

# *Geregistreeerde Belgische norm*

**NBN EN 469**

2e uitg., maart 2006

**Normklasse: S 08**

## **Beschermende kleding voor brandweerlieden - Prestatie-eisen voor beschermende kleding voor brandbestrijding (+ AC:2006)**

Vêtements de protection pour sapeurs pompiers - Exigences de performance pour les vêtements de protection pour la lutte contre l'incendie (+ AC:2006)

Protective clothing for firefighters - Performance requirements for protective clothing for firefighting (+ AC:2006)

### **Toelating tot publicatie: 31 januari 2006**

Vervangt NBN EN 469 (1995).

Deze Europese norm EN 469:2005 heeft de status van een Belgische norm.

Deze Europese norm bestaat in drie officiële versies (Duits, Engels, Frans).

Deze Europese norm is opgesteld in het kader van een Mandaat dat aan de CEN is gegeven door de Europese Commissie en de Europese Vrijhandelsassociatie; hij ondersteunt de fundamentele eisen van de EU-Richtlijn 89/686/EEG betreffende de onderlinge afstemming van de wetgevingen van de Lidstaten in verband met persoonlijke beschermingsmiddelen.



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# *norme belge enregistrée*

**NBN EN 469**

2e éd., mars 2006

**Indice de classement: S 08**

## **Vêtements de protection pour sapeurs pompiers - Exigences de performance pour les vêtements de protection pour la lutte contre l'incendie (+ AC:2006)**

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### **Autorisation de publication: 31 janvier 2006**

Remplace NBN EN 469 (1995).

La présente norme européenne EN 469:2005 a le statut d'une norme belge.

La présente norme européenne existe en trois versions officielles (allemand, anglais, français).

La présente norme européenne a été élaborée dans le cadre d'un Mandat donné au CEN par la Commission Européenne et l'Association Européenne de Libre Échange et vient à l'appui des exigences essentielles de la Directive UE 89/686/CEE concernant le rapprochement des législations des Etats membres relatives aux équipements de protection individuelle.



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English Version

## Protective clothing for firefighters - Performance requirements for protective clothing for firefighting

Vêtements de protection pour sapeurs pompiers -  
Exigences de performance pour les vêtements de  
protection pour la lutte contre l'incendie

Schutzkleidung für die Feuerwehr -  
Leistungsanforderungen für Schutzkleidung für die  
Brandbekämpfung

This European Standard was approved by CEN on 22 July 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## **Foreword**

This European Standard (EN 469:2005) has been prepared by Technical Committee CEN/TC 162 “Protective clothing including hand and arm protection and lifejackets”, the secretariat of which is held by DIN.

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 March 2006, and conflicting national standards shall be withdrawn at the latest by March 2006.

This European Standard supersedes EN 469:1995.

This European Standard 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 European Standard.

It is one of several standards for clothing that have been developed to protect persons against heat and/or flames. Some examples of other European Standards include:

- prEN ISO 11611:2003, Protective clothing for use in welding and allied processes (ISO/DIS 11611:2003);
- prEN ISO 11612:2003, Clothing to protect against heat and flame (ISO/DIS 11612:2003);
- ISO 11613:1999, Protective clothing for firefighters — Laboratory test methods and performance requirements;
- EN 1486:1996, Protective clothing for firefighters — Test methods and requirements for reflective clothing for specialized fire fighting;
- EN ISO 14460:1999 (and EN ISO 14460/A1:2002), Protective clothing for automobile racing drivers — Protection against heat and flame — Performance requirements and test methods (ISO 14460:1999);
- ISO 15384:2003, Protective clothing for firefighters — Laboratory test methods and performance requirements for wildland firefighting clothing;
- ISO 15538:2001, Protective clothing for firefighters — Laboratory test methods and performance requirements for protective clothing with a reflective outer surface;
- EN 13911:2004, Protective clothing for firefighters — Requirements and test methods for fire hoods for firefighters.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

The purpose of this European Standard is to provide minimum performance requirements for protective clothing for firefighters, whilst fighting fires. Within this European Standard, two performance levels are given for performance requirements 6.2, 6.3, 6.11 and 6.12 - level 1 is the lower level, level 2, the higher level. The level of personal protection chosen should be based on the outcome of a risk assessment. Annex G lists many of the hazards that may be encountered by firefighters and sets out guidelines for carrying out a risk assessment analysis.

During an incident, hazards other than those against which clothing to this European Standard is intended to protect may be encountered e.g. chemical, biological, radiological, and electrical. If the risk assessment identifies that exposure to such hazards is likely, protection by more appropriate personal protective equipment may be required either instead of or in addition to the protective clothing covered by this European Standard.

In this European Standard, some requirements have an influence on ergonomics and additional informative annexes on ergonomic features and physiological / heat stress hazards are included in the form of guidelines because suitable tests for these requirements have not yet been validated internationally. It is important that further requirements for ergonomic aspects of protective clothing become integrated normative parts of European standards such as this and currently work on this is taking place.

The requirement regarding water vapour resistance in 6.12, level 1, is proposed for an amendment (procedure).

For adequate overall protection against the risks to which firefighters are likely to be exposed, additional personal protective equipment to protect the head, face, hands and feet should also be worn, along with appropriate respiratory protection where necessary.

The specified controlled laboratory tests used to determine compliance with the performance requirements of this European Standard do not replicate the situations to which firefighting personnel may be exposed.

This European Standard sets minimum levels of performance requirements. Nothing in this European Standard is intended to restrict any jurisdiction, purchaser or manufacturer from exceeding these minimum requirements.

**NOTE** It is essential that firefighters are trained in the selection, use, care and maintenance of all personal protective equipment. Attention is drawn to CEN/TR 14560:2003, which sets out guidelines for selection, use, care and maintenance of protective clothing against heat and flame.

## EN 469:2005 (E)

### 1 Scope

This European Standard specifies minimum levels of performance requirements for protective clothing to be worn during firefighting operations and associated activities such as e.g. rescue work, assistance during disasters. The described clothing is not meant to protect against deliberate chemical and/or gas cleaning operations.

This European Standard covers the general clothing design, the minimum performance levels of the materials used, and the methods of test to be used to determine these performance levels. The required performance levels may be achieved by the use of one or more garments.

This European Standard covers the event of an accidental splash of chemical or flammable liquids but does not cover special clothing for use in other high-risk situations e.g. reflective protective clothing. It does not cover protection for the head, hands and feet or protection against other hazards e.g. chemical, biological, radiological and electrical hazards. These aspects may be covered in other European Standards.