

# Safety Footwear Guide

## **Health & Safety**

#### Legislation

EN ISO 20345:2011 is the current standard to which new and recently certified footwear has to conform. (Whilst stock rotates some safety footwear may have been tested to the previous standard.) 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 progressive ratings which assist selection of footwear appropriate for varying workplace hazards, these are:

- 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

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

 P – protection from upward penetration provided by a composite or steel midsole (not used in conjunction with S3 or S5)

- M metatarsal impact protection
- C conductive properties helping to prevent the build-up of static (but no protection against electric shock)
- A anti-static properties to prevent the build-up of static and give limited protection against electric shock from nominal mains voltage
- HI insulation against heat
- CI insulation against cold
- E energy absorption in heel unit
- WRU water resistant uppers
- HRO resistance to hot contact up to 300°C

## **Buying Guide**

#### Choose 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, 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 CAT, Timberland, Dr Martens, RockFall, U-Power, Goliath & 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 it's part in preventing injury, particularly from slips, by featuring slip resistant soles.

For many years the test of choice for slip resistance has been SATRA's TM144 standard which evaluates the performance of the sole unit on a water wet quarry tile. Well established styles of footwear are likely to have been tested to TM144 and will be identified as such by the TM144 icon.

However with regard to new styles or footwear undergoing periodic re-testing the recently established EN ISO 13287 with it's progressive SRA, SRB and SRC ratings has become more widely used.

Details of the EN ISO 13287 testing requirements are shown in the table below:

Slip resistance ratings for industrial PPE footwear in Europe			
Marking symbols and specifications			
Marking	Footwear slip resistant on	Minimum coefficient of friction by ISO 13287:2006	
		Forward heel slip	Forward flat slip
SRA	Ceramic tile with 0.5% SLS solution	0.28	0.32
SRB	Steel with 90% glycerine	0.13	0.18
SRC	Both the above	Both the above on respective surfaces	Both the above on respective surfaces
NR- ISO 13287-2006 is identical to EN ISO 13287-2007			

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

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

#### Sizing

Safety footwear often carries European sizing, please see below for a comparison table.

#### **Shoe Size Conversion Table**

This table is for guidance only as sizes are not standardised

British 2 3 4 5 6 7 8 9 10 11 12 13 Continental 35 36 37 38 39 41 42 43 44 46 47 48

#### Maintenance

As with all footwear it is essential that, to achieve optimum performance of the properties built in to the safety footwear at time of manufacture, safety footwear is cleaned and maintained regularly.

