

# **Amendment Specification**

**2021-11-01 ver. 14.1**

**Möbelfaktas requirements specification,  
Part 1 Quality**

## Instruction

This instruction applies to Möbelfakta's updated requirements specification as of April 8, 2022: version 2021-11-01 14.1

This document contains current changes in Möbelfakta's requirements specification part 1, Quality.

- **Yellow highlighted** text indicates new requirements or changes in the requirements.
- ~~Strikethrough red~~ text indicates deleted sections
- Chapters not found in this document are unchanged from 2021-11-01

**No changes in the requirements have been made in this audit. The changes are only editorial or clarifications.**

Edits have been made in the following sections:

1.1.1.4	Reclining furniture/mattresses	1.1.4.7	Sound absorbents
1.1.1.7	Seating for children	1.3.1	Use classes - indoor
1.1.2.5	Reclining furniture/mattresses	1.4.1	Upholstered seating furniture
1.1.2.8	Seating for children	1.5.1	Leather
1.1.2.10	Sound absorbents	1.5.1.1	Artificial leather
1.1.3.1	Office work chairs	1.5.2	Textile (indoor furniture)
1.1.3.6	Sound absorbents	1.5.3	Textile (outdoor furniture)
1.1.4.2	Seating for children	1.5.4	Terms
1.1.4.3	Tables	1.6	Acoustics

## CONTENTS

<b>CONTENTS .....</b>	<b>3</b>
<b>1 QUALITY .....</b>	<b>4</b>
1.1 Safety/function .....	4
1.1.1 Domestic environment.....	4
1.1.2 Non-domestic.....	7
1.1.3 Office environment .....	11
1.1.4 Educational environments .....	15
1.1.5 Outdoor .....	18
1.2 Dimensions .....	19
1.2.1 Office furniture.....	19
1.3 Surface resistance.....	20
1.3.1 Use classes – indoor .....	20
1.3.2 Use classes – outdoor.....	23
1.4 Fire.....	25
1.4.1 Upholstered seating furniture.....	25
1.4.2 Reclining furniture and mattresses .....	25
1.5 Upholstery .....	26
1.5.1 Leather .....	26
1.5.2 Textile (indoor furniture).....	28
1.5.3 Textile (outdoor furniture) .....	29
1.5.4 Terms.....	30
1.6 Acoustics.....	32
1.7 Glass.....	32

# 1 QUALITY

## 1.1 Safety/function

Safety/function is the collective term for the properties in the basic standards designated safety, strength and durability. Safety/function covers, and is separated into, the different environmental categories that an item of furniture is intended for and is tested for according to the relevant standard.

A valid test report/certificate from an accredited institute/laboratory/enterprise must be available to verify the safety/function requirements. A valid test report/certificate means that the item of furniture/component is tested according to applicable standards including normative annex and has not changed in significant respects since it was tested. It is possible to test according to preliminary standards during the revision process. This is only applicable where those preliminary standards are in the approval phase where no technical changes are allowed. Where applicable, there is a transition period for the current standard which in those cases are specified in the requirement.

### 1.1.1 Domestic environment

#### 1.1.1.1 Seating furniture

The following standard sets the requirements for an item of seating furniture for adults, intended for use in a domestic environment. The requirements apply to all types of seating for domestic use.

EN 12520:2016

Domestic furniture – Seating furniture – Strength, durability and safety requirements.

#### 1.1.1.2 Tables

The following standard sets the requirements for a table for adults, intended for use in a domestic environment. The requirements apply to all types of tables for domestic use.

- Glass as a material is included in section 1.7.

EN 12521:2016

Domestic furniture – Tables – Strength, durability and safety requirements.

#### 1.1.1.3 Storage units/kitchen/bathroom

The following standard sets the requirements for a storage unit intended for domestic use. Fittings for kitchens and bathrooms included. The requirements apply to all types of storage furniture including worktops for domestic use. The units may be either freestanding or attached to the wall/building.

- Kitchen drawers and doors should be tested at 80,000 cycles according to EN 16121:2013 table 5 level 2 and other storage furniture at 20,000 cycles.
- Glass as a material is included in section 1.7.

EN 14749:2016

Furniture for domestic and kitchen use – Storage units and work tops – Safety requirements and test methods.

Alternatively:

EN 16121:2013 +  
A1:2018 Level 1

Non-domestic furniture - Storage furniture - Strength, durability and safety requirements.

For other **freestanding storage furniture** such as magazine racks, coat hangers, etc. additional requirements as specified below apply:

EN 1023-2:2000*	<b>Office furniture - Screens - Part 2: Mechanical safety requirements</b>
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\*refers only to l stability only stability according to EN 1023-3:2000, 6.1

#### 1.1.1.4 Reclining furniture/mattresses

The following standard sets the requirements for reclining furniture or mattresses for adults, intended for domestic use

The requirements apply to the following types of reclining furniture and mattresses:

- Complete beds including relevant parts such as bedstead, bed base, mattress and overlay mattress.
- Bedstead with or without bed base.
- Bedstead with or without frame ends.
- Bed base.
- Mattress, including overlay mattress when applicable.

EN 1725:1998*	Domestic furniture – Beds and mattresses – Safety requirements and test methods.
EN 1957:2012	Domestic furniture - Beds and mattresses - Test methods for the determination of functional characteristics.
EN 1022:2018**	Domestic furniture – Seating – Determination of stability

\*Supplementary requirement is 20,000 cycles according to EN 1725:1998 item 7.3 and 25,000 cycles according to item 7.5.

~~\*\*Tests performed according to EN 1022:2005 are accepted until 2021-12-31.~~

#### 1.1.1.5 Bunk beds/high beds

The following standard sets the requirements on bunk beds/high beds for domestic use. The requirements include bunk beds and high beds with a width of  $\leq 1,200$  mm. The distance, from the floor to the upper surface of the bed base, shall be  $\geq 800$  mm. The main purpose of these requirements is to prevent accidents to children.

Other products that may be included in a bunk bed or a high bed, e.g. tables or storage units, are not included in the specification.

EN 747-1:2012 + A1:2015	Domestic furniture – Bunk beds and high beds – Part 1: Safety, strength and durability requirements.
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#### 1.1.1.6 Children's high chairs

The following standard sets the requirements on children's high chairs for domestic use. The requirements include two different categories; active and passive high chairs. Active chairs are chairs where the child is strapped into the chair and passive chairs are where the child is not strapped in. The type of chair must be specified.

