



Footwear Product Guide

Safety Footwear protects the feet/lower leg of workers when working in hazardous environments.

Risks must be assessed to identify the appropriate protection features that are required.

Hazards include toe impact, sole penetration, slippery/oily surfaces, hot surfaces, and areas in which chemicals are used.

Footwear selection made simple

Step 1

Identify risks (chemicals, hazardous, puncture, slip, temperature, working environment, static)

Step 2

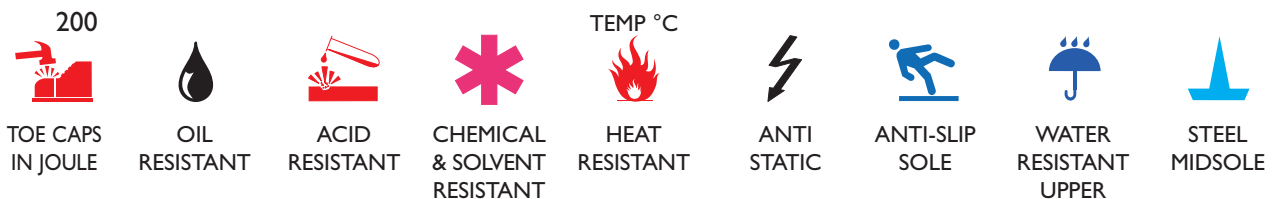
Identify footwear which offers protection from the identified risks, using the icons below as reference.

Step 3

Conduct trials from the products identified.

Step 4

If unsure, call your Eurosafe expert to clarify and help.



For your benefit a size conversion of english and continental sizes is shown below.

ENGLISH	1	2	3	4	5	6	6 1/2	7	8	9	10	10 1/2	11	12	13	14	15
CONTINENTAL	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

European Standards Footwear Classification (Pre September 2005)

The principal classification of footwear is based on the level of protection offered by the footwear. The table below explains the scheme in detail.

CE EN345-I

- Safety Footwear.
- Highest protection.
- Toecaps tested to 200 joules.
- S classification.

SB Basic safety protection. 200 joule

S1 200 joule toecap protection. Closed seat region (fully enclosed heel). Antistatic properties. Energy absorption of seat region.

S2 200 joule toecap protection. Closed seat region (fully enclosed heel). Antistatic properties. Energy absorption of seat region. Plus water penetration and water absorption resistance.

S3 200 Joule Toecap protection. Closed seat region (fully enclosed heel) Antistatic properties. Energy absorption of seat region. Water penetration and water absorption resistance. Plus penetration resistance. Cleated outsole.

S4 200 Joule Toecap protection. All rubber or all polymeric footwear with antistatic properties. Energy absorption of seat region.

S5 200 Joule Toecap protection. All rubber or all polymeric footwear with antistatic properties. Energy absorption of seat region. Plus penetration resistance. Cleated outsole.

CE EN346-I

- Protective Footwear.
- Lower protection.
- Toecaps tested to 100 joules.
- P classification.

PB Basic protection. 100 joule

P1 100 joule toecap protection. Closed seat region (fully enclosed heel). Antistatic properties. Energy absorption of seat region.

P2 100 joule toecap protection. Closed seat region (fully enclosed heel). Antistatic properties. Energy absorption of seat region. Plus water penetration and water absorption resistance.

P3 100 Joule Toecap protection. Closed seat region (fully enclosed heel) Antistatic properties. Energy absorption of seat region. Water penetration and water absorption resistance. Plus penetration resistance. Cleated outsole.

Additional Safety Features

- Should these products offer some extra protective feature, then the appropriate symbol would be added.

P Penetration resistance offered by a steel midsole: 1100 Newtons.

