## TYPES OF PROFESSIONAL FOOTWEAR

Protective footwear is classified into the following types:

- **A:** Shoe
- **B:** Low boot with ankle support
- **C:** Ankle boot
- **D:** Mid-calf boot
- **E:** Long boot

It is classified by the following codes:

- **I:** Footwear made from leather and other materials. Excludes footwear that is entirely made of rubber or polymer materials.
- **II:** Footwear made entirely from rubber (vulcanised) or polymer materials.

These types can be further divided into:

- Safety footwear
- Protective footwear
- Work footwear

## PROTECTION

Depending on how they work, footwear for professional use must protect against the following risks:

- **Foot injuries due to external actions:**
  - Thermal hazards (cold, heat, flames, splashes of molten metal, etc.).
  - Chemical hazards (powders, corrosive liquids, toxic products or irritants, etc.).
  - Mechanical hazards (knocks, trapping, crushing, perforations, punctures, etc.).

- **Hazards to people due to action on feet:**
  - Hazard of slipping and falling.
  - Electrical hazards (contact with live electrical conductors, electrostatic discharge, etc.).
  - Hazards due to radiation and contamination (UV rays, radioactive products, etc.).
### Health hazards or discomfort associated with the use of footwear:
- Biological hazards (allergies, irritation, etc.).
- Hazards due to discomfort at work caused by the use of the footwear (bad fit, infiltration of water, lack of flexibility, sweating, etc.).
- Other health-related risks (sprains, dislocations, etc.).

### MARKING
Protective footwear must be marked with the following elements:
- CE marking (according to Royal Decree 1407/1992 on conditions for marketing and free movement of personal protection equipment around the European Community).
- Size.
- Trademark or identification of the manufacturer.
- Name or reference of model.
- Date of manufacture (at least the quarter and the year).
- Number of the harmonised regulation used to assess the product’s conformity with essential health and safety requirements.
- Different markings depending on the footwear’s hazard prevention performance (SB, P, E, HRO, etc.). These markings should be explained in the manufacturer’s information booklet (which must be supplied with the product).

### SELECTION: RECOMMENDATIONS
- Before personal protection equipment is purchased, the **table of risks** should be completed to obtain more accurate criteria.
- The **manufacturer’s information booklet** should be considered, and must include the following useful information:
  - Name and address of the manufacturer or authorised representative.
  - Name or reference of the model.
  - Sizes available and classes of protection.
  - Explanation of brands.
  - Storage, use, maintenance, cleaning and disinfection.
## SELECTION OF PERSONAL PROTECTION EQUIPMENT (PPE): PROFESSIONAL FOOTWEAR

<table>
<thead>
<tr>
<th>TYPE</th>
<th>CHARACTERISTICS</th>
<th>Example of marking (*)</th>
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<tbody>
<tr>
<td>Safety footwear</td>
<td>Includes a safety stop or safety tip that ensures protection against a 200-joule impact and static compression under a load of 15 kN. (basic requirements)</td>
<td>SB: meets basic requirements for safety footwear met.</td>
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<td>P: penetration resistance of the sole, up to a penetration force of 1100 N.</td>
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<td>E: energy absorbing seat region, up to 20 J.</td>
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<td>HRO: outsole resistant to hot contact. Resistance is determined by passing a test at 300°C on a hot metal plate for 1 minute, without any damage appearing.</td>
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<tr>
<td>Protective footwear</td>
<td>Includes a safety stop or safety tip that ensures protection against a 100-joule impact and static compression under a load of 10 kN.</td>
<td>C: electrical resistance no higher than 100 kohms. The footwear is conductive to reduce electrostatic build-up by dissipating electrostatic charges as quickly as possible.</td>
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<tr>
<td></td>
<td></td>
<td>A: electrical resistance of between 0.1 and 1,000 Mohms. Antistatic footwear that reduces electrostatic build-up by dissipating electrostatic charges, thus preventing the risk of sparks igniting flammable substances and gases, for example.</td>
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<td>HI: resistant to aggressive environments. Insulates from heat. Delays temperature rises (below 22°C).</td>
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<td>CI: insulates from cold (at temperatures below 10°C).</td>
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<td>Work footwear</td>
<td>Incorporates protection components designed to protect the user from potential injuries to the toes.</td>
<td>WRU: water resistant upper only.</td>
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<td>M: metatarsal protection.</td>
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<td>CR: cut-proof.</td>
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<td>ORO: resistant to hydrocarbons.</td>
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