## BS EN ISO 22568-4:2019

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**BSI Standards Publication** 

# Foot and leg protectors - Requirements and test methods for footwear components

Part 4: Non-metallic perforation resistant inserts



## National foreword

This British Standard is the UK implementation of EN ISO 22568-4:2019. Together with BS EN ISO 22568-1:2019, BS EN ISO 22568-2:2019 and BS EN ISO 22568-3:2019, it supersedes BS EN 12568:2010, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PH/1, Safety, protective and occupational footwear.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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**English Version** 

## Foot and leg protectors - Requirements and test methods for footwear components - Part 4: Non-metallic perforation resistant inserts (ISO 22568-4:2019)

Protecteurs du pied et de la jambe - Exigences et méthodes d'essais pour les composants de chaussure - Partie 4: Inserts anti-perforation non métalliques (ISO 22568-4:2019) Fuß- und Beinschutz - Anforderungen und Prüfverfahren für Schuhkomponenten - Teil 4: Nichtmetallische perforationsbeständige Einlagen (ISO 22568-4:2019)

This European Standard was approved by CEN on 25 February 2019.

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## **European foreword**

This document (EN ISO 22568-4:2019) has been prepared by Technical Committee ISO/TC 94 "Personal safety - Personal protective equipment" in collaboration with 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of an identical text or by endorsement, at the latest by November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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

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#### **Endorsement notice**

The text of ISO 22568-4:2019 has been approved by CEN as EN ISO 22568-4:2019 without any modification.

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see <u>www.iso.</u> <u>org/iso/foreword.html</u>.

This document was prepared by Technical Committee ISO/TC 94, *Personal safety* — *Personal protective equipment*, Subcommittee SC 3, *Foot protection*.

A list of all parts in the ISO 22568 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

## Introduction

ISO 20345, ISO 20346 and ISO 20347 are related to safety, protective and occupational footwear which define the performance and required properties of the footwear. On introducing these standards all national standards relating to perforation resistant inserts were withdrawn leaving the manufacturers of these items with no means of demonstrating the performance of their products. This document has been prepared to allow manufacturers to demonstrate the type of the perforation resistant inserts before being inserted into the footwear.

Non-metallic perforation resistant inserts and materials complying with the requirements of this document are suitable components of "PPE footwear".

## Foot and leg protectors - Requirements and test methods for footwear components —

## Part 4: Non-metallic perforation resistant inserts

## 1 Scope

This document specifies requirements and test methods for the non-metallic inserts with resistance against mechanical perforation, intended to function as components of PPE footwear (e.g. as described by ISO 20345, ISO 20346 and ISO 20347).

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 105-E04:2013, Textiles — Tests for colour fastness — Part E04: Colour fastness to perspiration

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

ISO 20345, Personal protective equipment — Safety footwear

ISO 20346, Personal protective equipment — Protective footwear

ISO 20347, Personal protective equipment — Occupational footwear

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 20345, ISO 20346 and ISO 20347 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

#### 3.1

#### non-metallic perforation resistant insert

non-metallic footwear component placed (or intended to be placed) in the sole complex in order to provide protection against mechanical perforation

### 4 Requirements for non-metallic perforation resistant inserts

#### 4.1 General

Depending on the footwear construction, the non-metallic perforation resistant inserts could be in contact with the wearer foot, therefore the requirements of ISO 20345, ISO 20346 and ISO 20347 should be taken into account (for example abrasion resistance, water absorption).