



SLOVENSKI STANDARD

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Nadomešča:
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Pohištvo - Varnost, trdnost in trajnost - Zahteve za mize za domačo uporabo

Furniture - Safety, strength and durability - Requirements for domestic tables

Möbel - Sicherheit, Festigkeit und Dauerhaltbarkeit - Anforderungen an Tische im Wohnbereich

Meubles - Sécurité, résistance et durabilité - Exigences relatives aux tables à usage domestique

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Furniture - Safety, strength and durability - Requirements for domestic tables

Meubles - Sécurité, résistance et durabilité - Exigences
relatives aux tables à usage domestique

Möbel - Sicherheit, Festigkeit und Dauerhaltbarkeit -
Anforderungen an Tische im Wohnbereich

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

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents	Page
European foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Test conditions and test sequence	6
5 Safety requirements	6
5.1 General.....	6
5.2 Holes in tubular or rigid components.....	7
5.3 Shear and compression points.....	7
5.3.1 General.....	7
5.3.2 Shear and compression points when setting up and folding.....	7
5.3.3 Shear and compression points under influence of powered mechanisms.....	7
5.3.4 Shear and compression points during use.....	7
5.4 Glass.....	7
5.4.1 Safety glass.....	7
5.4.2 Other glass.....	8
5.5 Stability.....	8
5.5.1 Delicate tables.....	8
5.5.2 All tables except delicate tables.....	8
5.5.3 Stability for tables with extension elements.....	8
5.6 Strength and durability.....	9
5.6.1 General.....	9
5.6.2 Strength and durability requirements.....	15
6 Information for use	15
7 Test report	15
Annex A (normative) Test methods for finger entrapment and shear and compression	16
A.1 Finger entrapment	16
A.1.1 Test equipment — Test probe and shape assessment probe.....	16
A.1.2 Test method.....	17
A.2 Shear and compression	20
A.2.1 Test equipment — Test probes.....	20
A.2.2 Test method — Shear and compression points created under the influence of powered mechanisms.....	20
A.2.3 Test method — Shear and compression points created during normal use.....	21
Annex B (informative) Table top deflection test	22
B.1 General	22
B.2 Testing	22
B.3 Recommendation	22

Annex C (informative) Rationale..... 23
Bibliography 24

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(<https://standards.iteh.ai>)
Document Preview

[SIST EN 12521:2024](https://standards.iteh.ai/catalog/standards/sist/4e0071c2-e32d-4304-af7d-9449884e893d/sist-en-12521-2024)

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EN 12521:2023 (E)

European foreword

This document (EN 12521:2023) 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 month 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 12521:2015.

In comparison with the previous edition EN 12521:2015, the following modifications have been made:

- updated to reflect the finger entrapment requirements within CEN/TR 17202, including an Annex containing test methods;
- new requirements for delicate tables added;
- improved definition of safety glass;
- durability requirements for height adjustable tables added;
- amended was a vertical durability test for cantilever or pedestal tables for tables ≤ 600 mm in height, or for tables with tops with a surface area $\leq 0,3$ m²;
- amended was a durability test for tables with castors.

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 the minimum requirements for the safety, strength and durability of all types of domestic tables intended for use by adults, including those with glass in their construction. It also contains additional test methods in Annex A and Annex B.

It does not apply to office tables and office desks, tables for non-domestic use, tables for educational institutions or outdoor tables for which European Standards exist.

It does not apply to trestle tables.

With the exception of stability tests, this document does not provide assessment of the suitability of any storage features included in domestic tables.

It does not include requirements for electrical safety.

It does not include requirements for the resistance to ageing and degradation.

Annex A (normative) contains test methods for finger entrapment.

Annex B (informative) contains a table top deflection test.

Annex C (informative) contains a rationale.

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 1730:2012, *Furniture — Tables — Test methods for the determination of stability, strength and durability*

EN 12150-1:2015+A1:2019, *Glass in building — Thermally toughened soda lime silicate safety glass — Part 1: Definition and description*

EN 14072:2003, *Glass in furniture — Test methods*

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

accessible part

part to which access can easily be gained by the user when the table is in its intended configuration of use and for which the probability of unintentional user contact is high, including all parts 100 mm in from the edges

EN 12521:2023 (E)**3.2****delicate table**

table with a maximum surface area including extension of 0,30 m², intended to be used for placing light objects

Note 1 to entry: Light objects can be telephones, flowers, books, lamps, etc.

3.3**extension element**

storage component that can be pulled out and pushed in

EXAMPLES Drawers, suspended pocket files, keyboard trays.

[SOURCE: EN 16122:2012, 3.4, modified — “components” replaced by “storage component”]

3.4**trestle table**

product where a top rests on two or more legs without being affixed to them, and where the legs can be placed in any position

3.5**ancillary surface**

surface additional to the main surface intended for occasional use as part of the table top

4 Test conditions and test sequence

The tests shall be carried out in the order in which they are listed in Table 2.

The test conditions shall be as contained in EN 1730:2012, 4.1.

The test forces may be replaced by masses. The relationship $10 N = 1 \text{ kg}$ shall be used.

5 Safety requirements**5.1 General**

The table shall be so designed as to minimize the risk of injury to the user.

