

Safety footwear with resistance to chain saw cutting

The European Standard EN ISO 17249:2004, incorporating amendment A1:2007, has the status of a British Standard

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National foreword

This British Standard was published by BSI. It is the UK implementation of EN ISO 17249:2004, incorporating amendment A1:2007. It is identical with ISO 17249:2004, incorporating amendment 1:2007.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to text carry the number of the ISO amendment. For example, text altered by ISO amendment 1 is indicated by **A1** **A1**.

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

Safety footwear with resistance to chain saw cutting - (ISO 17249:2004)

Chaussures de sécurité résistantes aux coupures de scie à
chaîne (ISO 17249:2004)

Sicherheitsschuhe mit Schutz gegen Kettensägenschnitte
(ISO 17249:2004)

This European Standard was approved by CEN on 16 January 2004.

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Foreword

This document (EN ISO 17249:2004) 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of an identical text or by endorsement, at the latest by March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

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(s).

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Foreword to amendment A1

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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 July 2007, and conflicting national standards shall be withdrawn at the latest by July 2007.

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1 Scope

This European Standard specifies requirements for safety footwear with resistance to chain saw cutting.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 381-3, *Protective clothing for users of hand-held chain-saws — Part 3: Test methods for footwear*

EN ISO 20344:2004, *Personal protective equipment - Test methods for footwear (ISO 20344:2004)*

EN ISO 20345:2004, *Personal protective equipment - Safety footwear (ISO 20345:2004)*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN ISO 20345:2004 and the following term and definition apply.

feather line

the line of a shoe where the upper meets the bottom, the part of the bottom involved being the welt, rand, or sole, depending on the method of shoe construction

4 Classification

Safety footwear with resistance to chain saw cutting shall be classified in accordance with Table 1 of EN ISO 20345:2004.

5 Requirements

5.1 General

Four classes of safety footwear with varying resistance to chain saw cutting are specified according to the different chain saw speeds.

The uncertainty of measurement for each test method described in this standard shall be assessed in accordance with annex A.

Safety footwear with resistance to chain saw cutting shall conform to the requirements given in Table 1, Table 2, Table 3 and Table 4.

Table 1 — Requirements

	Requirement	Reference		Classification		Symbol
		EN ISO 20345:2004	This standard	I	II	
Design	Height of upper	5.2.1		X	X	
	Seat region:	5.2.2		X	X	
	Design		5.2	X	X	
	Construction		5.3	X	X	
Whole footwear	Sole performance:	5.3.1				
	Construction	5.3.1.1		X		
	Upper/outsole bond strength	5.3.1.2		X		
	Toe protection:	5.3.2				
	General	5.3.2.1		X	X	
	Internal length of toecaps	5.3.2.2		X	X	
	Impact resistance	5.3.2.3		X	X	
	Compression resistance	5.3.2.4		X	X	
	Behaviour of toecaps	5.3.2.5		X	X	
	Leak proofness	5.3.3			X	
	Specific ergonomic features	5.3.4		X	X	
	Penetration resistance	6.2.1		O	O	P
	Electrical properties:	6.2.2				
	Antistatic footwear	6.2.2.2		*	*	A
	Electrically insulating footwear	6.2.2.3		*	*	I
	Resistance to inimical environments:	6.2.3				
	Heat insulation of sole complex	6.2.3.1		*	*	HI
	Cold insulation of sole complex	6.2.3.2		*	*	CI
	Energy absorption of seat region	6.2.4		*	*	E
	Water resistance	6.2.5		*		WR
	Metatarsal protection	6.2.6		*	*	M
	Ankle Protection	6.2.7		*	*	AN
	Resistance to chain saw cutting		5.4	X	X	
Upper	General	5.4.1		X	X	
	Thickness	5.4.2			X	
	Tear strength	5.4.3		X		
	Tensile properties	5.4.4		X	X	
	Flexing resistance	5.4.5			X	
	Water vapour permeability and coefficient	5.4.6		X		
	pH value	5.4.7		X		
	Hydrolysis	5.4.8			X	
	Chromium VI content	5.4.9		X		
	Water penetration and water absorption	6.3.1		*		
	Upper construction	6.3.2		X		
	Cut resistance	6.3.3		*	*	CR