The requirements for high chairs are based upon the chair being used by children aged 6-36 months

EN 14988: 2017	Children's high chairs - Part 1: Safety requirements
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### 1.1.1.7 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~~ EN 17191:2021~~0~~\*

Seating for children – Safety requirements and test methods

*\*The standard is sent on formal vote and will be published without any technical changes during 2021.*

## 1.1.2 Non-domestic

### 1.1.2.1 Seating furniture

The following standard sets the requirements on seating furniture for adults intended for use in a non-domestic environment. The requirements apply to all types of seating for non-domestic use:

- Chair/armchair
- Stool
- Easy chair/sofa including corner and section combinations
- Bench

EN 16139:2013\*

Non-domestic furniture - Seating furniture - Strength, durability and safety requirements.

\*Furniture tested in accordance with EN 16139:2013 should be tested to at least level 1.

#### Load listing at higher user loads

With higher user weights, loads can be listed according to ISO 21015:2007 which means that the number of test loads in EN 16139: 2013 Table 1 should be listed using a factor which is directly proportional to the increase in load compared with the normal user weight of 110 kg. With user weights exceeding 110 kg the factors in Table 1 in EN 16139:2013 below should be listed: 1, 2, 4, 6, 8, 9, 10, 12, and 13. With user weights up to 160 kg factors/loads should be listed using a multiple of 1.4 and with user weights up to 200 kg by 1.8. Factor 14 in Table 1 in EN 16139:2013 should be selected according to level 2 with user weights exceeding 110 kg.

### 1.1.2.2 Tables

The following standard sets the requirements on a table for adults intended for use in a non-domestic environment. The requirements include all types of table for non-domestic use:

- Dining table
- Desk/work table, other non-office tables
- Coffee table
- Sideboard

Glass as a material is included in section 1.7.

EN 15372:2016\*  
Level 2

Non-domestic furniture - Tables - Strength, durability and safety requirements.

### 1.1.2.3 Storage furniture

The following standards set the requirements on a storage unit intended for use in a domestic environment. The requirements apply to all types of storage furniture for use in a domestic environment:

- Cupboard/cabinet/corner cupboard
- Chest of drawers/draw unit
- Bookshelf
- Bureau

Fittings:

- Base cabinet
- Wall cabinet
- High cabinet
- Worktops
- Coat hangers
- Magazine racks

The units may be either freestanding or attached to the wall/building.

EN 16121:2013 + A1:  
2018 Level 1

Non-domestic furniture – Strength, durability, stability and safety requirements.

For other **freestanding storage furniture** such as magazine racks, coat hangers, etc. additional requirements as specified below apply:

EN 1023-2:2000*	<b>Office furniture - Screens - Part 2: Mechanical safety requirements</b>
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\*refers only to l stability only stability according to EN 1023-3:2000, 6.1

#### 1.1.2.4 Kitchens & Bathrooms

The following standard sets the requirements for kitchens & bathrooms intended for use in a non-domestic environment  
The requirements apply to all types of storage furniture for kitchen & bathroom incl. worktops:

- Worktops
- Bench cupboard
- High cabinet
- Wall cabinet
- All cabinets including fittings.

Kitchen drawers and doors should be tested at 80,000 cycles according to EN 16121:2013 table 5 level 2.

EN 14749:2016*	Domestic and kitchen storage units and work tops - Safety requirements and test methods.
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Alternatively:

EN 16121:2013 + A1: 2018 Level 1	Non-domestic furniture - Storage furniture - Strength, durability and safety requirements.
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#### 1.1.2.5 Reclining furniture/mattresses

The following standard sets the requirements for reclining furniture or a mattress for adults for use in a non-domestic environment. These requirements are based on the European standard for domestic use, EN 1725:1998 including some tightening. The requirements apply to the following types of reclining furniture and mattresses:

- Complete beds including relevant parts such as bedstead, bed base, mattress and overlay mattress.
- Bedstead with or without bed base.
- Bedstead with or without frame ends.
- Bed base.
- Mattress, including overlay mattress when applicable.

EN 1725:1998*	Domestic furniture – Beds and mattresses – Safety requirements and test methods.
EN 1957:2012	Domestic furniture - Beds and mattresses - Test methods for the determination of functional characteristics
EN 1022: EN 1022:2018**	Domestic furniture – Seating – Determination of stability

\* Supplementary requirement is 20,000 cycles according to EN 1725:1998 item 7.3 and 25,000 cycles according to item 7.5.

~~\*\*Tests performed according to EN 15372:2008 are accepted until 2021-12-31.~~



### 1.1.2.6 Bunk beds/high beds

The following standard sets the requirements for bunk beds/high beds intended for use in a non-domestic environment.

The distance, from the floor to the upper surface of the bed base, shall be  $\geq 800$  mm. The main purpose of the requirements is to prevent accidents to children.

Other products that may be included in a bunk bed or a high bed, e.g. tables or storage units, are not included in the specification.

EN 747-1:2012 +  
A1:2015

Domestic furniture – Bunk beds and high beds – Part 1: Safety, strength and durability requirements.

### 1.1.2.7 Children's high chairs

The following standard sets the requirements on children's high chairs in non-domestic environments. The requirements include two different categories; active and passive high chairs. Active chairs are chairs where the child is strapped into the chair and passive chairs are where the child is not strapped in. The category of chair must be specified.

The requirements for high chairs are based upon the chair being used by children aged 6-36 months.

EN 14988-A1:2017

Children's high chairs - Part 1: Safety requirements

### 1.1.2.8 Seating for children

The following standard sets the requirements for seating for children in non-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~~ EN 17191:2021~~0~~\*

Seating for children – Safety requirements and test methods

~~\*The standard is sent on formal vote and will be published without any technical changes during 2021.~~

### 1.1.2.9 Screens

The following standard sets the requirements for partitions for non-domestic environments. The requirements cover stand-alone partitions. Declaring the equivalent sound-absorbing area and screen damping according to section 1.6 Acoustics is optional.

