



SLOVENSKI STANDARD
oSIST prEN 14749:2013
01-oktober-2013

Pohištvo - Shranjevalne enote za domačo uporabo in kuhinje ter kuhinjske delovne plošče - Varnostne zahteve in preskusne metode

Furniture - Domestic and kitchen storage units and kitchen-worktops - Safety requirements and test methods

Möbel - Wohn- und Küchen-Behältnismöbel und Küchen-Arbeitsplatten - Sicherheitstechnische Anforderungen und Prüfungen

Meubles - Éléments de rangement et plans de travail - Exigences de sécurité et méthodes d'essai
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English Version

Furniture - Domestic and kitchen storage units and kitchen-worktops - Safety requirements and test methods

Meubles - Meubles de rangement domestiques et de cuisine et plans de travail de cuisine - Exigences de sécurité et méthodes d'essai

Möbel - Wohn- und Küchenbehältnismöbel und Küchenarbeitsplatten - Sicherheitstechnische Anforderungen und Prüfverfahren

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 207.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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prEN 14749:2013 (E)

Foreword

This document (prEN 14749:2013) has been prepared by Technical Committee CEN/TC 207 “Furniture”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 14749:2005.

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Introduction

This European Standard is the result of the revision of EN 14749:2005, which was a merged standard out of the previous and withdrawn:

- EN 1727:1998, *Domestic furniture — Storage furniture — Safety requirements and test methods*, and
- EN 1153:1995, *Kitchen furniture — Safety requirements and test methods for built-in and free standing kitchen cabinets and worktops*.

With this revision the included test methods have been as far as possible taken out of this European Standard and referenced to:

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

This European Standard was prepared in order to provide assurance that domestic storage furniture and kitchen-worktops comply with the given requirements and are reasonably safe.

Note that the assessment of ageing and degradation of materials and the effects caused by heating from appliances are not included, nor is fire safety.

The intention of this European Standard is the prevention of serious injury through normal use, as well as foreseeable misuse. It cannot ensure that structural failure will not eventually occur as a result of habitual misuse.

Co-ordinating sizes for kitchen furniture (including kitchen-worktops) kitchen appliances, sinks and decorative panels are covered by EN 1116, *Kitchen furniture — Co-ordinating sizes for kitchen furniture and kitchen appliances*.

prEN 14749:2013 (E)**1 Scope**

This European Standard specifies safety requirements for all types of kitchen and bathroom storage units and domestic storage furniture that are fully assembled and ready for use, including kitchen-worktops and movable and non-movable components and components made of glass.

It specifies additional test methods in Annex A (normative).

It does not apply to non-domestic storage, office storage, industrial storage, catering equipment, retail storage and industrial storage lockers.

It does not apply to units covered by EN 71-1, *Safety of toys – Part 1: Mechanical and physical properties* and EN 60065, *Audio, video and similar electronic apparatus – Safety requirements*.

It does not include requirements for electrical safety.

If the furniture has additional functions, it is essential that it also meets the safety requirements of the appropriate European safety standard for that function.

Safety depending on the structure of the building is not included, e.g. the strength of wall hanging units includes only the cabinet and its components. The wall and the wall attachments are not included.

This European Standard does not include requirements for the resistance to ageing, degradation and flammability.

Annex A (normative) contains additional test methods.

Annex B (normative) contains a guideline for testing according to this document.

Annex C (informative) contains an example of loading of wall hanging units.

Annex D (informative) contains the relation between safety requirements, total mass and position of centre of gravity.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 71-1:2011, *Safety of toys — Part 1: Mechanical and physical properties*

EN 12150-1:2000, *Glass in building — Thermally toughened soda lime silicate safety glass — Part 1: Definition and description*

EN 12600:2002, *Glass in building — Pendulum test — Impact test method and classification for flat glass*

EN 14072:2003, *Glass in furniture — 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.

3.1

unit

piece of storage furniture

3.2

free standing unit

unit not intended to be attached to a load bearing structure

3.3

wall hanging unit

unit intended to be entirely or partially supported by a vertical structure, e.g. wall, panel or screen

3.4

TV-furniture

unit designed to support a visual display unit, e.g. television

3.5

component

part in a unit, e.g. a door, an extension element, a flap or a shelf

3.6

extension element

component that can be pulled out and pushed in, e.g. baskets, drawers or suspended pocket files

3.7

storage area/-volume

spaces in furniture for storage, e.g. in extension elements and on shelves, bottoms and tops

3.8

accessible parts

parts to which access can easily be gained by the user when in its intended configuration of use and for which the probability of unintentional user contact is high

Note 1 to entry: This includes, but is not limited to:

- the exposed edges and corners of storage units to which the user has access when the doors, drawers and extension elements are closed,
- the corners and edges of handles.

