







Protective Footwear EU Standards

Main standards concerning Footwear Protection.

EN345-1/EN ISO 20345

Specification for safety footwear for the workplace. In reference to standard EN345-1/EN ISO 20344, this European standard defines the basic and the additional (optional) requirements for safety footwear for the workplace marked "S"








The shoe was designed, and is equipped with safety toe caps designed to withstand a maximum impact of 200 joules and crushing up to 15kN

CLASS 1 or 2		EN345-1/EN ISO 20345
ALL MATERIALS	SB: basic properties	
CLASS 1 ALL MATERIALS EXCEPT FOR NATURAL OR SYNTHETIC	S1: basic properties plus: - closed back - anti-static - energy absorbing heel	
	S2: the same as S1 plus: - water resistant upper leather	
	S3: the same as S2 plus: - penetration resistant midsole - cleated outsole	
CLASS 2 NATURAL AND SYNTHETIC POLYMERS	S4: basic properties - anti-static - energy absorbing heel	
	S5: the same as S4 plus: - penetration resistant midsole - cleated outsole	




All footwear have energy absorbing heels indicated by the following icon:



SYMBOLS FOR INDIVIDUAL SPECIFICATIONS ARE DEFINED IN THE FOLLOWING TABLE

WHOLE SHOE	Penetration resistant midsole	P	
	RESISTANCE TO AGGRESSIVE ENVIRONMENTS Heat-insulated sole	HI	
	Safety Toe Cap	STC	
	Water-resistant sole/upper juncture in leather shoes	WR	
UPPER	Antistatic Protection	A	
	Water-resistant upper for leather shoes	WRU	
OUTSOLE	Contact-heat resistant outsole	HRO	

RESISTANCE TO SLIPPING

FLOOR TYPES	SYMBOLS	
Hard industrial floors, for indoor use (such as food industry tiled flooring)	SRA	
Hard industrial type floors for indoor or outdoor uses (paint or resin type flooring in industry)	SRB	
All types of hard floors for multiple uses indoors or outdoors	SRC	

SIZE CORRESPONDENCE TABLE

EURO	35	36	37	38	39	41	42	43	44	46	47	48	49	50
UK	2	3	4	5	6	7	8	9	10	11	12	13	14	15

WHAT IS THE DIFFERENCE BETWEEN STEEL AND COMPOSITE TOE CAPS?

Steel Toe Caps

Traditional. Tough piece of steel covering the toes, preventing objects from falling on and crushing them.

Composite Toe Caps

Contain no metal, so they are made from materials such as plastics, carbon fibre and rubbers.

	 Steel Toe Caps	 Composite Toe Caps
Pro's	<ul style="list-style-type: none"> - Puncture protection - Shatter proof - Tend to cost less 	<ul style="list-style-type: none"> - Lightweight - Better electrical resistance (when exposed) - Does not set of metal detectors - Great insulation in cold climates
Con's	<ul style="list-style-type: none"> - Weighs more - Poor insulation in cold climates - Sets of metal detectors 	<ul style="list-style-type: none"> - Puncture protection not as great - Tends to be more expensive