EN 1023-2:2000

Office furniture - Screens – Part 2: Mechanical safety requirements

### 1.1.2.10 Sound absorbents

The following requirements apply for measuring and calculating a sound absorbent's acoustic performance. 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 ljudabsorbenter" ("Guide for sound absorbents") at [www.mobelfakta.se](http://www.mobelfakta.se) there are recommended minimum values for sound absorption capacity. Procuring organisations such as Kammarkollegiet (The Legal, Financial and Administrative Services Agency) use these recommended levels in their procurements.

#### Sound absorbing area

The below-specified standards for measuring and calculating acoustic performance the sound absorbing area of the sound absorbent shall be reported in the form of a diagram. Complete documentation on performed measurements and calculations in accordance with the standards above shall be kept available.

The requirements cover individual sound absorbents and larger composite surfaces (> 10m<sup>2</sup>) with several sound absorbents.

EN ISO 354:2003

Measurement of sound absorption in a reverberation room.

Individual items are evaluated in accordance with the Swedish standard:

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

Larger surfaces (>10m<sup>2</sup>) made up of several sound absorbents should be evaluated in accordance with the Swedish and international standard:

SS-EN ISO  
11654:1997

Acoustics - Sound absorbents for use in buildings - Rating of sound absorption

~~\* Evaluations performed according to SS 25269:2013 are accepted until 2021-12-31.~~

### 1.1.2.11 Writing boards

The following standard sets the requirements for writing boards and is applicable for safety in normal use, the surface properties, durability of construction and ergonomics.

The requirements cover wall-mounted and stand-alone writing boards of the type writing boards and chalk boards, for educational institutions, offices, conference and board rooms.

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"> <li>- 7.2.3 Ability to write and erase</li> <li>- 7.3.2 Scratching</li> <li>- 7.4.2 Staining</li> <li>- 7.5.2 Colour degradation</li> </ul> <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"> <li>- 8.3.3 Ability to write</li> <li>- 8.4.2 Scratching</li> <li>- 8.5.2 Staining</li> <li>- 8.6.2 Colour degradation</li> </ul>
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### 1.1.3 Office environment

<h4>1.1.3.1 Office work chairs</h4>	
<p>This specification sets the requirements for work chairs intended for use in office environments according to the European standards EN 1335-2 and -3. EN 1335-1 is specified in item 1.2. Dimensions</p> <p>The requirements include work chairs for office environments according to the following definition: An item of seating furniture for a single person with backrest and with or without armrest. The chair includes a revolving seat and adjustable height.</p> <p>The chairs are divided into three types – <b>Ax, A, B and C</b>.</p> <p>The type is determined by the adjustment possibilities given by dimensions according to EN 1335-1:2020 (see also 1.2 Dimensions) and EN 1335-4. The requirements are based on being used eight hours a day by a person weighing 110 kg. When declaring a work chair, the chair's category must be specified as below.</p> <p>Type A: Seat – revolving, more adjustable height, adjustable seating-depth compared to Type A and adjustable leaning.</p> <p>Type A: Seat – revolving, adjustable height, adjustable seating-depth and adjustable leaning.</p> <p>Type B: Seat – revolving, adjustable height, fixed/adjustable seating-depth and fixed/adjustable leaning.</p> <p>Type C: Seat – revolving, adjustable height, fixed/ adjustable seating-depth, fixed/ adjustable leaning. Backrest – fixed height.</p>	
EN 1335-2:2018*	Office furniture – office work chair – Part 2: Safety requirements

~~\* Tests performed according to EN 1335-2:2009 are accepted until 2021-12-31.~~

### 1.1.3.2 Work tables

This specification sets the requirements for a work table and writing table intended for use in an office environment according to the European standard EN 527-2. EN 527-1 is specified in the item 1.2. Dimensions. For tables equipped with an electric motor for adjusting table height, CE marking is a requirement.

When declaring office work tables, you should also specify the type of table referred to in the declaration, table for **sitting, standing or sit/stand**. You must also specify the degree of adjustability according to one of four categories **A, B, C and D** which are specified in EN 527-1:2011.

Type A: Fully adjustable

Type B: Height selectable

Type C: Fixed height

Type D: Limited adjustability or selectability

Include work tables and writing tables according to the following definition

- Tables intended for office work performed by a person.
- Storage units, which are included and coupled/fixed to the table shall be tested in applicable parts according to the applicable standards for storage furniture for offices.

EN 527-2:2016+A1:2019\*

Office furniture – Work tables and desks – Mechanical safety requirements

\* Tests performed according to EN 527-2:2016 are accepted until 2022-12-31.

### 1.1.3.3 Storage furniture

The following standards set the requirements on an item of storage furniture for use in an office environment.

EN 14073-2:2004

Office furniture – Storage furniture – Part 2: Safety requirements

#### Alternatively:

EN 16121:2013 + A1:2018 Level 1

Non-domestic furniture - Storage furniture - Strength, durability and safety requirements

For other **freestanding storage furniture** such as coat hangers or magazine racks, additional requirements as specified below apply

EN 1023-2:2000\*

Office furniture - Screens - Part 2: Mechanical safety requirements

\*Lateral stability only

### 1.1.3.4 Screens

The following standards establish the requirements that partitions for office environments should meet. The requirements cover stand-alone partitions. Declaring the equivalent sound-absorbing area and screen damping according to section 1.6 Acoustics is optional.

EN 1023-2:2000

Office furniture - Screens – Part 2: Mechanical safety requirements

### 1.1.3.5 Table mounted screens

The following standards set the requirements for screens intended for use in office environments. The requirements cover screens mounted on table tops for offices. It is also optional to declare equivalent sound-absorption area and screen damping according to section 1.6 Acoustics.

EN 1023-2:2000*	Office furniture – Partitions – Part 2: Mechanical safety requirements
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EN 14073-2:2004**	Office furniture – Storage furniture – Part 2: Safety requirements
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\*Load-bearing screen with loads according to EN 1023-2 and 2 times the manufacturer's maximum recommended weight.

\*\* Horizontal force 80 N 100 mm from top edge of screen according to EN 14073-2, after testing should be adjustable to original position, damage criteria: breakage, deformation, stability. Vertical force 200 N function and 300 N safety (10 x 10 seconds), 100 mm from edge of screen, damage criteria: no breakage. General exception for lightweight screens where  $mgh \leq 65 \text{ Nm}$ ,  $m = \text{mass (kg)}$ ,  $g = \text{gravitational acceleration (m/s}^2\text{)}$ , height above floor to the screen's centre of gravity (m).

