

Tuletõrjujate jalanõud

Footwear for firefighters

This document is a preview generated by EVS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15090:2012 sisaldab Euroopa standardi EN 15090:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 15090:2012 consists of the English text of the European standard EN 15090:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 25.01.2012.	Date of Availability of the European standard is 25.01.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 13.340.50

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

English Version

Footwear for firefighters

Chaussures pour pompiers

Schuhe für die Feuerwehr

This European Standard was approved by CEN on 24 September 2011.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	4
Introduction.....	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Classification, design and type	6
4.1 Classification.....	6
4.2 Design	7
4.3 Type.....	7
5 Sampling and conditioning.....	7
6 Requirements	8
6.1 Types and classifications	8
6.2 General requirements.....	8
6.3 Thermal behaviour.....	13
6.3.1 Insulation against heat.....	13
6.3.2 Radiant heat	14
6.3.3 Flame resistance.....	14
6.4 Compression resistance of the toepuff.....	14
6.5 Resistance to chemicals	15
6.6 Electrical properties	15
6.6.1 General.....	15
6.6.2 Electrically insulating footwear.....	15
6.6.3 Antistatic footwear.....	15
6.7 Outsole.....	15
6.7.1 Cleat design.....	15
6.7.2 Cleat height	15
6.7.3 Cleat height in the waist area	15
6.7.4 Heel breast.....	15
6.8 Zipper.....	16
6.8.1 Zipper construction	16
6.8.2 Zipper (slide fastener) puller attachment strength.....	16
6.8.3 Zipper (slide fastener) lateral strength	16
7 Test methods.....	16
7.1 Insulation against heat.....	16
7.2 Radiant heat	16
7.3 Flame resistance test	17
7.3.1 Conditioning and sampling	17
7.3.2 Procedure	17
7.4 Compression resistance of the toepuff.....	18
7.5 Zipper.....	19
7.5.1 Puller attachment strength	19
7.5.2 Lateral strength.....	19
8 Marking	20
9 Information to be supplied.....	21
9.1 General.....	21
9.2 Antistatic footwear.....	22
9.3 Insocks.....	23

Annex A (informative) Example of guidelines and considerations for performing a risk	24
A.1 General	24
A.2 General approach for conducting a risk assessment	24
A.3 Recommended factors for identifying and evaluating fire fighter risks	25
A.4 Types of footwear for firefighters	26
Annex B (normative) Assessment of the footwear by the laboratory during testing of thermal behaviour	28
B.1 General	28
B.2 Criteria for the assessment of the state of footwear	28
Annex C (informative) Assessment of the footwear by the wearer	30
C.1 General	30
C.2 Criteria for the assessment of the state of footwear	30
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC	32
Bibliography	34

Foreword

This document (EN 15090:2012) has been prepared by Technical Committee CEN/TC 161 "Foot and leg protectors", 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 July 2012, and conflicting national standards shall be withdrawn at the latest by July 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 15090:2006.

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.

The main differences between this edition and EN 15090:2006 are as follows:

- a) Slip resistance has been added (reference to EN ISO 20345, 5.3.5).
- b) The types of footwear for firefighters (4.3) have been changed in accordance with the risks.
- c) The requirements and the test method for radiant heat (6.3.2 and 7.2) have been changed.
- d) The requirement for resistance to chemicals (6.5) have been slightly changed.
- e) The requirements for high electrical resistance outsoles (6.6.4 in the old version) and the adequate Marking symbols in Table 9 were removed.
- f) Annex B (normative) has been restructured. The criteria for the assessment of the state of footwear have been listed separately: "Insulation against heat", "Radiant heat" and "Flame resistance".
- g) Annex D 'Testing of laces' has been deleted.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The purpose of this standard is to provide minimum performance requirements and test methods for footwear for firefighters which is intended for use for fire fighting and associated activities. A risk assessment should be used to determine whether the footwear covered by this standard is suitable for the intended use for the expected exposure. Firefighters should be trained in the use, care and maintenance of the footwear covered by this standard, including an understanding of its limitations.

1 Scope

This European standard specifies minimum requirements and test methods for the performance of three types (see 4.3) of footwear for use by firefighters for fire suppression, general-purpose rescue, fire rescue and hazardous materials emergencies.

This European standard does not cover special personal protective equipment used in high-risk situations (for example, the conditions described in ISO 15538).

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 13832-3:2006, *Footwear protecting against chemicals — Part 3: Requirements for footwear highly resistant to chemicals under laboratory conditions*

EN 50321, *Electrically insulating footwear for working on low voltage installations*

EN ISO 6942:2002, *Protective clothing — Protection against heat and fire — Method of test: Evaluation of materials and material assemblies when exposed to a source of radiant heat (ISO 6942:2002)*

EN ISO 15025:2002, *Protective clothing — Protection against heat and flame — Method of test for limited flame spread (ISO 15025:2000)*

EN ISO 20344:2011, *Personal protective equipment — Test methods for footwear*

EN ISO 20345:2011, *Personal protective equipment — Safety footwear*

ISO 15538, *Protective clothing for firefighters — Laboratory test methods and performance requirements for protective clothing with a reflective outer surface*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 20345:2011 apply.

4 Classification, design and type

4.1 Classification

Footwear for firefighters shall be classified in accordance with Table 1.