SLOVENSKI STANDARD
oSIST prEN 17191:2019

01-september-2019

Pohištvo za otroke - Sedežno pohištvo - Varnostne zahteve in preskusne metode

Children’s Furniture - Seating for children - Safety requirements and test methods

Kindermöbel - Sitzmöbel für Kinder - Anforderungen und Prüfverfahren

Mobilier de puériculture et pour enfants - Sièges pour enfants - Exigences de sécurité et méthodes d'essai

Ta slovenski standard je istoveten z: **prEN 17191**

ICS:

97.140	Pohištvo	Furniture
97.190	Otroška oprema	Equipment for children

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EUROPEAN STANDARD

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ICS 97.140; 97.190

English Version

Children's Furniture - Seating for children - Safety requirements and test methods

Mobilier de puériculture et pour enfants - Sièges pour enfants - Exigences de sécurité et méthodes d'essai

Kindermöbel - Kindersitzmöbel - Sicherheitstechnische Anforderungen und Prüfverfahren

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

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (prEN 17191:2019) 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 second CEN Enquiry.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of M/527.

1 Scope

This document specifies safety requirements and test methods for seating for children who are able to walk and sit by themselves.

It applies to seating intended to be placed on the floor for domestic and non-domestic use including in day care centres and for indoor and outdoor use.

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

It does not apply to toys, children's high chairs, childcare articles such as reclined cradles and seating in educational institutions for which other European Standards exist.

It does not apply to swing chairs, wheel chairs, electrical safety or seating for children with special needs.

Annex A (informative) contains a guide for dimensions.

Annex B (informative) contains a rationale for the inclusion of safety requirements.

Annex C (informative) contains guidance for applicable tests according to size.

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 71-1:2014+A1:2018, *Safety of toys - Part 1: Mechanical and physical properties*

EN 71-2:2011+A1:2014, *Safety of toys - Part 2: Flammability*

EN 71-3, *Safety of toys – Part 3: Migration of certain elements*

EN 1022:2018, *Domestic furniture - Seating - Determination of stability*

EN 1728:2012+AC:2013, *Furniture - Seating - Test methods for the determination of strength and durability*

EN 1729-2:2012+A1:2015, *Furniture - Chairs and tables for educational institutions - Part 2: Safety requirements and test methods*

EN ISO 13936-2, *Textiles - Determination of the slippage resistance of yarns at a seam in woven fabrics - Part 2: Fixed load method (ISO 13936-2)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

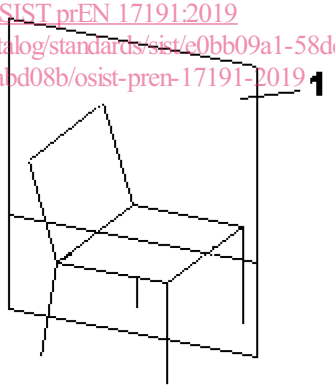
3.1
automatic locking device
mechanism which engages without the guidance of the user and which prevents unintentional movement

3.2
surface flash
rapid spread of flame over the surface of a material without ignition of its base structure at the same time

3.3
median plane
vertical plane running from front to rear through the centre of the seat, dividing the seating into two parts

Note 1 to entry: In most instances the two parts are symmetrical.

Note 2 to entry: See Figure 1.