### 1.1.3.6 Sound absorbents

The following requirements apply for measuring and calculating a sound absorbent's acoustic performance. 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 ljudabsorbenter" ("Guide for sound absorbents") at [www.mobelfakta.se](http://www.mobelfakta.se) there are recommended minimum values for sound absorption capacity. Procuring organisations such as Kammarkollegiet (The Legal, Financial and Administrative Services Agency) use these recommended levels in their procurements.

#### Sound absorbing area

The below-specified standards for measuring and calculating acoustic performance the sound absorbing area of the sound absorbent shall be reported in the form of a diagram. Complete documentation on performed measurements and calculations in accordance with the standards above shall be kept available.

The requirements cover individual sound absorbents and larger composite surfaces (> 10m<sup>2</sup>) with several sound absorbents.

EN ISO 354:2003	Measurement of sound absorption in a reverberation room.
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Individual items are evaluated in accordance with the Swedish standard:

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
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Larger surfaces (>10m<sup>2</sup>) made up of multiple objects should be evaluated in accordance with the Swedish and international standard:

SS-EN ISO 11654:1997	Acoustics - Sound absorbents for use in buildings - Rating of sound absorption
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~~\* Evaluations performed according to SS 25269:2013 are accepted until 2021-12-31.~~

### 1.1.3.7 Writing boards

The following standard establishes the requirements for writing boards and is applicable for safety in normal use, the surface properties, durability of construction and ergonomics.

The requirements cover wall-mounted and stand-alone writing boards of the type writing boards and chalk boards, for educational institutions, offices, conference and board rooms.

EN 1434:2010	<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"><li>- 7.2.3 Ability to write and erase</li><li>- 7.3.2 Scratching</li><li>- 7.4.2 Staining</li><li>- 7.5.2 Colour degradation</li></ul> <p>When testing chalk board in accordance with EN 14434:2010 the writing boards should meet the standard requirements and minimum level 2 should achieved in terms of</p> <ul style="list-style-type: none"><li>- 8.3.3 Ability to write</li><li>- 8.4.2 Scratching</li><li>- 8.5.2 Staining</li></ul>
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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 1729-2:2012+  
A1:2016\*

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

### 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 intended to be published in the OJEC.

~~For~~ EN 17191:2021~~0\*~~

Seating for children – Safety requirements and test methods

*\*The standard is sent on formal vote and will be published without any technical changes during 2021.*

### 1.1.4.3 Tables

~~The following standard sets the requirements for tables intended for use in education/school environments.~~

- ~~• Desk/work tables, other than those subject to office work requirements.~~

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 1729-2:2012+  
A1:2016\*

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

#### 1.1.4.4 Storage

The following standard sets the requirements for storage furniture intended for use in education/school environments. The requirements apply to all types of storage furniture:

- Cupboard/cabinet/corner cupboard
- Chest of drawers/draw unit
- Bookshelf
- Bureau

Fittings:

- Base cabinet
- Wall cabinet
- High cabinet
- Worktops
- Coat hangers
- Magazine racks

The furniture may be either freestanding or attached to the wall/building.

SS-EN 16121:2013\*\*  
+ A1: 2018 Level 1

Non-domestic furniture – Storage furniture – Strength, durability and safety requirements.

For other **freestanding storage furniture** such as magazine racks, coat hangers, etc. additional requirements as specified below apply:

EN 1023-2:2000\*

**Office furniture - Screens - Part 2: Mechanical safety requirements**

*\*refers only to stability according to EN 1023-3:2000, 6.1*



#### 1.1.4.5 Children's high chairs

The following standards establish the requirements on children's high chairs in school environments. The requirements for high chairs include two different categories; active and passive high chairs. Active chairs are chairs where the child is strapped into the chair and passive chairs are where the child is not strapped in. The category of chair must be specified.

The requirements for high chairs are based upon the chair being used by children aged 6-36 months.

EN 14988: 2017

Children's high chairs - Part 1: Safety requirements

#### 1.1.4.6 Partitions

The following standards establish the requirements that a partition for educational institutions should meet. The requirements cover stand-alone partitions. Declaring the equivalent sound-absorbing area and screen damping according to section 1.6 Acoustics is optional.

EN 1023-2:2000

Office furniture - Screens – Part 2: Mechanical safety requirements

#### 1.1.4.7 Sound absorbents

The following requirements apply for measuring and calculating a sound absorbent's acoustic performance. 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 ljudabsorbenter" ("Guide for sound absorbents") at [www.mobelfakta.se](http://www.mobelfakta.se) there are recommended minimum values for sound absorption capacity. Procuring organisations such as Kammarkollegiet (The Legal, Financial and Administrative Services Agency) use these recommended levels in their procurements.

##### Sound absorbing area

The below-specified standards for measuring and calculating acoustic performance the sound absorbing area of the sound absorbent shall be reported in the form of a diagram. Complete documentation on performed measurements and calculations in accordance with the standards above shall be kept available.

The requirements cover individual sound absorbents and larger composite surfaces (> 10m<sup>2</sup>) with several sound absorbents.

EN ISO 354:2003

Measurement of sound absorption in a reverberation room.

Individual items are evaluated in accordance with the Swedish standard:

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

Larger surfaces (>10m<sup>2</sup>) made up of multiple objects should be evaluated in accordance with the Swedish and international standard:

SS-EN ISO  
11654:1997

Acoustics - Sound absorbents for use in buildings - Rating of sound absorption

~~\* Evaluations performed according to SS 25269:2013 are accepted until 2021-12-31.~~

### 1.1.4.8 Writing boards

The following standard establishes the requirements for writing boards and is applicable for safety in normal use, the surface properties, durability of construction and ergonomics.

The requirements cover wall-mounted and stand-alone writing boards of the type writing boards and chalk boards, for educational institutions, offices, conference and board rooms.

