

## **Hoonetes ja muudes rajatistes kasutamiseks mõeldud tuletõrjekiivrid**

Helmets for fire fighting in buildings and other  
structures

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 443:2008 sisaldab Euroopa standardi EN 443:2008 ingliskeelset teksti.

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English Version

## Helmets for fire fighting in buildings and other structures

Casques pour la lutte contre les incendies dans les  
bâtiments et autres structures

Feuerwehrlhelme für die Brandbekämpfung in Gebäuden  
und anderen baulichen Anlagen

This European Standard was approved by CEN on 28 December 2007.

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## Foreword

This document (EN 443:2008) has been prepared by Technical Committee CEN/TC 158 "Head protection", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by August 2008, and conflicting national standards shall be withdrawn at the latest by August 2008.

This document supersedes EN 443:1997.

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 Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

Minimum requirements for helmets protecting the lower face and the neck are included in this European Standard. Requirements for other products protecting the lower face and neck are also covered in other European Standards. This European Standard allows options to take account of particular additional requirements.

This European Standard deals with two types of helmets: type A and type B. Selection of the type of helmet and any optional equipment should be made following a comprehensive risk assessment.

Annex A gives an informative list of hazards.

Firefighters should be trained in the use, care and maintenance of helmets covered by this European Standard, including an understanding of any limitations.

## 1 Scope

This European Standard specifies minimum requirements for firefighters' helmets protecting the upper head mainly against the effects of impact, penetration and heat and flame, whilst firefighting in buildings and other structures.

## 2 Normative references

The following referenced documents are indispensable for the application 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 136:1998, *Respiratory protective devices — Full face masks — Requirements, testing, marking*

EN 137:2006, *Respiratory protective devices — Self-contained open circuit compressed air breathing apparatus with full face mask — Requirements, testing, marking*

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

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

EN 469:2005, *Protective clothing for firefighters — Performance requirements for protective clothing for firefighting*

EN 531:1995, *Protective clothing for industrial workers exposed to heat (excluding firefighters' and welders' clothing)*

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

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

EN 13087-2:2000, *Protective helmets — Test methods — Part 2: Shock absorption*

EN 13087-3, *Protective helmets — Test methods — Part 3: Resistance to penetration*

EN 13087-4, *Protective helmets — Test methods — Part 4: Retention system effectiveness*

EN 13087-5:2000, *Protective helmets — Test methods — Part 5: Retention system strength*

EN 13087-6, *Protective helmets — Test methods — Part 6: Field of vision*

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

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

EN 13911, *Protective clothing for firefighters — Requirements and test methods for fire hoods for firefighters*

EN 14458:2004, *Personal eye-equipment — Face shields and visors for use with firefighters' and high performance industrial safety helmets used by firefighters, ambulance and emergency services*

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

ISO 1817:2005, *Rubber, vulcanized — Determination of the effect of liquids*

ISO 17493, *Clothing and equipment for protection against heat — Test method for convective heat resistance using a hot air circulating oven*

### 3 Terms and definitions

For the purpose of this document, the terms and definitions given in EN 960:2006 and the following apply.

#### 3.1

##### **helmet for firefighting in buildings and other structures (hereafter referred to as 'helmet')**

headwear, for the protection of the wearer's head against hazards which might occur during operations of firefighting in buildings and other structures

#### 3.2

##### **area of protection**

specific area on a headform for which protection is intended to be provided by the helmet

NOTE This European Standard envisages five areas as defined in 3.3 to 3.7.

#### 3.3

##### **area 1a**

area situated above plane 'AA' as defined in Figure 1

#### 3.4

##### **area 1b**

area situated between plane 'AA' and points CDEF as defined in Figure 1

#### 3.5

##### **area 2**

at least the area defined for an eye-guard in EN 14458

#### 3.6

##### **area 3a**

area on the neck-guard from the lower edge of the shell to the lower edge of the neck-guard and rearward from the vertical transverse plane, or part thereof

#### 3.7

##### **area 3b**

at least the area CDHG defined in Figure 2

#### 3.8

##### **type A helmet**

helmet protecting at least area 1a

#### 3.9

##### **type B helmet**

helmet protecting at least areas 1a and 1b

#### 3.10

##### **headform**

shape replacing the head which is used for testing certain helmet characteristics

#### 3.11

##### **sagittal plane of the helmet**

plane corresponding with the longitudinal vertical median plane of the headform when the helmet is correctly adjusted on it according to manufacturer's instructions of use