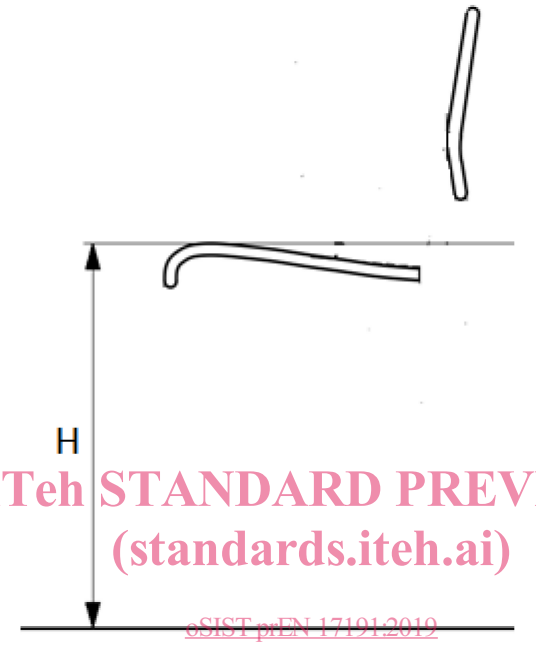
Key

1 median plane

Figure 1 — Median plane

3.4
seat height
vertical distance in the median plane between the floor, or the footrest in case of tall chairs, and the highest point on the front of the seat

Note 1 to entry: See Figure 2.



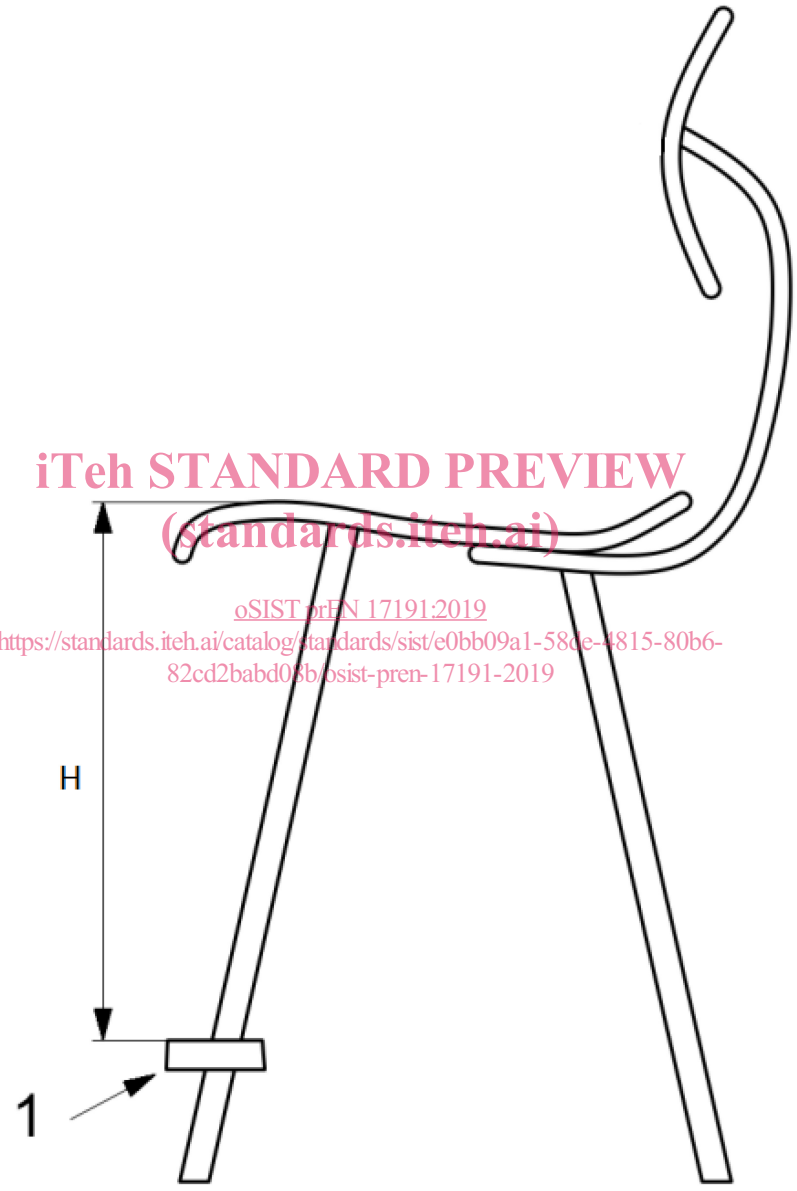
Key

H seat height

Figure 2 — Seat height

3.5
tall chair
chair where the height of seat from the floor is higher than the seat height specified in Table A.1 and with a footrest as shown in the figure below

Note 1 to entry: See Figure 3.