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 writing boards should meet the standard requirements and minimum level 2 should achieved in terms of</p> <ul style="list-style-type: none"> <li>- 7.2.3 Ability to write and erase</li> <li>- 7.3.2 Scratching</li> <li>- 7.4.2 Staining</li> <li>- 7.5.2 Colour degradation</li> </ul> <p>When testing chalk boards in accordance with EN 14434:2010 the writing boards should meet the standard requirements and minimum level 2 should achieved in terms of</p> <ul style="list-style-type: none"> <li>- 8.3.3 Ability to write</li> <li>- 8.4.2 Scratching</li> <li>- 8.5.2 Staining</li> </ul>
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## 1.1.5 Outdoor

### 1.1.5.1 Seating furniture

The following standards set the requirements for seating for adults mainly intended for use in outdoor environments. The requirements include all types of outdoor seating intended for camping, domestic and non-domestic environments.

Seating furniture loungers, sun-beds, etc. shall fulfil the requirements according to section 3. Requirements and test sequence for stability and function are in standard EN 581-2.

EN 581-1:2017 + EN 581-2:2015	Outdoor furniture – Seating and tables for camping, domestic and contract use – Part 1: General safety requirements. Part 1: General safety requirements
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### 1.1.5.2 Tables

The following standards set the requirements for a table for adults intended for use in outdoor environments. The requirements include all types of tables for outdoor use in camping, domestic and non-domestic environment.

EN 581-1:2017 + EN 581-3:2017	Outdoor furniture – Seating and tables for camping, domestic and non-domestic use. Part 1: General safety requirements
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## 1.2 Dimensions

Dimensions can be attributed to two groups of standards; safety/function and ergonomics. The standards related to safety are found in item 1.1 Safety/function. They are relevant when testing furniture of the respective type of furniture.

### 1.2.1 Office furniture

The following standards set the requirements for the types of furniture that have separate standards with requirements for ergonomics. That is work chairs, work tables and screens, all in the office environment use class.

#### 1.2.1.1 Office work chairs

The following standards set the requirements for work chairs intended for use in office environments with respect to dimensions.

Work chairs for offices can be divided into three categories – **Ax, A, B and C**.

The categorisation is determined by the chair's adjustment possibilities that are determined in the dimensional requirements in EN 1335-1:2020 and CEN/TR 1335-4. The requirements are based on being used eight hours a day by a person weighing 110 kg. When declaring a work chair, the chair's category must be specified as below.

Type A: Seat – revolving, more adjustable height and adjustable seating-depth compared to Type A and adjustable leaning.

Type A: Seat – revolving, adjustable height, adjustable seating-depth and adjustable leaning.

Type B: Seat – revolving, adjustable height, fixed/ adjustable seating-depth, fixed/ adjustable leaning.

Type C: Seat – revolving, adjustable height, fixed/ adjustable seating-depth, fixed/ adjustable leaning. Backrest – fixed height.

EN 1335-1:2000

Office furniture – Office work chair – Part 1: Determination of dimensions.

\* Tests performed according to EN 1335-1:2000 are accepted until 2023-12-31.

#### 1.2.1.2 Office work tables

The following standards set the requirements for work tables for use in an office environment with respect to dimensions.

When declaring office work tables, you should also specify the type of table referred to in the declaration, table for **sitting, standing or sit/stand**. You must also specify the degree of adjustability according to one of four categories **A, B, C and D** which are specified in EN 527-1:2011.

Type A: Fully adjustable

Type B: Height selectable

Type C: Fixed height

Type D: Limited adjustability or selectability

EN 527-1:2011

Office furniture – Work tables and desks – Part 1: Dimensions.

#### 1.2.1.3 Office screens

The following standards set the requirements for screens for use in office environments with respect to dimensions. The requirements cover stand-alone screens. Declaring the equivalent sound-absorbing area and screen damping according to section 1.6 Acoustics is optional.

SS-EN 1023-1:1996

Office furniture – Screens – Part 1: Dimensions.

## 1.3 Surface resistance

Requirements for the surfaces of furniture apply to all varnished surfaces and to foiled or laminated hard surfaces. The requirements do not apply to surfaces treated with oil, wax or equivalent. Care and treatment recommendations should be provided with the furniture. Chromed and untreated surfaces are exempt. The requirements apply to all use classes.

### 1.3.1 Use classes – indoor

The following specification sets the requirements for the resistance of surfaces on furniture intended for use in indoor environments.

#### Application

Use class	Furniture surface		Requirements
Domestic	Seating furniture Tables Reclining furniture Storage furniture	Undercarriage - legs and frames Undercarriage - legs and frames Undercarriage - legs and frames Interior surfaces incl. drawer bottoms.	Requirement category 1
	Seating furniture Reclining furniture Storage furniture	Seats, backrests and arm rests Other surfaces excl. bases External surfaces	Requirement category 2
	Tables	Table tops	Requirement category 4
Non-domestic/offices	Seating furniture Tables Reclining furniture Storage furniture	Undercarriage - legs and frames Undercarriage - legs and frames Undercarriage - legs and frames Interior surfaces incl. drawer bottoms.	Requirement category 1
	Seating furniture Reclining furniture Storage furniture	Seats, backrests and arm rests Other surfaces excl. undercarriages External surfaces	Requirement category 2
	Table tops	For table tops such as conference, waiting room and library. Refers to the top. For e.g. restaurant, café and training halls see below.	Requirement category 4
	Table tops	Designed for restaurants, cafés, study environments, etc. Refers to the top.	Requirement category 5
Kitchen and bathroom fittings		Interior surfaces and drawer bottoms, excluding shelves and bottoms	Requirement category 1
		Exterior surfaces, shelves and bottoms	Requirement category 3
	Worktop		Requirement category 6

