



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 14458:2018

Personal eye-equipment - High performance visors intended only for use with protective helmets

Équipement de protection des yeux -
Visières haute performance uniquement
destinées à une utilisation avec des
casques de protection

Persönlicher Augenschutz -
Hochleistungsvisiere zur
ausschließlichen Verwendung an
Schutzhelmen

08/2018



National Foreword

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EUROPEAN STANDARD ILNAS-EN 14458:2018 **EN 14458**
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English Version

**Personal eye-equipment - High performance visors
intended only for use with protective helmets**

Équipement de protection des yeux - Visières haute
performance uniquement destinées à une utilisation
avec des casques de protection

Persönlicher Augenschutz - Hochleistungsvisiere zur
ausschließlichen Verwendung an Schutzhelmen

This European Standard was approved by CEN on 27 November 2017.

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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.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 14458:2018) has been prepared by Technical Committee CEN/TC 85 “Eye protective equipment”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by February 2019, and conflicting national standards shall be withdrawn at the latest by February 2019.

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 14458:2004.

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 EU Regulation.

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

The main changes regarding EN 14458:2004 are:

- change of title;
- correction of discrepancies between this European Standard and the designated helmet standards, e.g. EN 443, EN 14052; EN 16473;
- modifications regarding terms and definitions;
- clarification and extension of the scope; not only useable for firefighter helmets;
- clarifications regarding the three different types of visors covered by this standard and the corresponding tests and requirements;
- clarification regarding the two forms of visors considered in this standard, e.g. only face guards for increased thermal performance;
- introduction of two radiant heat exposure levels and the corresponding tests for increased thermal performance visors;
- revision and extension of the practical performance test;
- new normative Annex A which summarizes the conditioning, number of test samples and the sequence of tests to be done.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the minimum requirements for visors designed specifically to be used only with protective helmets e.g. firefighter helmets conforming to EN 443, EN 16471 and EN 16473 and high performance industrial helmets conforming to EN 14052. These visors may be permanently fitted to, or be removable from the helmet.

Three types of visors in two forms are described in this document.

The two forms are:

- face guards provide both eye and face protection, and
- eye guards that are shorter and effectively provide only eye protection.

The three types are:

- visors for general use: eye guards and face guards providing resistance and/or protection against mechanical, liquid chemical and basic physical hazards;
- visors with increased thermal performance: face guards that additionally provide resistance and/or protection against higher than basic levels of heat and flame;
- mesh visors: eye guards and face guards that incorporate mesh lenses with defined levels of performance from EN 1731, and other additional mechanical requirements described in this European Standard.

These visors are not intended to protect against smoke and gas /vapour hazards.

Visors for sporting use, those with corrective effect, and goggles used with a protective helmet are not covered by this European Standard.

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 136:1998, *Respiratory protective devices — Full face masks — Requirements, testing, marking*

EN 166:2001, *Personal eye-protection — Specifications*

EN 167:2001, *Personal eye-protection — Optical test methods*

EN 168:2001, *Personal eye-protection — Non-optical test methods*

EN 170:2002, *Personal eye-protection — Ultraviolet filters — Transmittance requirements and recommended use*

EN 171:2002, *Personal eye-protection — Infrared filters — Transmittance requirements and recommended use*

EN 172:1994, *Personal eye protection — Sunglare filters for industrial use*

EN 407:2004, *Protective gloves against thermal risks (heat and/or fire)*

EN 443:2008, *Helmets for fire fighting in buildings and other structures*

EN 659:2003+A1:2008, *Protective gloves for firefighters*

EN 1731:2006, *Personal eye protection — Mesh eye and face protectors*

EN 12477:2001, *Protective gloves for welders*

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

EN 13087-7:2000, *Protective helmets — Test methods — Part 7: Flame resistance*

EN 13087-8:2000, *Protective helmets — Test methods — Part 8: Electrical properties*

EN 13087-10:2012, *Protective helmets — Test methods — Part 10: Resistance to radiant heat*

EN 16128:2015, *Ophthalmic optics — Reference method for the testing of spectacle frames and sunglasses for nickel release*

EN ISO 4007:2012, *Personal protective equipment — Eye and face protection — Vocabulary (ISO 4007:2012)*

EN ISO 9185:2007, *Protective clothing — Assessment of resistance of materials to molten metal splash (ISO 9185:2007)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 4007 and the following 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

visor

device providing protection to all or part of the face including at least the eyes

3.2

eye guard

visor which provides protection to essentially only the eyes, when in the in-use position

Note 1 to entry: See 5.2.8.2.

3.3

face guard

visor which provides protection to the eyes and a substantial area of the face, when in the in-use position

Note 1 to entry: See 5.2.8.1.