All parts of the table with which the user comes into contact during intended use when the table is positioned in its intended configuration of use shall be so designed that physical injury and damage are avoided.

These requirements are met when:

- a) the edges and corners of table tops which are directly in contact with the user are rounded or chamfered;
- b) all other edges and corners accessible during intended use are free from burrs and/or sharp edges.

Movable and adjustable parts shall be designed so that injuries and inadvertent operation are avoided.

It shall not be possible for any load bearing part of the table to come loose unintentionally.

All parts that are lubricated to assist sliding shall be designed to protect users from lubricant stains when in normal use.

5.2 Holes in tubular or rigid components

There shall be no holes in tubular components or holes in rigid components in accessible parts between 7 mm and 12 mm, unless the depth of penetration is less than 10 mm. This requirement is fulfilled if there is no hazard present when tested in accordance with A.1.

5.3 Shear and compression points

5.3.1 General

The requirements contained within 5.3.2, 5.3.3 and 5.3.4 do not apply to electrically operated furniture.

NOTE The requirements for electrically operated furniture will be provided in EN 17684, which is under preparation.

5.3.2 Shear and compression points when setting up and folding

Unless 5.3.3 or 5.3.4 are applicable, shear and compression points that are created only during setting up and folding are acceptable, because the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately upon experiencing pain.

The edges of parts moving relative to each other and creating shear and compression points shall be as specified in 5.1.

5.3.3 Shear and compression points under influence of powered mechanisms

With the exception of operation of doors, flaps and extension elements, there shall be no areas where the distance between two accessible parts moving relative to each other can be less than 25 mm, and more than 8 mm in any position during movement that could present a risk of injury to the user, created by parts of the furniture operated by powered mechanisms, e.g. mechanical springs and gas lifts.

This requirement is fulfilled if there is no hazard present when tested in accordance with A.2.2.

5.3.4 Shear and compression points during use

With the exception of operation of doors, flaps and extension elements, there shall be no areas where the distance between two accessible parts moving relative to each other can be less than 18 mm, and more than 8 mm in any position that could present a risk of injury to the user, created by loads applied during normal use.

The loads used for durability tests within Table 2 are considered representative of normal use.

This requirement is fulfilled if there is no hazard present when tested in accordance with A.2.3.

5.4 Glass

5.4.1 Safety glass

For glass to be considered to be 'safety glass' when tested in accordance with Table 2, Test 8 – Vertical impact test for glass table tops, either:

- a) the manufacturer, importer or retailer, provides verification that the glass fulfils the requirements in EN 12150-1:2015+A1:2019, Clause 8, fragmentation test; or where the mode of breakage (β) according to EN 12600, is Type B or Type C; or
- b) the glass shall be tested in accordance with EN 12150-1:2015+A1:2019, 8.3 and 8.4 (fragmentation test) and shall have a minimum particle count of 40 particles in any 50 mm × 50 mm square, in derogation that the test shall be performed on one full size sample of the glass, as used in the product.

EN 12521:2023 (E)**5.4.2 Other glass**

Where glass does not satisfy the requirements of 5.4.1 it shall be considered to be 'other glass' when tested in accordance with Table 2, Test 8 – Vertical impact test for glass table tops.

5.5 Stability**5.5.1 Delicate tables**

The requirements only apply to delicate tables with a height to the top surface ≥ 600 mm above the floor and where the weight of the unloaded table is more than 10 kg.

The table shall not overturn when tested according to EN 1730:2012, 7.2.2, using the forces specified in Table 2.

If during testing the overturning movement is prevented by the opening of an extension element, door or flap, the component shall be prevented from opening and the test repeated.

5.5.2 All tables except delicate tables**5.5.2.1 General**

Tables that can be set to heights both above and below 950 mm shall be tested to both 5.5.2.2 and 5.5.2.3.

If during testing the overturning movement is prevented by the opening of an extension element, door or flap, the component shall be prevented from opening and the test repeated.

5.5.2.2 Test for tables that are or can be set to a height of 950 mm or less

The table shall be set to the height most likely to overturn the table, but not more than 950 mm. The table shall not overturn when tested according to EN 1730:2012, 7.2.2, using the forces specified in Table 2.

5.5.2.3 Test for tables that are or can be set to a height greater than 950 mm

The table shall be set to the height most likely to cause overturning, but not less than 950 mm. The table shall not overturn when tested according to EN 1730:2012, 7.2.3, using 50 % of the forces specified in Table 2.

5.5.3 Stability for tables with extension elements

Load each extension element with the load specified in Table 1.

Extension elements shall be opened across the full width of the table. Extension elements shall be fully opened, except where there are no open stops in which case they shall be opened to two thirds of the internal length. Only one extension element in each vertical line of extension elements shall be opened so as to produce the configuration most likely to cause overturning.

The table shall not overturn when the vertical force specified in Table 2 is applied at the centre of the front of the table, through a loading pad (EN 1730:2012, 5.4), 50 mm from the edge.

If during testing the overturning movement is prevented by the opening of an extension element, door or flap, the component shall be prevented from opening and the test repeated.

Table 1 — Loading of extension elements ^a

Component	Load
Extension elements designed for suspended filing only	1,25 kg/dm ³
Other extension elements	0,2 kg/dm ³
^a See 3.3.	