		Requirement category					
		1	2	3	4	5	6
Testing	References						
Water 1)	EN 12720:2009+A1:2013	6 hours <sup>a)</sup>	16 hours	16 hours	24 hours	24 hours	24 hours
Fat 1)	EN 12720:2009+A1:2013	24 hours <sup>b)</sup>	24 hours	24 hours	24 hours	24 hours	24 hours
Fat + scratching 1)	SS 83 91 22: 2017	-	-	-	24 hours + 3 N	24 hours + 5 N	24 hours + 5 N
Scratching	SIS 83 91 17 2) <sup>c)</sup> alt. EN 15186 3)	-	3 N 1,5 N	3 N 1,5 N	3 N 1,5 N	5 N 3 N	5 N 3 N
Alcohol 1)	EN 12720:2009+A1:2013	-	-	-	1 hour	1 hour	1 hour
Coffee 1)	EN 12720:2009+A1:2013	-	1 hour <sup>d)</sup>	1 hour	1 hour	1 hour	1 hour
Dry heat 1)	EN 12722:2009+A1:2013	-	-	-	70° C	70° C	180°C
Wet heat 1)	EN 12721:2009+A1:2013	-	-	-	-	-	85°C
Heat to edges 1)	NS 8061: 1983	-	-	-	-	-	85°C
Assessment of edges 1)	SS 83 91 20 :2017	-	-	6 hour <sup>e)</sup>	-	-	1 hour
Perspiration– acid and neutral 1) according to EN ISO 105-E04:2013	EN 12720:2009+A1:2013	-	1 hour <sup>f)</sup>	-	-	-	-
Impact on surface and edge 1)	SS 83 91 23	-	-	25 mm <sup>e)</sup>	-	-	25 mm
Steam to edge – doors 1)	SS 83 91 25:2021	-	-	55° (±5) <sup>g)</sup>	-	-	-
Steam to edge – worktop 1)	SS 83 91 24:2021	-	-	-	-	-	55° (±5)

1) = When grading, 4 is the lowest approved score.

2) = Max. scratch width 0.5 mm. Penetration of varnishing coating not acceptable.

3) = Max. scratch width 0.3 mm.

For laminates, requirements and testing according to EN 438-2, -3 are also accepted., should also include clauses 10, 16, 20, 25 and 26 with the same fluids as in the table above and wet heat according to EN 12721:2009. VGS is accepted for requirement category 1–5 level and level HGS is required for requirement category 6, level and testing of edge of finished board.

For melamine-faced boards, requirements and testing according to EN 14322:2017 are also accepted with fluids according the Table above.

a) For the inside back of kitchen fittings, 1 hour applies.

b) For the inside back of the kitchen fittings, Grease 24 h

c) Testing according to SS 83 91 17 is accepted until further notice

d) Applies to storage furniture - external horizontal surfaces

e) Applies to doors and drawer pieces in kitchens and bathrooms

f) Applies to arm rest

g) Applies to doors **and drawer front pieces** in kitchens and bathrooms

### 1.3.2 Use classes – outdoor

The following specification sets the requirements for the resistance of surfaces on furniture intended for use in outdoor environments.

#### Application

Use class	Furniture surface		Requirements
Camping	Seating furniture Tables Reclining furniture	All surfaces	Requirement cat. 1
Domestic environment	Seating furniture Tables Reclining furniture	Undercarriage - legs and frames Undercarriage - legs and frames Undercarriage - legs and frames	Requirement cat. 1
	Seating furniture Seating and reclining furniture Storage furniture	Seats, backrests and armrests Other surfaces excl. undercarriage External surfaces	Requirement cat. 2
	Tables	Table tops	Requirement cat. 3
Non-domestic	Seating furniture Tables Seating and reclining furniture	Undercarriage - legs and frames Applies to those parts of the lower leg and legs that are accessible for wear Undercarriage - legs and frames Undercarriage - legs and frames	Requirement cat. 1
	Seating furniture Seating and reclining furniture	Seats, backrests and armrests Other surfaces excl. undercarriage	Requirement cat. 2
	Table tops	Table tops	Requirement cat. 3

		Requirement category		
		1	2	3
<b>Testing:</b>	<b>References:</b>			
Water 1)	EN 12720:2009+A1:2013	16 hours	24 hours	24 hours
Fat 1)	EN 12720:2009+A1:2013	24 hours	24 hours	24 hours
Alcohol 1)	EN 12720:2009+A1:2013	-	-	1 hour
Coffee 1)	EN 12720:2009+A1:2013	-	-	1 hour
Dry heat 1)	EN 12722:2009+A1:2013	-	-	70°C
Perspiration – acid and neutral 1) according to EN ISO 105-E04:2013	SS-EN 12722:2009+A1:2013	-	1 hour	-

1) When grading, 4 is the lowest approved score.

## 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. $\geq 5$ Assessment according to EN-ISO 10289
Domestic environment	All	24 hours. $\geq 5$ Assessment according to EN-ISO 10289
Non-domestic environment	All	72 hours. $\geq 5$ Assessment according to EN-ISO 10289



## 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/m<sup>3</sup>) as padding. This requires the declared item of furniture to have polyether padding with a density equal to or greater than 22 kg/m<sup>3</sup>. **Other upholstery materials must be tested according to current standards.**

EN 1021-1:2014*	Furniture – Assessment of the ignitability of upholstered furniture – Part 1: Ignition source: Smouldering cigarette.
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### 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.

EN 597-1:2016	Furniture – Assessment of the ignitability of mattresses and upholstered bed bases – Part 1: Ignition source: Smouldering cigarette.
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## 1.5 Upholstery

For furniture with upholstery, the following requirements on the upholstery shall be met. Applies to seating furniture, screen and sound absorbents. Not all the requirements below are applicable to screens and sound absorbents, see exceptions below.

### 1.5.1 Leather

This specification sets the requirements for a leather furniture upholstery. An alternative to the specified requirements specified in the table below is that the leather upholstery fulfils the requirements in SS-EN 13336:2012. The requirements do not apply for sheepskin. For artificial leather, requirements specified in 1.5.1.1.