C Conductive footwear

A Antistatic footwear. Range 100k to 1000m

HI Insulation against heat

CI Insulation against cold

E Heel energy absorption: 20 joules

WRU Water penetration and water absorption resistant uppers

HRO Heat resistant outsole up to 300°C

ORO Oil resistant outsole

New Safety Standards

There is a new Safety Standard being introduced across Europe that will replace the current EN standard

EN345-I
will be replaced with
ENISO 20345-I

Please Note

All certificates issued to EN345-I will remain valid indefinitely.

This means you will be able to continue using the footwear marked with EN345.

From September 2005 all new products must be tested and certified to the new standards ENISO 20345-I

What are the changes in the standards?

The standards are mostly identical to the old ones, but there are a few changes:

- The footwear must be assessed for ergonomics.
- Leather components must be tested for Chromium VI content.
- If the footwear has in-socks, these are tested instead or in addition to the insole.
- All upper components, including collar materials are subject to testing.
- There are also some minor changes in some of the test methods – for example, toe cap testing, impact and compression resistance samples undergo slightly different preparation prior to the test.

Overleaf are the new ENISO 20345-I Categories

This information has been kindly given by Briggs Industrial Footwear Ltd.

For further guidance please contact your **EURSAFE** Member who will be pleased to assist with product selection



STANDARDS

UNI ENISO20344-I	Requirements and test methods for safety, protective and working shoes for professional use.
UNI ENISO20345-I	Specifications for safety shoes for professional use.
UNI ENISO20346-I	Specifications for protection shoes for professional use.
UNI ENISO20347-I	Specifications for working shoes for professional use.
D.Lgs 475/92	Accomplishment of 89/868/CEE Directive.
D.Lgs 626/94	Accomplishment of directive on improvement of health and safety of workers at workplace.
Dir.89/686/CEE	Directive of the Council regarding the standardisation of legislation of Member States in the D.P.I field.
CEI EN 100015/1	Protection of electronic devices against electrostatic discharges – ESDS.

CATEGORIES

Category	Description	ENISO 20345-I	ENISO 20347-I
A	Anti-static footwear	Footwear with toe protection against 200 J impact	SB ORO
E	Energy absorption in the heel region		S1 A + ORO + E
ORO	Oil resistance of outer sole		S1P A + ORO + E + P
P	Penetration resistance		S2 A + ORO + E + WRU
HRO	Heat resistance of outer sole		S3 A + ORO + E + WRU + P
CI	Cold insulation	OCCUPATIONAL FOOTWEAR	S4 A + ORO + E + Leakproofness
HI	Heat insulation		S5 A + ORO + E + P + Leakproofness
WR	Water resistant footwear		01 A + ORO + E
WRU	Water resistant upper		01P A + ORO + E + P
M	Foot arch protection footwear		02 A + ORO + E + WRU
			03 A + ORO + E + WRU + P
			04 A + ORO + E + Leakproofness
			05 A + ORO + E + P + Leakproofness

ADDITIONAL SYMBOLS	ADDITIONAL SAFETY REQUIREMENTS	EN ISO 20345-I				EN ISO 20347-I		
		SB	S1	S2	S3	01	02	03
L	Toe cap resistant to 200 joule	X	X	X	X	-	-	-
ORO	Oil resistance of outer sole (hydrocarbons)	X	X	X	X	O	X	X
A	Anti-static footwear	O	X	X	X	O	X	X
E	Energy absorption in the heel region	O	X	X	X	O	X	X
WRU	Water resistant upper	O	-	X	X	O	-	X
P	Penetration resistance (steel insole)	O	O	-	X	O	O	X
WR	Water resistant footwear	O	-	O	O	O	-	O
M	Foot arch protection footwear	O	O	O	O	O	O	O
CI	Cold insulation (tested at -20°C)	O	O	O	O	O	O	O
HI	Heat insulation	O	O	O	O	O	O	O
HRO	Heat resistance of outer sole (at 300°C for 1 min)	O	O	O	O	O	O	O

X = Compulsory for the relevant category

O = Optional, applicable in addition to the compulsory requirements if marked