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Personal protective equipment — Footwear — Test method for slip resistance

Équipement de protection individuelle — Chaussures — Méthode d'essai pour la résistance au glissement

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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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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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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

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