Characteristics	Test method	Requirements:
Colour fastness to rubbing Decolouring and change in colour	EN ISO 11640:2018* EN ISO 11641:2012 – Artificial sweat  Assessment according to: EN ISO 105-A02:1993 and EN ISO 105-A03:1993 Assessment according to grey scale	<u>Aniline</u> - dry leather/dry fabric 50 cycles. ≥ 3-4 - wet leather/ dry fabric 20 cycles. ≥ 3-4 - sweat-soaked fabric 20 cycles. ≥ 3-4 <u>Semi-aniline</u> - dry leather/dry fabric 500 cycles. ≥ 4 - wet leather/ dry fabric 150 cycles. ≥ 3 - sweat soaked fabric 80 cycles. ≥ 3 <u>Surface-dyed</u> - dry leather/dry fabric 500 cycles. ≥ 4 - wet leather/ dry fabric 250 cycles. ≥ 3 - sweat soaked fabric 80 cycles. ≥ 3
Light fastness	EN ISO 105-B02:2014 Xenon arc light Assessment according to blue scale	Aniline ≥ 3 Semi-aniline ≥ 5 Surface-dyed: ≥ 5
Adhesion – surface finish**	EN ISO 11644:2009	- dry ≥ 2 N/10 mm - wet ≥ 2 N/10 mm
Flexing resistance	EN ISO 5402-1:2017	Aniline: Not applicable Other: 20,000 cycles No finish cracks permitted
Tear strength	EN ISO 3377-2: 2016	≥ 20 N
Determination of cold crack temperature of surface coatings	EN ISO 17233: 2017	Aniline: Not applicable Other: 10°C, No finish cracks permitted.
Colour fastness to water spotting	EN ISO 15700: 2000 EN ISO 105-A02:1993. Assessment No manual treatment before testing	≥ 3 No permanent swelling permitted

*\*Tests performed according to EN ISO 11640 are accepted until 2021-12-31*

*\*\*The requirement is only applicable if there is a smooth surface layer that can be glued against a board without the glue penetrating the surface layer. The surface layer must also be > 15 µm for the requirement to be applicable.*

### 1.5.1.1 Artificial leather

The following standards set the requirements for an artificial leather shall fulfil. An alternative to the specified requirements in the table is that the upholstery fulfils the requirements in SS-EN 15618:2019+A1:2013 Level (with the deviation for Adhesion where level E applies and Tear strength where level C applies) regarding these properties.

Characteristics	Test method	Requirements:
Colour fastness to rubbing Decolouring and change in colour	SS-EN ISO 105-X12:2016	- dry $\geq 4$ - wet $\geq 4$
Light fastness	SS-EN IOS 105-B02:2014	$\geq 5$
Adhesion – surface finish	SS-EN ISO 2411:2017	- longitudinal $\geq 15$ N - transversal $\geq 15$ N
Tensile strength	SS-EN ISO 1421:2017 (Method 1)	- longitudinal $\geq 250$ N/5cm - transversal $\geq 180$ N/5cm
Tear strength	ISO 4674-1:2016 (Method A)	- longitudinal $\geq 20$ N - transversal $\geq 20$ N *

\*Applies only to artificial leather with fabric base.

## 1.5.2 Textile (indoor furniture)

This specification sets all the requirements for textile upholstery intended for indoor use.

The requirements do not apply for webbing and mesh material. For artificial leather, see adapted requirements under 1.5.1.1.

Characteristics	Test method	Requirements: Domestic	Requirements: Non-domestic Office
Resistance to abrasion: - Change of colour - Change of appearance (Pile textiles) - Endpoint, two broken threads - Endpoint, two bald patches (Pile textiles)	EN ISO 12947-2:2017*	3 000 cycles. $\geq$ 3-4 10,000 cycles. $\geq$ 4 $\geq$ 35,000 cycles $\geq$ 35,000 cycles	3,000 cycles. $\geq$ 4 15,000 cycles. $\geq$ 4 $\geq$ 40,000 cycles $\geq$ 40,000 cycles
Fastness to piling**	EN ISO 12945-2:2000	5,000 cycles $\geq$ 3	5,000 cycles $\geq$ 3-4
Light fastness	EN ISO 105-B02:2014	$\geq$ 5	$\geq$ 5
Seam slippage (warp and weft)	EN ISO 13936-2:2004 Alternatively EN ISO 13936-3:2007	See "Seam slippage" under item 1.5.4	See "Seam slippage" under item 1.5.4
Colour fastness to chafing: - Staining/change of colour, dry - Staining, wet	EN ISO 105-X12:2016	$\geq$ 4 $\geq$ 3-4	$\geq$ 4 $\geq$ 3-4
Colour fastness to water wash: (Applies to washable upholstery) - Staining, multi-fibre - Change of colour - Staining of own material	EN ISO 105-C06:2010	$\geq$ 3-4 $\geq$ 4 $\geq$ 4-5	$\geq$ 4 $\geq$ 4 $\geq$ 4-5
Colour fastness to dry cleaning: (Applies to washable upholstery) - Staining, multi-fibre - Change of colour - Staining of own material	EN ISO 105-D01:2010	$\geq$ 3-4 $\geq$ 4 $\geq$ 4-5	$\geq$ 3-4 $\geq$ 4 $\geq$ 4-5
Colour fastness to water spotting: - Change of colour	EN ISO 105-E16:2007	$\geq$ 4	$\geq$ 4
Colour fastness to perspiration; acid and alkaline - Staining, multi-fibre - change of colour	EN ISO 105-E04:2013	$\geq$ 4	$\geq$ 4
Dimensional change - Applies to removable and washable upholstery (incl. water and dry cleaning)	EN ISO 5077:2008	See section "Dimensional change" under item 1.5.4	See section "Dimensional change" under item 1.5.4

For requirements with no measurement units, use the scale of 1-5, where 5 is best. For "Colour fastness to artificial light" the scale of 1-8 applies, where 8 is best.

**\* Tests according to EN ISO 12947-2/AC:2006 are accepted until 2021-12-31**

**\*\* Textiles in wool can have an initial piling which decreases after a period of use, for approved results, piling should be  $\geq$  3-4 at 10,000 cycles**

### 1.5.3 Textile (outdoor furniture)

This specification sets the requirements on textile upholstery intended for outdoor use.

The requirements do not apply for webbing and mesh material. For artificial leather, see adapted requirements under 1.5.1.1.

