

TAKING THE RIGHT STEPS TO SAFETY

Safety Standards Guide

EN ISO 20345:2011 is the most common standard marked on PPE footwear within our range. The standard to which the footwear conforms will be identified on the product information label within the footwear.

The standard requires the inclusion of a safety toecap that achieves 200J impact resistance and 15kN

compression resistance. This is identified by at least the basic category of protection "SB". In addition to the over arching requirements of the standards, there are a number of additional categories of protection which assist selection of footwear appropriate for varying workplace hazards.

- SB** Safety basic footwear with 200 joule safety toecap
- S1** SB featuring anti-static properties, a fully enclosed seat region, energy absorption heel unit and fuel oil resistant outsole
- S2** S1 featuring water resistant upper materials
- S3** S2 featuring cleated outsole pattern and perforation resistant midsole/insole
- S4** Rubber or polymeric waterproof footwear with 200 joule toecap, anti-static properties, energy absorbing heel and fuel oil resistant outsole
- S5** S4 featuring perforation resistant midsole/insole















*These short marking codes may be used in conjunction with other optional categories of protection e.g. S1 P M HI CI SRA

Additional protective features can be built into the footwear and are identified by the following:

- | | | |
|--|--|--|
| P Resistance to perforation of the footwear from underneath | the body and offers some resistance to mains voltage | WR Waterproof |
| M Metatarsal impact protection | HI Insulation against heat | HRO Heat resistant outsole – resistant to hot contact up to 300°C |
| C Conductive – dissipates static away from the body for highly volatile atmospheres | CI Insulation against cold | FO Fuel oil resistant outsoles |
| A Anti-static – dissipates most static electricity away from | E Energy absorption of the heel region | CR Cut resistant upper |
| | WRU Water-resistant upper materials | AN Ankle impact resistance |

Safety Symbols Guide

Should our safety footwear offer any additional protective features, then the appropriate symbol will be added.

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|---|--|---|
|  Tested on ceramic tile floor with sodium lauryl solution |  Footwear available in women's sizes |  Footwear with anti-static soles |
|  SRB rating. Tested on steel floor with glycerine solution |  Footwear with Metatarsal protection – 100 Joules impact energy |  Heat resistant outsole compound tested to 300°C |
|  SRC rating.*Tested on both ceramic tile and steel floors
*Tested to both SRA & SRB ratings |  Footwear with energy absorption of the seat region tested at 20 Joules |  Cold insulation |
|  Footwear with safety toecap |  Waterproof footwear |  Suitable for Vegans |
|  Footwear with safety midsole |  Water-resistant uppers | |

Buying Guide




Most workplaces have varying requirements for the provision of safety footwear, which is why we offer a comprehensive range within which you should be able to identify appropriate footwear to meet the needs of your workforce whatever the hazards identified in your risk assessment.

Whilst protection is paramount it is recognised that with long wear periods, often in hostile conditions, wearer

acceptance, wellbeing, design, brand and comfort are additional considerations. We therefore offer varying styles from executive shoes to heavy duty rigger boots, and leading brands such as Rock Fall®, uvex, Magnum, Ejendals, Gifford Newton and Dunlop® alongside our increasingly popular and cost effective Tuf Revolution and Tuf ranges.

Slip Resistance

Slips, trips and falls are one of the most common causes of workplace injury. Every effort should be made to remove the risk from an environment, but where the risk cannot be eliminated, safety footwear can help reduce the risk of slipping. The EN ISO 13287 test method for slip resistance is used to test the performance of slip resistance in different types of environment and this is identified by the marking codes below:

SLIP RESISTANCE PROPERTIES			
Marking symbols and specifications			
Marking	Test surface and lubricant combination	Minimum coefficient of friction	
		Forward heel slip	Forward flat slip
	Ceramic tile with 0.5% sodium lauryl sulphate solution	0.28	0.32
	Steel floor with 90% glycerine solution	0.13	0.18
	Both SRA and SRB above have been achieved		

Anti-Static

Anti-Static footwear has an electrical resistance between 0.1 and 1000 megaohm (M) Ω, measured according to EN 20344:2011. They conduct static electricity through the insole, linings, outsole and into the ground, helping regulate the build-up of electrical charge on a person's body and help protect against the dangers of static build-up in the workplace.

These are used to reduce the chance of sparks igniting flammable substances or vapours. Anti-static footwear also maintains a minimum resistance and reduces the risk of electrocution if the wearer is in contact with mains voltage electricity.



Electrostatic dissipative footwear marked in accordance with the IEC 61340 suite of standards offers static dissipation (to ground) preventing static discharge and sparking. This property is intended to prevent damage to sensitive electrical equipment, such as microchips and circuit boards. Often confused, this property does not claim to protect the wearer, although the resistance will be in the region of conductive and very low range anti-static footwear – it will often be marked with one or other of these properties as well.



Electrical Hazard

It is very important to understand that Electrical Hazard is an entirely different specification and standard to Anti-Static and ESD. Electrical Hazard boots are designed to impede the flow of electricity through the shoe and to the ground, reducing the likelihood of electrocution.

The outer surface of the sole and heel shouldn't be penetrated by any electrically conductive component, like nails in the heel. EH shock resistant footwear must be capable of withstanding the application of 18,000 volts at 60 Hz for 1 minute with no current flow or leakage in excess of 1.0 milliampere.

Electrical Hazard boots are not meant to be the main source of protection in an electrical hazard environment. EH boots are designed to be used as a secondary source of protection.