

EN ISO 20345 – Safety Footwear

Your foot is the foundation of your body. Like the foundation of a building, they need to be strong. You spend a lot of time on your feet and if you don't wear the correct safety footwear and are caught in an accident you could do damage which could cause your life to change drastically.

According to HSE statistical analysis, 196,910 (29%) of accidents in 2016/2017 are caused by slips. Some of these could have been prevented with correct footwear. Getting the right footwear will make life safer and easier. Employers are legally responsible for providing the correct footwear.

The safety footwear standard is referred as EN ISO 20345. The EN ISO 20345 standard sets out minimum requirements that safety footwear must be successfully tested against.

The standard specifies *all* safety footwear must have toe protection. Basic safety footwear will have this as a minimum, but safety footwear can be tested for a lot of extra protective features. These are referred to as letter combinations which are explained below.

Rating	Letter Combinations	Description
NS	-	Non-Safety, Does not comply with EN ISO 20345.
SB	-	Safety toecap protecting against 200J impact.
SBP	P	As per SB, with penetration resistant midsole (P).
S1	A FO E	As per SB, with Anti-static properties (A), Fuel oil resistant outsole (FO), Energy absorbing heel (E).
S1P	A FO E P	As per S1, with penetration resistant midsole (P).
S2	A FO E WRU	As per S1, with Water resistant upper (WRU).
S3	A FO E WRU P	As per S2, with penetration resistant midsole (P).
S4	A FO E Waterproof	As per S1, with waterproof seal.
S5	A FO E P Waterproof	As per S4, with penetration resistant midsole (P).

Other additional testing may give

C - Conductive

I - Electrical Insulating Footwear

HI - Insulation against heat

CL - Insulation against cold

M - Metatarsal Protection

AN - Ankle protection

CR - Cut resistant upper

HRO - Heat resistant outside compound: shall withstand 300 °C for 60s

WR - Water resistant footwear

In addition to the ratings shown above (S1, SB, S3 etc) all safety footwear must have a degree of slip resistance. The levels of slip resistance are:

Slip Resistance Rating	Explanation
SRA	Slip resistance on ceramic tile floor with dilute soap solution.
SRB	Slip resistance on steel floor with glycerol.
SRC	Slip resistance on ceramic tile floor with dilute soap solution and on steel floor with glycerol.