3.9

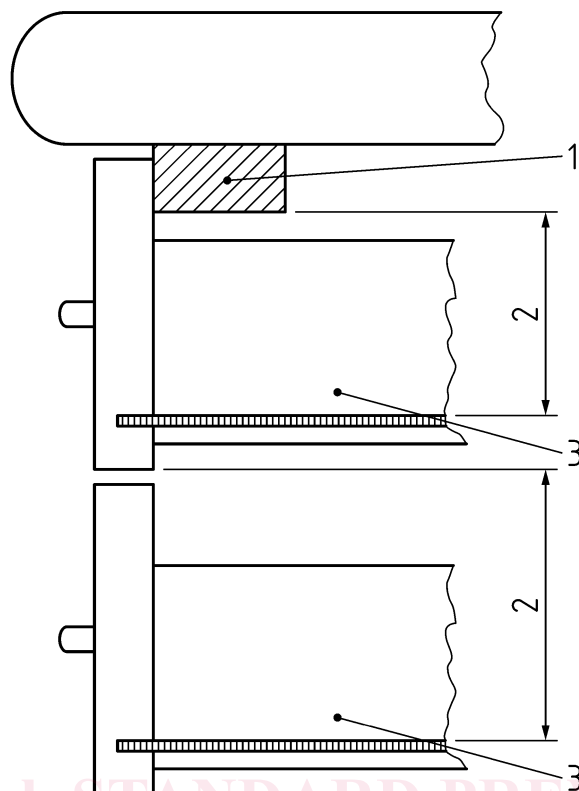
shear and squeeze points

shear and squeeze points exist if the distance between two accessible parts moving relative to each other can be less than 25 mm or more than 8 mm in any position during movement

3.10

clear height

unobstructed height above the top of the bottom surface, e.g. the top of the extension element bottom and the lower edge of the extension element above, or the structure of the unit (see Figure 1)

**Key**

- 1 structure of the unit
- 2 clear height H
- 3 extension element

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<https://standards.iteh.ai/catalog/standards/sist/5-ddf3-4d91-890e-113e7cdc2922/sist-en-14749-2016> **Figure 1 — Clear height**

3.11 levelling device

adjustable device intended to keep the item of furniture perpendicular to the floor e.g. adjustable feet or similar

3.12 potential energy

Nm
multiplication of the total mass (kg) of the unit (or the component), gravity (m/s^2) and the height (m) above the floor to the centre of gravity

Note 1 to entry: For the purpose of this European Standard, gravity can be considered to be $10 m/s^2$.

4 Test sequence and tolerances

4.1 General

For all tests according to the given requirements in this European Standard, EN 16122:2012, clause 4 “General test conditions” and EN 16122:2012, clause 5 “Test equipment and apparatus” apply.

Wall hanging units shall be mounted according to the manufacturer’s instructions.

4.2 Sequence of testing

The tests shall be carried out in the same sequence as the clauses are numbered in this European Standard.

4.3 Tolerances (allowed variation from the nominal values)

Unless otherwise stated, the following tolerances are applicable:

Forces: $\pm 5\%$ of the nominal force;

NOTE 1 The forces is replaced by masses. The relationship $10\text{ N} = 1\text{ kg}$ is used.

Velocities: $\pm 5\%$ of the nominal velocity;

Masses: $\pm 1\%$ of the nominal mass;

Dimensions: $\pm 1\text{ mm}$ of the nominal dimension;

Angles: $\pm 2^\circ$ of the nominal angle.

NOTE 2 For the purposes of uncertainty measurement, test results are not considered to be adversely affected when the above tolerances are met.

5 Safety requirements

5.1 Principles of safety requirements

5.1.1 General

The safety requirements are based upon the knowledge that kitchen units and domestic storage furniture and their components are likely to cause serious injury only when they are heavy and fall through a significant distance. This is possible if floor standing units overbalance, wall or screen hanging units become detached, or heavy components become detached from units.

Therefore, with the exception of stability (5.4), vertical glass components (5.5) and TV-furniture (5.4.3), the requirements specified in 5.3 are only considered to affect safety when:

— the height of the centre of gravity of the unit, or any component, is $> 900\text{ mm}$ above the floor and the total mass is $> 10\text{ kg}$;

or

— the height of the centre of gravity is above 350 mm and whose total mass (according to 5.1.3) is equal to or exceeds 35 kg .

NOTE Values to be approved during CEN-enquiry.

The tests in 5.3.12 shall be carried out on all wall and top hanging units with a total mass equal to or more than 10 kg . All components in wall and top hanging units shall be tested irrespective of their total mass. However, the safety requirements specified in 5.3 do not apply to components with a total mass less than 10 kg , see 5.3.12.2.

The requirements for stability (5.4) only apply to storage units where the height to the top of the unit is 600 mm or more above the floor level, and when the potential energy (3.12), exceeds 60 Nm .

5.1.2 Determination of centre of gravity

The centre of gravity of a component or unit shall be taken as the geometric centre of that unit, except in the case of extension elements, where the geometric centre of the usable volume shall be used.

The height of the centre of gravity above the floor (for floor standing units) shall be measured when installed according to the manufacturer's instructions.