Key

H seat height

1 footrest

Figure 3 — Example of tall chairs

3.6
soft seating
seating with no internal support or frame composed of a fabric, vinyl, leather or a similar cover, over a soft filling (such as foam, air, polystyrene beads)

Note 1 to entry: Bean bags, inflatable and foam seating are considered to be soft seating.

3.7
deckchair
foldable chair with a locking mechanism at the bottom of the transverse bar

Note 1 to entry: Figure 14 shows an example of a locking mechanism of a deckchair.

3.8
seat width
horizontal distance between vertical lines through the side edges of the seat surface at a distance equal to half of the seat depth (t_4)

Note 1 to entry: See Figure A.2.

Drafting note for 2nde Enquiry – Consider to add the figure here. Not so good to refer to a figure in an informative annex.

4 General requirement and test condition

4.1 Preliminary preparation

The seating shall be tested as delivered. Knock-down seating shall be assembled according to the manufacturer's instructions. If the instructions allow the seating to be assembled or combined in different ways, the most adverse combination shall be used for each test. Knock-down fittings shall be tightened before testing. Further tightening shall not take place unless specifically required by the manufacturer. If the configuration shall be changed to produce the worst-case conditions, this shall be recorded in the test report.

Unless otherwise specified by the manufacturer, the sample for test shall be stored in indoor ambient conditions for at least 24 h immediately prior to testing.

The tests shall be carried out at indoor ambient conditions. However, if during a test the temperature is outside the range 15 °C to 25 °C, the maximum and/or minimum temperature shall be recorded in the test report.

Before beginning the testing, visually inspect the unit thoroughly. Record any defects so that they are not assumed to have been caused by the tests.

4.2 Application of forces

The test forces in durability and static load tests shall be applied sufficiently slowly to ensure that negligible dynamic load is applied. The forces in durability tests shall be applied sufficiently slowly to ensure that kinetic heating does not occur.

Unless otherwise stated:

— static forces shall be maintained for (10 ± 2) s

— durability forces shall be maintained for (2 ± 1) s.

The forces may be replaced by masses. The relationship 10 N = 1 kg shall be used.

4.3 Tolerances

Unless otherwise stated, the following tolerances are applicable to the test equipment:

— Forces: ± 5 % of the nominal force;

— Velocities: ± 5 % of the nominal velocity;

— Masses: ± 1 % of the nominal mass;

— Dimensions: ± 1 mm of the nominal dimension;

— Angles: ± 2° of the nominal angle.

The accuracy for the positioning of loading pads and impact plates shall be 5 mm.

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

4.4 Sizes

The seating shall be tested with reference to the seat height, see Table 1.

Table 1 — Seating sizes

Dimensions in millimetres

Size	Size 1	Size 2	Size 3
Seat height (h)	h ≤ 260	260 < h ≤ 350	h > 350

NOTE Information on seating sizes and the age/size of children is contained within Annex A.

For seating where it is not possible to determine a size (e.g. bean bags), they shall be tested as size 1 for all tests, except the strength and durability tests for which they shall be tested as size 3.

4.5 Accessibility

For the purpose of the standard, all parts of the seating are considered accessible to the child.

4.6 Testing range of seating

If seating in a range of sizes are all manufactured with identical construction details, or if the seating can be adjusted to different heights, it is only necessary to carry out the complete strength, durability and stability tests on the highest size in the range or in the highest position, plus additional stability tests on the smallest size in the range or the lowest position. In the event of failure of any seating in the above test programme, the complete test programme shall be carried out on each seating size mark individually.

5 Test equipment

5.1 Entrapment test probes

5.1.1 Finger probes with hemispherical end

Probes with hemispherical ends made of plastic or other hard, smooth material, mounted on a force-measuring device, see Figure 4.