

**Isikukaitsevahendid. Kaitsejalanõud (ISO 20345:2011)**

**Personal protective equipment - Safety footwear (ISO 20345:2011)**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 20345:2011 sisaldab Euroopa standardi EN ISO 20345:2011 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 20345:2011 consists of the English text of the European standard EN ISO 20345:2011.
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 15.12.2011.	Date of Availability of the European standard is 15.12.2011.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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Võtmesõnad: occupat, properties, protective clothing, protective equipment, protective footwear, safety, safety requirements, shoes, soles, specification, specification (approval), specifications, strength of materials, testing, working clothings, working shoe, workplace safety,

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English Version

**Personal protective equipment - Safety footwear (ISO  
20345:2011)**

Équipement de protection individuelle - Chaussures de  
sécurité (ISO 20345:2011)

Persönliche Schutzausrüstung - Sicherheitsschuhe (ISO  
20345:2011)

This European Standard was approved by CEN on 14 December 2011.

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## Foreword

This document (EN ISO 20345:2011) has been prepared by Technical Committee CEN/TC 161 "Foot and leg protectors", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 94 "Personal safety - Protective clothing and equipment".

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of an identical text or by endorsement, at the latest by June 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.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 ISO 20345:2004.

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 Directive.

For relationship with EU Directive, 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, 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 and the United Kingdom.

## Annex ZA (informative)

### Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC Personal Protective Equipment

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 89/686/EEC Personal Protective Equipment.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

**Table ZA.1 — Clauses of this European Standard addressing Essential Requirements or other provisions of EU Directives**

Clauses of this European Standard	Essential requirements (ERs) of EU Directive 89/686/EEC Annex II
	1. General requirements applicable to all PPE
5.3.4	1.1.1 Ergonomics
5.3.4	1.1.2.1 Highest level of protection possible
	1.2 Innocuousness of PPE
5.3.2.2; 5.4.8; 5.8.5; 6.2.1.2; 6.2.1.3; 6.2.5; 6.3.1	1.2.1 Absence of risks and other inherent nuisance factors
5.4.7; 5.4.9; 5.5.4; 5.5.5; 5.6.2; 5.6.3; 5.7.2; 5.7.5	1.2.1.1 Suitable constituent materials
5.3.4	1.2.1.2 Satisfactory surface condition of all PPE parts in contact with the user
5.3.4	1.2.1.3 Maximum user impediment
	1.3 Comfort and efficiency
5.3.1.2; 5.3.2.5.1; 5.3.2.5.2; 5.4.3; 5.4.4; 5.4.5; 5.5.1; 5.5.2; 5.6.1; 5.7.4; 5.8.2; 5.8.3; 5.8.4; 5.8.6; 6.2.1.4; 6.2.1.5.1; 6.4.1; 6.4.2	1.3.2 Lightness and design strength
8	1.4 Information supplied by the manufacturer
5.4.6; 5.5.3	2.2 PPE enclosing the parts of the body to be protected
6.2.2.1; 6.2.2.2	2.6 PPE for use in explosive atmospheres
6.1; 7	2.12 PPE bearing one or more identification or recognition marks directly indirectly or relating to health and safety
	3.1 Protection against mechanical impact
5.3.2.3; 6.2.4; 6.2.6; 6.2.7	3.1.1 Impact caused by falling objects and collision of parts of the body with an obstacle

Table ZA.1 (continued)

Clauses of this European Standard	Essential requirements (ERs) of EU Directive 89/686/EEC Annex II	
5.3.5	3.1.2	Prevention of falls due to slipping
5.3.2.4	3.2	Protection against (static) compression of part of the body
6.2.1.1; 6.2.1.5.2; 6.2.8	3.3	Protection against physical injury (abrasion, perforation, cuts, bites)
6.2.3.1	3.6	Protection against heat and/or fire
6.2.3.2	3.7	Protection against cold
6.2.2.3	3.8	Protection against electric shock

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

# Contents

Page

Foreword .....	iv
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions .....</b>	<b>1</b>
<b>4 Classification and designs .....</b>	<b>6</b>
<b>5 Basic requirements for safety footwear .....</b>	<b>8</b>
5.1 General .....	8
5.2 Design .....	10
5.3 Whole footwear .....	11
5.4 Upper .....	14
5.5 Vamp and quarter lining .....	16
5.6 Tongue .....	17
5.7 Insole and insock .....	17
5.8 Outsole .....	18
<b>6 Additional requirements for safety footwear .....</b>	<b>19</b>
6.1 General .....	19
6.2 Whole footwear .....	20
6.3 Upper — Water penetration and absorption .....	24
6.4 Outsole .....	24
<b>7 Marking .....</b>	<b>24</b>
<b>8 Information to be supplied .....</b>	<b>25</b>
8.1 General .....	25
8.2 Electrical properties .....	26
8.3 Insocks .....	27
<b>Annex A (normative) Hybrid footwear .....</b>	<b>28</b>
<b>Bibliography .....</b>	<b>30</b>

# Personal protective equipment — Safety footwear

## 1 Scope

This International Standard specifies basic and additional (optional) requirements for safety footwear used for general purpose. It includes, for example, mechanical risks, slip resistance, thermal risks, ergonomic behaviour.

Special risks are covered by complementary job-related standards (e.g. footwear for firefighters, electrical insulating footwear, protection against chain saw injuries, protection against chemicals and molten metal splash, protection for motor cycle riders).

## 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.

ISO 17075, *Leather — Chemical tests — Determination of chromium(VI) content*

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

EN 12568:2010, *Foot and leg protectors — Requirements and test methods for toecaps and penetration resistant inserts*

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

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE The component parts of footwear are illustrated in Figures 1 and 2.

### 3.1

#### **safety footwear**

footwear incorporating protective features to protect the wearer from injuries that could arise through accidents

NOTE Items of safety footwear are fitted with toecaps designed to give protection against impact when tested at an energy level of at least 200 J and against compression when tested at a compression load of at least 15 kN.