

“Info Sheet” for Foot Protection

If you are at risk for foot injury at your workplace, you should wear the appropriate protective footwear.

- If foot protection is required, set up a complete foot safety protection program including selection, fit testing, training, maintenance and inspection.
- Safety footwear is designed to protect feet against a wide variety of injuries. Impact, compression, and puncture are the most common types of foot injury.
- Choose footwear according to the hazard. Refer to CSA Standard Z195 "Protective Footwear".
- Select CSA-certified footwear. Ensure that it has the proper rating for the hazard and the proper sole for the working conditions.
- Use metatarsal protection (top of the foot between the toes and ankle) where there is a potential for injury.

Footwear must be chosen based on the hazards that are present. Assess the workplace and work activities for:

- Materials handled or used by the worker.
- Risk of objects falling onto or striking the feet.
- Any material or equipment that might roll over the feet.
- Any sharp or pointed objects that might cut the top of the feet.
- Objects that may penetrate the bottom or side of the foot.
- Possible exposure to corrosive or irritating substances.
- Possible explosive atmospheres including the risk of static electrical discharges.
- Risk of damage to sensitive electronic components or equipment due to the discharge of static electricity.
- Risk of coming into contact with energized conductors of low to moderate voltage (e.g., 220 volts or less).

Also, evaluate the risk:

- To ankles from uneven walking surfaces or rough terrain; of foot injury due to exposure to extreme hot or cold; of slips and falls on slippery walking surfaces or of exposure to water or other liquids that may penetrate the footwear causing damage to the foot and the footwear and of exposure to rotating or abrasive machinery (e.g., chainsaws or grinders)

What to look for in fit...

- Walk in new footwear to ensure it is comfortable.
- Boots should have ample toe room (toes should be about 12.5 mm from the front)
- Make allowances for extra socks or special arch supports when buying boots.
- Boots should fit snugly around the heel and ankle when laced.






- Lace up boots fully. High-cut boots provide support against ankle injury.




Recommended Care

- Use a protective coating to make footwear water-resistant.
- Inspect footwear regularly for damage.
- Repair or replace worn or defective footwear.
- Electric shock resistance of footwear is greatly reduced by wet conditions and with wear.

What symbols will be on the footwear?

- The following symbols, or markings, will help you determine which footwear is appropriate for the job.

Selection of Safety Footwear		
Marking	Criteria	Use
	Green triangle footwear has sole puncture protection with a Grade 1 protective toe (withstand impact up to 125 joules).	Any industrial or heavy work environment, including construction, where sharp objects are present (such as nails).
	Yellow triangle footwear has sole puncture protection and Grade 2 protective toe (withstand impact up to 90 joules)	Light industrial work environments that need both puncture and toe protection.
	White rectangle with orange Greek letter "omega" footwear has soles that provide electric shock resistance.	Any industrial environment where accidental contact with live electrical conductors can occur. REMEMBER: Electric shock resistance is greatly reduced by wet conditions and with wear. Also know that conductive footwear as listed in CSA Z195-09 relates to an electrical discharge that might ignite volatile, flammable materials that are close to the wearer. Live electrical work should follow recommendations for an electrically conductive clothing ensemble (as specified under CAN/ULC-60895).
	Yellow Rectangle with green letters "SD" and grounding symbol footwear has soles that are static dissipative.	Any industrial environment where a static discharge can be a hazard for workers or equipment.
	Red rectangle with black letter "C" and grounding symbol footwear has soles that are electrically conductive.	For any industrial environment where low-power electrical charges can be a hazard for workers or equipment.

	White label with green fir tree symbol footwear provides protection when using chainsaws.	For forestry workers and others who work with or around hand-held chainsaws and other cutting tools.
	Blue rectangle footwear provides Grade 1 protective toe with no protective sole	For industrial work that does not require puncture protection.
	Grey rectangle footwear provides Grade 2 protective toe with no protective sole	For institutional and non-industrial work that does not require puncture protection.

- Note 1: The ® symbol indicates the preferred position for the identifying logo or mark or the certifying agency.
- Note 2: Labels are on the tongue of the right shoe at ankle height. They may also appear at ankle height on the shoe itself (for electrical protection footwear)
- From: "Z195-09 Protective Footwear" , Canadian Standards Association, 2009.

Other markings

An "internal protection code" is also required. This code will be permanently marked on the outside or inside of at least one shoe/boot.

Protection Code

Position:	1	2	3	4	5
Mark:	1	P	M	E	X

Position:

1. level of toe protection (1 for Grade 1, 2 for Grade 2, 0 if not)
2. presence of puncture-resistant sole (P if present, 0 if not)
3. presence of metatarsal protection (M if present, 0 if not)
4. type of electrical protection (E if shock resistant, S if static dissipative, C if conductive, 0 if no protection)
5. chainsaw protection (X if present, 0 if not)

Reference Material Sources

- <http://www.ccohs.ca/oshanswers/prevention/ppe/footwear.html>
- Z195.1-02 Guideline on Selection, Care and Use of Protective Footwear, Canadian Standards Association, 2002.

- Z195-09 Protective Footwear" , Canadian Standards Association, 2009