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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 13287:2019 sisaldb Euroopa standardi EN ISO 13287:2019 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 13287:2019 consists of the English text of the European standard EN ISO 13287:2019.
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 23.10.2019.	Date of Availability of the European standard is 23.10.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 13287

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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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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.

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

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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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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.

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