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Mountaineering equipment - Helmets for mountaineers - Safety requirements and test methods

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. 01/26

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English Version

Mountaineering equipment - Helmets for mountaineers - Safety requirements and test methods

Équipements d'alpinisme et d'escalade - Casques
d'alpinistes - Exigences de sécurité et méthodes d'essai

Bergsteigerausrüstung - Bergsteigerhelme -
Sicherheitstechnische Anforderungen und
Prüfverfahren

This European Standard was approved by CEN on 25 August 2025.

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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

EN 12492:2025 (E)

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EN 12492:2025 (E)**European foreword**

This document (EN 12492:2025) has been prepared by Technical Committee CEN/TC 158 “Head protection”, the secretariat of which is held by SIS.

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of an identical text or by endorsement, at the latest by April 2026 and conflicting national standards shall be withdrawn at the latest by April 2026.

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 12492:2012.

EN 12492:2025 includes the following significant technical changes with respect to EN 12492:2012:

- the scope is extended to activities with similar hazards as in mountaineering, including, but not limited to, climbing, caving, canyoning, rope courses and via ferrata climbing;
- the helmet positioning index (HPI) (3.9) has been added in the terms and definitions and test methods;
- ergonomic requirements have been added;
- a weight requirement has been added;
- off-crown requirements have been added;
- retention system strength requirements and test method have changed;
- the test method to measure the force transmission has been modified using speed instead of the drop height of the mass;
- the clause ‘Marking’ has been updated and the subclause ‘Labelling’ has been deleted;
- Annex B has been replaced by a new Annex A: ‘Recommendations on the materials and construction for thermal comfort of helmets for mountaineers’;
- the Bibliography has been updated and replaced by the Annex B: ‘Standards on mountaineering equipment’;
- Annex ZA has been updated.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

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 organizations 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 12492:2025 (E)**Introduction**

The intention of this document is to reduce the potential injury risk to the head during mountaineering activities associated with the hazards but will not eliminate them completely. A proportion of the energy of an impact is absorbed by the helmet, thereby reducing the force of the blow sustained by the head. The structure of the helmet may be damaged whilst absorbing this energy and any helmet that sustains a severe blow needs to be replaced even if damage is not apparent. There are limits to the amount of protection that can be provided and wearing a helmet cannot always prevent death or long-term disability. A helmet may only be a part of the protection that is required to carry out this activity.

Angled and tangential (rotational) impacts are one of the causes of head injuries. CEN/TC 158 has published a new test method, EN 17950:2024. CEN/TC158 WG 13 requires more time to evaluate the test method which then can be used in future revisions of this document.

1 Scope

This document specifies requirements and test methods for protective helmets for use in mountaineering intended to protect the head of the user in order to reduce the risk of impact injury.

This document is also applicable to protective helmets used in activities with similar hazards as in mountaineering, including, but not limited to, climbing, caving, canyoning, rope courses and via ferrata climbing.

This document does not apply to protective helmets used by ski mountaineers as defined in EN 18100:2025.

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 960:2006, *Headforms for use in the testing of protective helmets*

EN 13087-1:2000,¹ *Protective helmets — Test methods — Part 1: Conditions and conditioning*

EN 13087-5:2012, *Protective helmets — Test methods — Part 5: Retention system strength*

EN ISO 13688:2013,² *Protective clothing — General requirements (ISO 13688:2013)*

ISO 6487:2015,³ *Road vehicles — Measurement techniques in impact tests — Instrumentation*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹ As amended by EN 13087-1:2000/A1:2001.

² As amended by EN ISO 13688:2013/A1:2021.

³ As amended by ISO 6487:2015/Amd 1:2017.