BS EN ISO 13287:2012



BSI Standards Publication

Personal protective equipment — Footwear — Test method for slip resistance

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



raising standards worldwide[™]

This British Standard is the UK implementation of EN ISO 13287:2012. It supersedes BS EN ISO 13287:2007, which is withdrawn.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.

© The British Standards Institution 2012.

Published by BSI Standards Limited 2012.

ISBN 978 0 580 74398 6

ICS 13.340.50

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2012.

Amendments issued since publication

Amd. No. Date Text affected

EN ICO 1007

This is a preview of "BS EN ISO 13287:2012". Click here to purchase the full version from the ANSI store.

EUROPÄISCHE NORM

October 2012

ICS 13.340.50

Supersedes EN ISO 13287:2007

English Version

Personal protective equipment - Footwear - Test method for slip resistance (ISO 13287:2012)

Équipement de protection individuelle - Chaussures -Méthode d'essai pour la résistance au glissement (ISO 13287:2012) Persönliche Schutzausrüstung - Schuhe - Prüfverfahren zur Bestimmung der Rutschhemmung (ISO 13287:2012)

This European Standard was approved by CEN on 14 October 2012.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2012 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 13287:2012: E

Contents	Page
Foreword	3
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC	4

Foreword

This document (EN ISO 13287:2012) 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 April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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 13287:2007.

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 organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC

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 the Essential Requirements of the New Approach Directive (89/686/EEC).

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 clauses of this standard, together with the relevant requirements given in the product standards, confers within the limits of the scope of those standards, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations."

The clauses of this European Standard specify a test method for the relevant requirement of safety, protective or occupational footwear to support the essential requirement 3.1.2.1 of Directive 89/686/EEC, Annex II.

WARNING: Other requirements and other EU Directives may be applicable to products falling within the scope of this standard.

Contents Page		
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Apparatus and materials	2
5 5.1 5.2	Sampling and conditioning Sampling Conditioning	3
6 6.1 6.2	Test method Principle Test modes and test conditions	4
7 7.1 7.2	Preparation of footwear and floor Footwear Floor	8
8	Procedure	10
9	Test report	11
Annex	A (normative) Standard shoemaking last and mechanical foot for testing footwear	
Annex	B (informative) Background information relating to Eurotile 1 and Eurotile 2	14
Annex	C (normative) Specification of Eurotile 1	15
Annex D (normative) Specification of Eurotile 2 (OFIR)		
Annex E (normative) Calibration procedure for Eurotile tiles and other test surfaces		
Bibliography		

Personal protective equipment — Footwear — Test method for slip resistance

1 Scope

This International Standard 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.

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

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 International Standard, the following terms and definitions apply.

3.1

normal force

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

NOTE 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

3.5

measurement period

time interval during which the frictional force measurement is taken and during which the test conditions are satisfied

3.6

floor

material (flooring), without contaminant (lubricant), to be used as the test surface