



# Safety Footwear

EN 20345



**EN 20345** specifies basic and additional (optional) requirements for safety footwear

**EN 20346** specifies basic and additional (optional) requirements for protective footwear

**EN 20347** specifies basic and additional (optional) requirements for occupational footwear

|  |   |
|--|---|
| <b>Basic requirements</b> - Safety footwear must have a 200J toecap. Other properties: |   |
|  | <b>P</b> - Penetration Resistance<br><b>C</b> - Conductive<br><b>A</b> - Antistatic<br><b>HI</b> - Insulating Against Heat<br><b>CI</b> - Insulating Against Cold<br><b>E</b> - Energy Absorbing Seat Region<br><b>WRU</b> - Uppers Resistant to Water Penetration / Absorption<br><b>HRO</b> - Outsole Resistant to Hot Contact                        |
| <b>Classification I</b>  | Made from leather and other materials but not all-rubber or all-polymeric types   |
|  | <b>S<sub>B</sub></b> - Basic requirements for safety footwear met<br><b>S<sub>1</sub></b> - Basic requirements plus closed and energy absorbing seat region, and anti-static<br><b>S<sub>2</sub></b> - as S <sub>1</sub> plus water penetration and absorption<br><b>S<sub>3</sub></b> - as S <sub>2</sub> plus penetration resistance and cleated sole |
| <b>Classification II</b>   | All-rubber or all-polymeric types   |
|  | <b>S<sub>B</sub></b> - Basic requirements for safety footwear met<br><b>S<sub>4</sub></b> - Basic requirements plus energy absorbing seat region, and anti-static<br><b>S<sub>5</sub></b> - As S <sub>4</sub> plus penetration resistance and cleated sole  |

| Slip resistance ratings for industrial PPE footwear in Europe |                                     |  |                                       |
|---|-------------------------------------|--|---------------------------------------|
| Marking symbols and specifications                            |                                     |  |                                       |
| Marking   | Footwear slip resistant on          | Minimum co-efficient of friction by ISO 13287:2012 |                                       |
|   |                                     | 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 |

## Footwear Size Conversions

|        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| UK     | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Europe | 34 | 35 | 36 | 37 | 38 | 39 | 41 | 42 | 43 | 44 | 46 | 47 | 48 | 49 | 50 | 51 |

Read more on Clad Safety's Safety Standards Guide [here](#).