

User Information

This safety footwear complies with MS ISO 20345:2008. It is certified by SIRIM QAS INTERNATIONAL SDN. BHD.

Safety footwear is designed to minimize the risk of injury by the wearer. It is designed to be used in conjunction with safe working environment and will not completely prevent injury if an accident occurs which exceeds the testing limits of MS ISO 20345:2008. Safety footwear toecaps designed to give protection against impact when tested at an energy level of at least 200J and against compression when tested at a compression load of at least 15kN. This safety footwear protects the wear's toes against risk of injury from falling objects and crushing when worn in industrial and commercial environments where potential hazards occur. This safety footwear has been tested and passed according to the ANSI/ESD STM9.1-2022 standard. This standard assesses the electrical resistance of footwear, ensuring that it is within a range suitable for electrostatic discharge (ESD) protection. The shoes meet the ANSI/ESD STM9.1-2022 requirement with a maximum resistance of $1 \times 10^9 \Omega$, confirming their effectiveness in managing electrostatic properties for safety applications.

Markings

Marking on footwear denotes that the footwear is licensed according to the PPE Regulation and it as follows.

Item	Examples of markings
Manufacturer's identification mark	WORKSafe
Number of European standard	MS ISO 20345:2008
Footwear size	6/40
Month and year of manufacturer	12/2024
Category of protection	S1
Additional property symbols, e.g. SR (Slip resistance on greasy ground)	P
CE mark	CE

Marking Categories of safety footwear

Category	Class I*					Class II**		
	SB	S1	S1P	S2	S3	SB	S4	S5
Properties								
Safety Basic Requirement including Impact Resistant and Compression Resistant Toecap	X	X	X	X	X	X	X	X
Closed Seat Region		X	X	X	X		X	X
Energy Absorption of Seat Region (E)		X	X	X	X		X	X
Antistatic Properties (A)		X	X	X	X		X	X
Penetration Resistant (P)			X		X			X
Water Penetration and absorption (WRU)				X	X			
Cleated Outsole					X			X

* **Class I:** Footwear made from leather and other materials excluding all-rubber or all-polymeric footwear.
 ** **Class II:** All-rubber (i.e. entirely vulcanized) or all-polymeric (i.e. entirely moulded) footwear.

NOTE 1 For ease of marking, this table categorizes safety footwear with the most widely used combinations of basic and additional requirements.

Additional requirements for safety footwear

Additional protection can be necessary for safety footwear depending upon risks to be encountered at workplace. In such cases, safety footwear shall conform to the appropriate additional requirements and corresponding marking give below.

Requirement	Classification		Symbol
	Class I	Class II	
Whole footwear	Penetration resistance (1100N)		
	Electrical properties		X X P
	Partially conductive footwear (Max 100kΩ)		X X C
	Antistatic footwear (Range of 100kΩ to 1000MΩ)		X X A
	Electrically insulating footwear		X I
	Resistance to inimical environments		
	Heat insulation of sole complex		X X HI
	Cold insulation of sole complex		X X CI
	Energy absorption of seat region (20J)		X X E
	Water resistance		X WR
	Metatarsal protection		X X M
Ankle protection		X X AN	
Upper	Water penetration and absorption		X WRU
	Construction		X
	Cut resistance		X X CR
Outsole	Cleated area		X X
	Thickness of cleated outsoles		X X
	Cleat height		X X
	Resistance to hot contact		X X HRO

NOTE The applicability of a requirement to a particular property is indicated by an X

Perforation resistance

A non-metal, penetration-resistance insert is included.

The penetration resistance of this footwear has been measured in the laboratory using a truncated nail of diameter 4.5mm and a force of 1100N. A higher force or nails of smaller diameter will increase the risk of penetration occurring. Consider alternatives if needed.

Both metal and non-metal inserts meet the minimum requirements for penetration resistance of the standard marked on this footwear but each has different attributes:

Metal is less affected by the shape of sharp object / hazard (ie diameter, geometry, sharpness) but due to the shoemaking limitations does not cover the entire lower area of the shoes.

Non-metal may be lighter, more flexible and provide greater coverage area when comparing with metal but the penetration resistance may vary more depending on the shape of the sharp object/hazard (ie diameter, geometry, sharpness).

Insock

The footwear is designed to be used with the provided removable insock. Do not replace the insock with anything other than a comparable insock supplied by the original footwear manufacturer or an insock manufacturer that guarantees compatibility with this standard.

Antistatic footwear

Antistatic footwear should be used if it is necessary to minimize electrostatic build-up by dissipating electrostatic charges, thus avoiding the risk of spark ignition of, for example flammable substances and vapours, and if the risk of electric shock from any electrical apparatus or live parts has not been completely eliminated. It should be noted, however, that antistatic footwear cannot guarantee an adequate protection against electric shock as it introduces only a resistance between foot and floor. If the risk of electric shock has not been completely eliminated, additional measures to avoid this risk are essential. Such measures, as well as the additional tests mentioned below, should be a routine part of the accident prevention program at the workplace.

Experience has shown that, for antistatic purposes, the discharge path through a product should normally have an electrical resistance of less than 1 000 M Ω at any time throughout its useful life. A value of 100 k Ω is specified as the lowest limit of resistance of a product when new, in order to ensure some limited protection against dangerous electric shock or ignition in the event of any electrical apparatus becoming defective when operating at voltages of up to 250 V. However, under certain conditions, users should be aware that the footwear might give inadequate protection and additional provisions to protect the wearer should be taken at all times.

The electrical resistance of this type of footwear can be changed significantly by flexing, contamination or moisture. This footwear will not perform its intended function if worn in wet conditions. It is, therefore, necessary to ensure that the product is capable of fulfilling its designed function of dissipating electrostatic charges and also of giving some protection during the whole of its life. The user is recommended to establish an in-house test for electrical resistance and use it at regular and frequent intervals.

Classification I footwear can absorb moisture if worn for prolonged periods and in moist and wet conditions can become conductive.

If the footwear is worn in conditions where the soling material becomes contaminated, wearers should always check the electrical properties of the footwear before entering a hazard area. Where antistatic footwear is in use, the resistance of the flooring should be such that it does not invalidate the protection provided by the footwear.

In use, no insulating elements, with the exception of normal hose, should be introduced between the inner sole of the footwear and the foot of the wearer. If any insert is put between the inner sole and the foot, the combination footwear/insert should be checked for its electrical properties.

Shoe care tips

It only takes a minute to care for your shoes. Proper care, storage and wear in correct working environment will add lifespan to the footwear. It also ensures maximum comfort and protection for your feet. The actual wear life for footwear is dependent on the type of footwear, environmental conditions which can affect the wear, contamination and degradation of the product.

1. Clean your shoes regularly. Remove any dirt gently with damp cloth or a stiff bristle brush.
2. Clean your outsole regularly to prevent clogging of cleats.
3. Do not use any caustic cleaning agents
4. Always store your shoes in dry ventilated conditions with normal conditions (Temperature, and relative humidity).
5. Where footwear is subjected to wet conditions, it is allowed to dry naturally in a cool dry area and not be force dried as this can cause deterioration of the upper material.
6. Change your socks regularly for better hygiene.

When to replace my shoes?

The lifetime of shoe is not endless as shoes may become worn out or damaged. Here are some signs to remind you that it is time to replace your shoes.

Toecap:

- The material above the steel toecap is abraded and the toecap is visible.
- Toecap is deformed by impact or compression accident.

The sole:

- The bond has either failed, the entire sole profile is abraded or broken.
- The steel mid-sole is broken or penetrated.

Shoe body (Shoe upper):

- Broken or torn