

STANDARDS EXPLAINED

Specification for safety footwear for professional use: Footwear with characteristics suitable for protecting the wearer against injuries that may occur in the professional sectors for which the footwear has been designed, with toe caps for providing protection against impact, when tested tested at an energy level of 200 J.

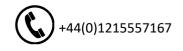
Safety Ratings Explained

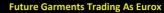
Class	Features & Benefits		
500	Safety basic, 200 joules Toe Protection, Oil Resistant outer sale. (Minimum Requirement)		
SEP	As SB plus Mid-Sole for penetration resistance.		
51	As SB plus Anti-Static properties and fully enclosed Energy Absorbing heel area.		
SIP	As \$1 plus Mid-Sole for penetration resistance.		
52	As S1 plus resistance to Water Penetration and absorption.		
53	As S2 plus Mid-Sole for penetration resistance and cleated outsole		
54	200 judies Toe Protection. All rubber or polymer construction (waterproof). And Static properties, Energy Absorbing heel area.		
55	As S4 plus Mid-Sole for penetration resistance and cleated outsole.		

EN ISO 20345:2011

Category	Basic Requirements	Additional Requirements	
58	1=1		
51	I	Chased sent region Antistatic properties Emergy alsocytion of sent reign Resistance to facel oil	
2	18	As S1, plac: Water penetration and alcomption	
59	Ĭ.	As SZ, plan: Praetration resistance Clastral pulsa le	
54	11	Closed sext region Anticipis: properties	
53	п	As S4, plan: Peartration resistance	









DESCRIPTIONS

Toe protection (SB)

Your toes are a very vulnerable part of your body, especially in a workplace. Toe protection must withstand a 200 joule impact. Joule is the unit of energy and this standard is purposefully specific. Something heavy falling from a low height could have a lot less energy than something lighter from a much higher height. As well as impacts, the toe area must withstand a resting mass of well over 1000kg. Most people have heard of steel toe cap boots but the protection doesn't have to be steel. In fact there are advantages to alternatives. Non-metallic protection can be equally as strong but lighter.

Anti-static protection (A)

Clothing, seating materials, and climate factors can cause a build up a static charge of electricity in the body. Some materials in footwear can over insulate the body causing the charge to be held. When you then touch something the charge can rush from your body quickly causing a spark and a small uncomfortable shock. Anti-static footwear will significantly reduce this effect but does not offer full protection for exposure to electronics and explosives work. You will need Electro-Static Protection (ESD) for this.

Mid-sole penetration protection (P) – SB-P, S1-P, S3, S5

Sharp objects where we walk and stand are a significant risk not only in the workplace but also outdoors and at home. Mid-sole protection will guard against nails and other objects. To meet this standard the footwear must be able to resist a penetration force of 1100N. Mid-sole protection is provided in one of these methods: a stainless steel insert in the sole, aluminum insert in the sole, or by Kevlar insole. The Aluminum and Kevlar solutions are the most flexible and lightest and cover the greatest area of the foot. Kevlar insoles also offer much higher thermal insulation.

Energy Absorption (E)

Energy Absorption in the heel region

Water Resistant Upper (WRU)

Water resistant upper; not used on all rubber or polymeric footwear

Heat Resistant (HRO)

Heat resistant out-sole: to resist 300°C for 60 seconds

Insulation against Cold (CI)

Insulation against cold: tested for 30 minutes at 1 -20°C

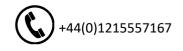
Insulation against heat (HI)

Insulation against heat: tested for 30 minutes at 150°C

Electro-Static Discharge (ESD)

ESD footwear is designed for the electronics and explosives industry and has to meet ESD CEI BS EN 61340-5-1 standard.







Non-metallic footwear

Safety footwear containing no metal parts is ideal for workplaces with metal detectors like airports or security points without the need to remove footwear to pass through.

All safety footwear can have more features than are listed above but these are the minimum requirements to meet each of the safety ratings and the most common.

Options for specific protection are categorised as:

A – Anti-static: Comes as standard with level S1, S2 & S3

E – Energy absorbing heel: Comes as standard with level S1, S2 & S3

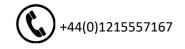
P – Puncture Resistant: Comes as standard with level SB-P, S1-P & S3

HRO – Heat Resistant Out-sole: Comes as standard with level SB, S1, S2 & S3

Reprisements for fundament resistant to sign

Marking of product for silp resistance properties	Species i
Commit the with scalium buryl sulphate	SRA
Steel with glycerol	SKI
Derumic tile with soulium toury) sulphote 8. steel with glycerol	SRIC.







Requirement		Symbol
	Penetration resistance	P
Whole Footwear	Bectrical properties:	
	- Conductive footwear	C
	Antistatic footwear	Α
	Bectrically insulating footwear	As per double triangle in
		standard EN 50321
	Resistance to inimical environments:	
	 Heat insulation of sole complex. 	н
	- Cold insulation of sole complex	a
	Energy absorption of seat region	E
	Water resistance	WR
	Metatarsal protection	M
	Ankle protection	AN
	Cut resistance	CR
Upper	Water penetration and absorption	WRU
Outsole	Resistance to hot contact	HRO
	Resistance to fuel oil	FO







RESISTANCE TO PERF



RESISTANCE



REPELLENT





SLIP RESISTANCE



RESISTANCE ABSORPTION





DUAL DENSITY SOLE



Mon - Fri 8:30 am - 5:30pm

