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BSI Standards Publication

Personal protective equipment — Footwear — Test method for slip resistance

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National foreword

This British Standard is the UK implementation of EN ISO 13287:2019. It is identical to ISO 13287:2019. It supersedes BS EN ISO 13287:2012, which is withdrawn.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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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected
30 November 2019	Missing Annex C added

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Supersedes EN ISO 13287:2012

English Version

Personal protective equipment - Footwear - Test method for slip resistance (ISO 13287:2019)

Équipement de protection individuelle - Chaussures -
Méthode d'essai pour la résistance au glissement (ISO
13287:2019)

Persönliche Schutzausrüstung - Schuhe - Prüfverfahren
zur Bestimmung der Rutschhemmung (ISO
13287:2019)

This European Standard was approved by CEN on 4 October 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 13287:2019) 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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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.

This document supersedes EN ISO 13287:2012.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 13287:2019 has been approved by CEN as EN ISO 13287:2019 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 www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 www.iso.org/iso/foreword.html.

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

This third edition cancels and replaces the second edition (ISO 13287:2012), which has been technically revised. The main changes compared to the previous edition are as follows:

- Scope — additional text added;
- [4.10](#), design and use of rigid wedges is more precisely defined, and illustrated in [Figures 1, 2](#) and [C.1](#);
- [5.1](#), requires a left and right sample;
- [5.2](#), conditioning time reduced to 24 h;
- [6.1](#), uncertainty of measurement: additional approaches allowed;
- [Figure 2](#) a)/b) and c) redrawn for clarification;
- New [Figure 5](#) and text in [6.2.2](#) added for curved outsoles;
- [6.2.3](#), UK size changed and requirements for application of force tightened;
- [7.1](#) has been restructured and an additional procedure allowed for cleaning grease contaminated soling;
- [7.2.4](#) to [7.2.6](#) and [8.6](#) concerning floor sample conditioning, cleaning and replacement are revised;
- [Clause 9](#) b) and d) are revised; [Clause 9](#) e) is added;
- [Annex B](#) replaces and updates three previous annexes (Annex B, C and D of ISO 13287:2012) due to the deletion of Eurotile 1; [B.2](#) is a new addition;
- [C.2.1](#) requires S96 to be discarded according to the certificated date.

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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 www.iso.org/members.html.

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Personal protective equipment — Footwear — Test method for slip resistance

1 Scope

This document specifies a method of test for the slip resistance of PPE footwear. It is not applicable to special purpose footwear containing spikes, metal studs or similar.

Footwear claiming 'slip resistance' would be deemed an item of personal protective equipment.

NOTE For product development purposes, sole units, outsoles or other soling components such as top pieces may be tested.

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 4287, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters*

ISO 4662, *Rubber, vulcanized or thermoplastic — Determination of rebound resilience*

3 Terms and definitions

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

normal force

force applied to the surface through the footwear, perpendicular (90°) to the surface

Note 1 to entry: The force includes the weight of the footwear, shoemaking last (4.1.1 or 4.1.2) or mechanical foot (4.1.3) and mounting.

3.2

frictional force

force parallel to the surface and against the direction of movement arising when footwear slides over a surface

3.3

coefficient of friction

CoF

ratio of the frictional force divided by the normal force

3.4

static contact time

time between initial contact of the footwear with the surface achieving a normal force of 50 N and the beginning of movement