Characteristics	Test method	Requirements: Domestic environment	Requirements: Non-domestic use
Resistance to abrasion: - Endpoint, two broken threads	EN ISO 12947-2:2017*	15,000 cycles	30,000 cycles
Fastness to piling	EN ISO 12945-2:2000 5,000 cycles	≥ 3	≥ 3-4
Colour fastness to artificial light/exposure	EN ISO 105-B10:2011 method A, 500 h	≥ 4	≥ 4
Colour fastness to chafing: - Staining, dry - Staining, wet	EN ISO 105-X12:2002	≥ 4 ≥ 3-4	≥ 4 ≥ 3-4
Colour fastness to water wash: (Applies to washable upholstery) - Staining, multi-fibre - Staining of own material - Change of colour	EN ISO 105-C06:2010	≥ 3-4 ≥ 3-4 ≥ 4	≥ 4 ≥ 4 ≥ 4
Colour fastness to water spotting: - Change of colour	EN ISO 105-E16:2007	≥ 4	≥ 4
Colour fastness to sweat; acid and alkaline - Staining, multi-fibre - Change of colour	EN ISO 105-E04:2013	≥ 4 ≥ 4	≥ 4 ≥ 4
Dimensional change Applies to removable and washable upholstery (incl. water and dry cleaning)	EN ISO 5077:2008	See section "Dimensional change" under item 1.5.4	See section "Dimensional change" under item 1.5.4

*\*Tests according to EN ISO 12947-2/AC:2006 are accepted until 2021-12-31*

### Parasol, sun-shield etc.

Characteristics	Test method	Requirements: Domestic	Requirements: Non-domestic
Colour fastness to artificial light/exposure	EN ISO 105-B10:2011 method A, 500 h	≥ 4	≥ 4
Colour fastness to water wash: (Applies to washable upholstery) - Staining, multi-fibre - Staining of own material - Change of colour	EN ISO 105-C06:2010	≥ 3-4 ≥ 3-4 ≥ 4	≥ 4 ≥ 4 ≥ 4
Colour fastness to water spotting: - Change of colour	EN ISO 105-E16:2007	≥ 4	≥ 4
Break strength: - warp and weft	EN ISO 13934-1:2013	≥ 1,000 N	≥ 1,000 N
Tear strength: - warp and weft	EN ISO 13937-2	≥ 35 N	≥ 35 N

Dimensional change Applies to removable and washable upholstery (incl. water and dry cleaning)	EN ISO 5077:2008	See section "Dimensional change" under item 1.5.4	See section "Dimensional change" under item 1.5.4
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*For requirements with no measurement units, use the scale of 1-5, where 5 is best. For "Colour fastness to artificial light/exposure", the scale of 1-8 applies, where 8 is best.*

## 1.5.4 Terms

### Seam slippage

The textile supplier is required to specify seam slippage according to the standards listed in table 1.5.2. The furniture producer is responsible for providing covering and seams that are adapted to the textile's seam slippage for the purpose of producing sustainable upholstery.

### Dimensional changes

On furniture with removable and washable upholstery, the upholstery material/detail must be replaced in a manner that gives the furniture the correct appearance and function. The furniture manufacturer is responsible for meeting this requirement. The textile supplier is required to specify the dimension change in conjunction with washing as described above according to the standards listed in table 1.5.2 and 1.5.3.

### Labelling

Removable and washable upholstery must be labelled with washing instructions.

### Fire

The fabric must meet the requirements according to the standard EN 1021-1:2014\*. Furniture – Assessment of the ignitability of padded furniture – Part 1: Ignition source: Smouldering cigarette. This standard applies for all environments with the exception of partitions and outdoor furniture which is exclusively intended for outdoor use.

### Exceptions

Fabric upholstery material for partitions and sound absorbents is only subject to the requirements for light fastness according to 1.5.2. Webbing and mesh are materials not subject to the requirements for upholstery under 1.4 or Upholstery under 1.5.

### Sampling fabrics

When selecting fabric samples from a collection of fabrics for testing according to the standards in Tables 1.5.1, 1.5.2 and 1.5.3, a representative selection must be made which may vary in scope depending on the collection's variation in colours and patterns. All variants of the fabric do not need to be tested and the selection is suitably made in consultation with the testing laboratory that will perform the testing. The principle for sampling is that the test results should be representative of the entire collection, which is why some different colours from light to dark should be tested, as well as different patterns if these vary. A sample can usually consist of 3 - 8 variants of the collection depending on its variation.

### Sampling surface resistance of hard surfaces

When selecting fabric samples regarding requirements for surface resistance for hard surfaces (lacquered, foil and laminate coated) for testing according to the standards in Tables 1.3.1 and 1.3.2, a representative selection must be made which may vary in scope depending on the variation of surface. All variants of surfaces do not need to be tested and the selection is suitably made in consultation with the testing laboratory that will perform the test. The principle for sampling is that the test results should be representative of the entire range of variants, which is why some different surfaces should be tested and different substrates if these vary. The samples should include both light and dark colours, as well as different gloss if applicable. A sample can usually consist of 3 - 8 variants of surfaces depending on its variation.

### Documentation

The furniture producer should be able to show documentation/test certificate, proving that the covering material included in Möbelfakta's furniture label meets the requirements. Documentation/test certificate must be issued by an independent testing laboratory or internal laboratory with the required expertise or a certificate from a subcontractor.

The documentation should be for the covering that is produced/delivered from time to time. If there is a change in the covering product that affects its function and characteristics, new tests as described above should be performed.

## 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 ljudabsorbenter" ("Guide for sound absorbents") at [www.mobelfakta.se](http://www.mobelfakta.se) there are recommended minimum values for sound absorption capacity. 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 **but is optional for other categories of furniture.**

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 20189:2018*	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 <sup>2</sup> ) of multiple objects are evaluated in accordance with the new Swedish and international standard:	
SS-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:	
SS-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

*\*Evaluations performed according to SS-25269:2013 are accepted until 2021-12-31*

### Equivalent sound-absorption area

The equivalent sound-absorption area [m<sup>2</sup> Sabine] must upon declaration be presented in a diagram in accordance with ISO 20189:2018 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  $\Delta L_s$  [dB] must be declared in a diagram in accordance with ISO 20189:2018. Complete documentation of measurements performed and calculations in accordance with the standards above must be available when the screen damping is declared.

*\* Evaluations according to SS-25269:2013 accepted until 2021-12-31*

## 1.7 Glass

Glass in furniture must meet the requirements in the respective standard for the appropriate furniture category and use class according to the standards given below. Alternately safety glass\* can be used.

SS-EN 14072:2003	Furniture – Glass in furniture – Test methods
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*\*Glass meets the requirements on safety glass when:*

- CE-marked according to 12150-2:2004 or*
- the glass meets the fragmentation testing according to EN 12150-1:2015, section 8. or*
- the glass breaks as described in EN 12600:2003 according to type B or type C.*