

STN	Zariadenia pre divákov Časť 4: Sedadlá Charakteristiky výrobku	STN EN 13200-4 73 5230
------------	---	--

Spectator facilities - Part 4: Seats - Product characteristics

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/23

Obsahuje: EN 13200-4:2023

Oznámením tejto normy sa ruší
STN EN 13200-4 (73 5230) z marca 2007

136696

EUROPEAN STANDARD

EN 13200-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2023

ICS 91.040.10; 97.200.10; 97.220.10

Supersedes EN 13200-4:2006

English Version

Spectator facilities - Part 4: Seats - Product characteristicsInstallations pour spectateurs - Partie 4 : Sièges -
Caractéristiques des produits

Zuschaueranlagen - Teil 4: Sitze - Produktmerkmale

This European Standard was approved by CEN on 2 January 2023.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

EN 13200-4:2023 (E)

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	4
3	Terms and definitions	4
4	Abbreviations	5
5	General requirements of construction	5
5.1	Safety, strength and durability	5
5.2	Shear and squeeze point	6
5.2.1	Shear and squeeze points when setting up and folding	6
5.2.2	Shear and squeeze points under influence of powered mechanism	6
5.2.3	Shear and squeeze points during use	6
5.3	General requirements for fixing elements and fixing methods	7
5.3.1	General	7
5.3.2	Criteria for presentation of designs	7
5.3.3	Acceptance testing	7
6	Sampling and conditioning	8
6.1	Sampling	8
6.2	Conditioning	8
7	Characteristics of materials	8
7.1	General	8
7.2	Corrosion resistance	8
7.3	Resistance to weathering agents/stability to light	8
8	Strength and durability requirements	9
9	Test report	10
10	Seating numbers	11
11	Instruction for use	11
12	Marking	11
Annex A (informative) Examples of seats		12
Annex B (informative) Ergonomy		14
B.1	Ergonomy	14
B.1.1	Anthropometric aspects and data	14
B.1.2	Design requirements	14
Bibliography		23

European foreword

This document (EN 13200-4:2023) has been prepared by Technical Committee CEN/TC 315 “Spectator facilities”, 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 August 2023, and conflicting national standards shall be withdrawn at the latest by August 2023.

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 13200-4:2006.

The main changes compared to the previous edition are listed below:

- Clause 2 “Normative References” has been updated;
- subclauses 5.2.2, 5.2.3 and 5.2.4 have been amended and aligned with the new edition of EN 12727;
- Table 2 in Clause 8 has been updated and aligned with the new edition of EN 12727.

The EN 13200 / CEN/TR 13200 series, *Spectator facilities*, consists of the following parts:

- EN 13200-1, *Spectator facilities — Part 1: General characteristics for spectator viewing area*;
- CEN/TR 13200-2, *Spectator facilities — Layout criteria of service area — Part 2: Characteristics and national situations*;
- EN 13200-3, *Spectator facilities — Part 3: Separating elements — Requirements*;
- EN 13200-4, *Spectator facilities — Part 4: Seats — Product characteristics*;
- EN 13200-5, *Spectator facilities — Part 5: Telescopic stands*;
- EN 13200-6, *Spectator facilities — Part 6: Demountable stands*;
- EN 13200-7, *Spectator facilities — Part 7: Entry and exit elements and routes*;
- EN 13200-8, *Spectator facilities — Part 8: Safety Management*.

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.

EN 13200-4:2023 (E)**1 Scope**

This document specifies mechanical, physical and chemical product characteristics of fixed seating for spectator facilities used in sports venues (indoor and outdoor) in the spectator viewing area. It also specifies the criteria for fixing the seating to the structure.

These characteristics and criteria are determined to ensure an adequate resistance to static and dynamic stresses and to atmospheric agents. This document specifies comfort, functionality and safety requirements to prevent serious injury through normal use, as well as misuse that might reasonably be expected to occur. This document does not include any fire behaviour or resistance requirements.

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 12727:2016, *Furniture - Ranked seating - Requirements for safety, strength and durability*

EN 13200-1, *Spectator facilities - Part 1: General characteristics for spectator viewing area*

EN ISO 179-1:2010, *Plastics - Determination of Charpy impact properties - Part 1: Non-instrumented impact test (ISO 179-1:2010)*

EN ISO 527-2, *Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2)*

EN ISO 4892-2, *Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps (ISO 4892-2)*

EN ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227)*

EN ISO 13857, *Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857)*

EN 20105-A02, *Textiles - Tests for colour fastness - Part A02: Grey scale for assessing change in colour (ISO 105-A02)*

ISO 554, *Standard atmospheres for conditioning and/or testing — Specifications*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN