

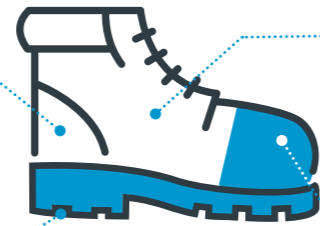
STANDARDS FOR SAFETY FOOTWEAR



EN ISO 20345 : 2022

1 FUNDAMENTAL REQUIREMENTS

Resistance, safety and performance of materials



Ergonomics and comfort

Slip protection (ceramic floor / soapy water)

End cap resistance to impact (200 J) and crushing (1500 daN)

2 MAIN MARKINGS

		SHOES/BOOTS IN LEATHER AND OTHER MATERIALS*												POLYMER SHOES / BOOTS				
		S1 BREATHABLE SHOES					WATER-REPELLENT S2 OR S3 SHOES				SHOES WITH MEMBRANE							
		MARKING																
		SB	S1	S1P	S1PL	S1PS	S2	S3	S3L	S3S	S6	S7	S7L	S7S	S4	S5	S5L	S5S
FUNDAMENTAL REQUIREMENTS		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Closed heel area			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Antistatic shoes A			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Heel energy absorption E			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Anti-puncture insert P PL PS				metallic P >4,5 mm	wide point fabric PL >4,5 mm	textile fine point PS >3 mm		metallic P >4,5 mm	wide point fabric PL >4,5 mm	textile fine point PS >3 mm		metallic P >4,5 mm	wide point fabric PL >4,5 mm	textile fine point PS >3 mm		metallic P >4,5 mm	wide point fabric PL >4,5 mm	textile fine point PS >3 mm
Sole with studs							•	•	•		•	•	•		•	•	•	
Water resistance - stem materials WPA							•	•	•	•	•	•	•					
Water resistance - whole shoe WR												•	•	•				

*excluding rubber or any polymer

3 ADDITIONAL MARKINGS

SC NEW

Abrasion resistance of stone guards

LG NEW

Grip System Unhooked heel

SR NEW

ceramic floor + oil
Slip resistance

HRO

Heat resistance of the outsole

M

Metatarsal protection

AN

Malleolus protection

HI

Base insulation (hot)

CI

Base insulation (cold)

FO

Resistance to hydrocarbons

CR

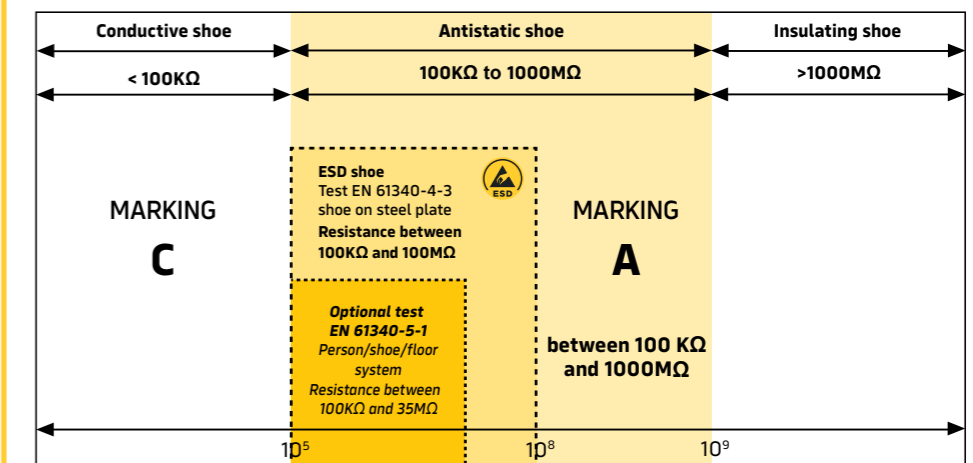
Cut resistance

C

Conductive shoes

ESD standard

'ESD' stands for Electrostatic Discharge. Unlike the antistatic properties claimed in standard EN 20345 ('A' marking), ESD is not a personal protection standard.



The standard aims to prevent electrostatic discharges that can damage electronic equipment handled by the user.

ESD footwear therefore guarantees the dissipation of electrostatic charge from the wearer to the ground. To be ESD certified, the electrical resistance of safety footwear must be between 100KΩ and 100MΩ.