

Kaitserõivad tuletõrjajatele. Katsemeetodid ja nõuded erikustutustööde jaoks ette nähtud helkurrõivastele

Protective clothing for firefighters - Test methods and requirements for reflective clothing for specialized fire fighting

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1486:2001 sisaldab Euroopa standardi EN 1486:1996 ingliskeelset teksti.

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This Estonian standard EVS-EN 1486:2001 consists of the English text of the European standard EN 1486:1996.

This standard is ratified with the order of Estonian Centre for Standardisation dated 14.08.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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ICS 13.220.10, 13.340.10

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Descriptors: Clothing, firefighting, requirements, testing.

English version

Protective clothing for firefighters

Test methods and requirements for reflective clothing for specialized firefighting

Vêtements de protection pour sapeurs-pompiers; méthodes d'essai et exigences relatives aux vêtements réfléchissants pour opérations spéciales de la lutte contre l'incendie

Schutzkleidung für die Feuerwehr; Prüfverfahren und Anforderungen für reflektierende Kleidung für die spezielle Brandbekämpfung

This European Standard was approved by CEN on 1996-06-20.

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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard 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 January 1997, and conflicting national standards shall be withdrawn at the latest by January 1997.

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).

Annex A is informative.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

0 Introduction

This standard specifies three types of reflective protective clothing, which provide higher levels of protection against radiant heat than the non-reflective clothing specified in EN 469. This reflective clothing may be used in certain techniques of specialized fire fighting.

However, protective clothing conforming to EN 469 may also be used with different specialized fire fighting techniques. The type of protective clothing employed should be appropriate for the fire fighting tactics.

1 Scope

This standard specifies test methods and minimum performance requirements for reflective protective clothing used in specialized fire fighting.

This clothing provides protection against flame lick and intense radiant heat and is worn for short periods only, to enable the firefighter to enter specific high-risk fire fighting and fire rescue situations which also require the use of breathing apparatus and head, hand and foot protection.

This standard only covers protective clothing that relies upon the ability of the outer material to reflect intense radiant heat. This type of reflective clothing may also be used for industrial applications involving high levels of radiant heat.

The reflective clothing specified in this standard is not covered in EN 469. Non-reflective protective clothing as specified in EN 469 may also be used for specialized fire fighting applications in conjunction with appropriate head, hand, foot and respiratory protection.

2 Normative references

This European standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 340

Protective clothing - General requirements

EN 344

Requirements and test methods for safety, protective and occupational footwear for professional use

EN 366 : 1993

Protective clothing - Protection against heat and fire - Method of test: Evaluation of materials and material assemblies when exposed to a source of radiant heat

EN 367

Protective clothing - Protection against heat and flames - Test method: Determination of the heat transmission on exposure to flame

prEN 443

Helmets for firefighters

EN 469:1995

Protective clothing for firefighters - Requirements and test methods for protective clothing for firefighting

EN 531:1995

Protective clothing for industrial workers exposed to heat (excluding firefighters' and welders' clothing)

EN 532

Protective clothing - Protection against heat and flame - Test method for limited flame spread

EN 659

Protective gloves for firefighters

EN 702

Protective clothing- Protection against heat and flame- Test method: Determination of the contact heat transmission through protective clothing or its materials

ISO 1421

Fabrics coated with rubber or plastics: Determination of breaking strength and elongation at break

ISO 4674: 1977

Fabrics coated with rubber or plastics: Determination of tear resistance

EN 25077

Textiles- Determination of dimensional change in washing and drying (ISO 5077:1984)

ISO 5081

Textiles- Woven fabrics: Determination of breaking strength and elongation (Strip method)

3 Definitions

For the purposes of this standard, the following definitions apply:

3.1 specialized fire fighting: Fire fighting operations involving approach, proximity or entry fire fighting.

3.2 approach fire fighting: Limited, specialized fire fighting operations conducted at a distance from incidents involving very high levels of radiant, convective and contact heat, such as bulk flammable gas and bulk flammable liquid fires.

3.3 proximity fire fighting: Specialized fire fighting operations, which may include the activities of rescue and fire suppression at incidents involving very high levels of radiant, convective and contact heat, such as aircraft fires, bulk flammable gas and bulk flammable liquid fires. These operations are conducted close to the fire but do not involve fire entry.

3.4 entry fire fighting: Very specialized fire fighting operations, which may include the activities of rescue and fire suppression at incidents involving very high levels of radiant, convective and contact heat, such as aircraft fires, bulk flammable gas and bulk flammable liquid fires, and which may involve voluntary direct entry into flames.

3.5 reflective protective clothing for specialized fire fighting: Protective clothing designed to provide protection against high levels of radiant, convective, and contact heat, relying on the ability of the outer materials to reflect intense radiant heat, and appropriate for specialized fire fighting operations.

3.6 garment: A single item of clothing which may consist of single or multiple layers.

3.7 component assembly: The material combination found in a multilayer garment arranged in the order of the garment construction and including any liner

3.8 closure system: A method of fastening openings in the garment including combinations of more than one method of achieving a secure closure, e. g. a slide fastener covered by an overflap fastened down with a touch and close fastener.

3.9 seam: The junction of two edges of material which are permanently attached in the garment by sewing or any other method.

3.10 hardware: Non-fabric items used in protective clothing including those made of plastic or metal, e. g. fasteners, rank markings, buttons.

3.11 melting: Liquefaction of a material when exposed to heat to the extent of forming a hole in its structure, either by shrinking and/or dripping away under specified test conditions.