

TAKING THE RIGHT STEPS TO SAFETY

Choosing the Right Footwear

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 Dr Martens, Rock Fall®, uvex, Magnum, CAT, Ejendals and Dunlop® alongside our increasingly popular and cost effective Tuf Revolution and Tuf ranges.

Slip Resistance

Slips, trips and falls are an ever present hazard within most workplaces and safety footwear can play its part in preventing injury, particularly from slips, by featuring slip-resistant soles. With regard to current testing, the now established EN ISO 13287 with its progressive SRA, SRB and SRC ratings are commonly used. Details of the EN ISO 13287 testing requirements are shown in the table below:

SLIP RESISTANCE RATINGS FOR INDUSTRIAL PPE FOOTWEAR

Marking symbols and specifications

Marking	Footwear slip resistant on	Minimum coefficient of friction by ISO 13287:2006	
		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
	Tested on ceramic and steel floors with % solutions as above	Both the above on respective surfaces	Both the above on respective surfaces

NB: ISO 13287:2006 is identical to EN ISO 13287:2007

STANDARDS & INDUSTRIAL SYMBOLS

EN ISO 20345:2011 is the standard to which new and recently certified footwear has to conform. 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 200 joule toecap for impact protection. In addition to the over arching requirements of the standards there are a number of ratings which assist selection of footwear appropriate for varying workplace hazards.

Also included where relevant EN 61340-5-1: 2007 ESD performance

- SB** Safety basic footwear meeting all the minimum requirements of the standard
- S1** Additionally featuring anti-static properties and fully enclosed and energy absorbing heel unit
- S2** Additionally featuring the use of water resistant leather
- S3** Additionally featuring cleated outsole and pierce resistant midsole
- S4** Rubber or polymeric waterproof footwear with 200 joule toecap, anti-static properties and energy absorbing heel unit
- S5** Additionally featuring cleated outsole and pierce resistant midsole
- SBP** SB and P (upward penetration protection)
- S1P** S1 and P (upward penetration protection)

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

- | | | |
|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| P Protection from upward penetration provided by a composite or steel midsole (not used in conjunction with S3 or S5) | C Conductive properties helping to prevent the build-up of static (but no protection against electric shock) | HI Insulation against heat |
| M Metatarsal impact protection | A Anti-static properties to prevent the build-up of static and give limited protection against electric shock from nominal mains voltage | CI Insulation against cold |
| | | E Energy absorption in heel unit |
| | | WRU Water-resistant uppers |
| | | HRO Outsole resistance to hot contact up to 300°C |

ANTI-STATIC, ESD AND ELECTRICAL HAZARD SAFETY FOOTWEAR EXPLAINED

ANTI-STATIC

Anti-Static footwear has an electrical resistance between 0.1 and 1000 megaohm (M), 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 change of sparks igniting flammable substances or vapours. The aim is therefore to protect those wearing safety footwear (and their

colleagues) from dangers related to electrostatic build-up.



ESD

ESD has the same benefit as Anti-Static, however its resistance range is much lower. They have an electrical resistance between 0.1 and just 35 megaohm (M), measured according to EN 20344:2011.

For this reason, all ESD compliant footwear is anti-static, however not all anti-static footwear is ESD compliant.



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, in accordance with ASTM F2413-11.

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.

ADDITIONAL SAFETY FEATURES

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



SRB rating.
Tested on steel floor with glycerine solution



Waterproof footwear



Water-resistant uppers



Footwear available in women's sizes



Tested on ceramic tile floor with sodium lauryl solution



SRC rating.*
Tested on both ceramic tile and steel floors
*Tested to both SRA & SRB ratings



Footwear with anti-static soles



Footwear with safety midsole



Cold resistance



Heat resistant outsole compound tested to 300°C



Footwear with safety toecap



Footwear with Metatarsal protection – 100 Joules impact energy



Footwear with energy absorption of the seat region tested at 20 Joules

Footwear tested to EN ISO 13287 and the rating achieved will be identified by the appropriate SRA/SRB/SRC icon.