

EN 61340-4-3:2018

This part of EN 61340 describes a test method for determining the electrical resistance of footwear used in the control of electrostatic potential on people. This standard is suitable for use by the manufacturer of footwear as well as the end user.

Electrostatic conductive footwear

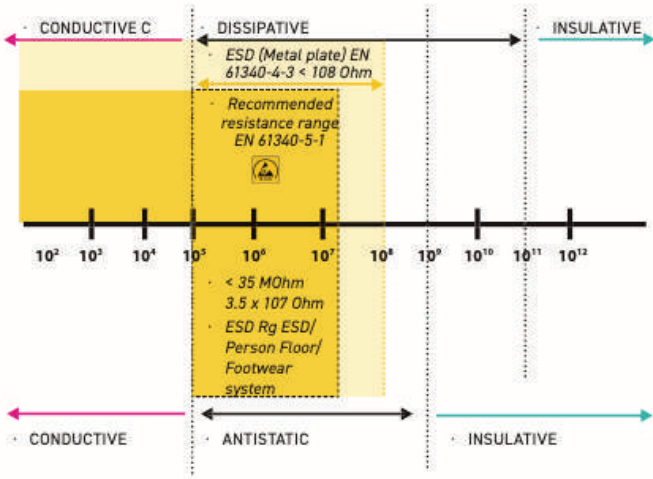
Footwear as tested by the method described in this standard with an electrical resistance of $< 1 \Omega \times 10$.

Electrostatic dissipative footwear

Footwear as tested by the method described in this standard with an electrical resistance of $> 1 \Omega \times 10$ and $< 1 \Omega \times 10^9$.

Floor/Footwear System used for primary grounding - ESD Standard EN 61340

Occupational and safety shoes standard - EN ISO 20344 to EN ISO 20347. The level of charge generated is influenced by atmospheric humidity.



EN ISO 20347:2012

The International Standard specifies basic and additional (optional) requirements for occupational footwear that is not exposed to any mechanical risks (impact or compression).

Category	Additional requirements
0B	Conforms to the basic requirements set out by the standard EN ISO 20347: 2012
01	Closed seat region, antistatic properties, energy absorption of seat region
02	As 01 plus: Water penetration and absorption
03	As 02 plus: Penetration resistance, cleated outsole
04	Closed seat region, antistatic properties, energy absorption of seat region
05	As 04 plus: Penetration resistance, cleated outsole

EN ISO 13287:2019

This European Standard specifies a method of test for the slip resistance of conventionally soled safety, protective and occupational footwear. It is not applicable to special purpose footwear containing spikes, metal studs or similar.

The item of footwear to be tested is put on a surface, subjected to a given normal force and moved horizontally relative to the surface. The frictional force is measured and the dynamic coefficient of friction is calculated.

If the outsole passes both the ceramic tile test (SRA) and the steel floor test (SRB) it is marked as SRC.

Marking Code	Test Surface	Coefficient of Friction (EN 13287)	
		Forward Heel Slip	Forward Flat Slip
SRA	Ceramic tile with SLS*	≥ 0.28	≥ 0.32
SRB	Steel floor with Glycerol	≥ 0.13	≥ 0.18
SRC	Ceramic tile with SLS* & Steel floor with Glycerol	≥ 0.28 ≥ 0.13	≥ 0.32 ≥ 0.18

* Water with 5% Sodium Lauryl Sulphate (SLS) solution

EN 13832-2:2006



Footwear Protecting Against Chemicals

Footwear protecting against chemicals - Part 2: Requirements for footwear resistant to chemicals under laboratory conditions

Resistance to degradation: Samples are placed in contact with the chemical for 23 hours.

Chemical	Resistance
This footwear resists degradation by the stated chemicals (at least 2 from the list below).	
B - acetone	
D - dichloromethane	
F - toluene	
G - diethylamine	
H - tetrahydrofuran	
I - ethyl acetate	
J - n-heptane	
K - 30% sodium hydroxide	
L - 95% sulphuric acid	
M - 65% nitric acid	
N - 99% acetic acid	
O - 25% ammonia solution	
P - 30% hydrogen peroxide solution	
Q - isopropanol	
R - 13% sodium hypochlorite	
- toecap strength (200J or 100J) ¹	

ASTM F2413-18

Standard specification for performance requirements for protective (safety) toe cap footwear.

The specification contains performance requirements for footwear to protect workers feet from the following hazards by providing:

- I** Impact resistance (I) for the toe area of footwear.
- C** Compression resistance (C) for the toe area of the footwear.
- Mt** Metatarsal impact protection (Mt) that reduces the chance of injury to the metatarsal bones at the top of the foot.
- Cd** Conductive properties (Cd) which reduce hazards that may result from static electricity buildup, and reduce the possibility of ignition of explosives and volatile chemicals.
- EH** Electric hazard protection (EH), to protect the wearer when accidental contact is made by stepping on live electric wires.
- SD** Static dissipative properties (SD) to reduce hazards due to excessively low footwear electrical resistance that may exist where SD footwear is required.
- PR** Puncture resistance (PR) footwear devices.

For further information please call our team on 0345 500 6060 or email sales@safetecdirect.co.uk

www.safetecdirect.co.uk

Safetec direct.co.uk
EXPERT SAFETY & WORKWEAR SUPPLIERS