 597-2:2016. (NEW REQUIREMENT)

EN 597-1:2016	Furniture – Assessment of the ignitability of mattresses and upholstered bed bases – Part 1: Ignition source: Smouldering cigarette.
SS-EN 597-2:2016	Furniture - Assessment of the ignitability of mattresses and upholstered bed bases - Part 2: Ignition source: match flame equivalent

1.6 Acoustics

Requirements on the reporting of the acoustic performance of an item of furniture or sound absorbent are set in accordance with the standards below. Products that are declared in **Acoustic Facts** fulfil the requirements listed in the specification. Acoustic performance data reported according to this specification can be used for calculating and dimensioning a room's acoustic performance.

In "Guide för kravställning och upphandling av ljudabsorberande bords-, och golvsärmar, ljudabsorbenter samt mobila rum" ("Guide for requirements and procurement of sound absorbing table, and screens, sound absorbents and furniture ensembles and enclosures") at www.mobelfakta.se there are recommended minimum values for sound absorption capacity. The same guide provides recommended minimum values for speech level reduction for furniture ensembles and enclosures in Möbelfakta.

Procuring organisations such as Kammarkollegiet (The Legal, Financial and Administrative Services Agency) use these recommended levels in their procurements. The specification is mandatory for reporting the equivalent sound absorption area for sound absorbents and for furniture ensembles and enclosures regarding speech level reduction, *but is optional for other categories of furniture.*

Furniture ensembles and enclosures used as a shielding for spoken sound can be measured in accordance with the established international standard and evaluated for speech level reduction, DS,A:	
ISO 23351 (2020)	Acoustics – Measurements of speech level reduction of furniture ensembles and enclosures. Part 1: Laboratory method
An item of furniture that is used as a sound absorbing unit can be measured in accordance with the international standard:	
SS-EN ISO 354:2003	Measurement of sound absorption in a reverberation room.
Individual objects evaluated regarding equivalent sound absorption area in accordance with the Swedish standard:	
ISO 20189:2019	Acoustics -- Screens, furniture and single objects intended for interior use -- Rating of sound absorption and sound reduction of elements based on laboratory measurements
Larger surfaces (>10 m ²) of multiple objects are evaluated in accordance with the new Swedish and international standard:	
EN ISO 11654:1997	Acoustics - Sound absorbents for use in buildings - Rating of sound absorption
An item of furniture that is used as a screening-off unit shall be measured (optional) in accordance with international standard and are evaluated regarding screen damping in accordance with the Swedish standard:	
ISO 10053: 2003	Acoustics - Screens or single objects - evaluation with regard to sound absorption and screen damping
ISO 20189:2018	Acoustics -- Screens, furniture and single objects intended for interior use -- Rating of sound absorption and sound reduction of elements based on laboratory measurements

Equivalent sound-absorption area

The equivalent sound-absorption area [m² Sabine] must upon declaration be presented in a diagram in accordance with ISO 20189:2019 alternately SS-EN-ISO 11654:1997 This is a requirement for sound absorbents as a furniture category. Complete documentation of measurements performed and calculations in accordance with the standards above must be available.

Screen damping

For an item of furniture that is used as a screening-off unit the screen damping ΔL_s [dB] must be declared in a diagram in accordance with ISO 20189:2019. Complete documentation of measurements performed and calculations in accordance with the standards above must be available when the screen damping is declared.

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