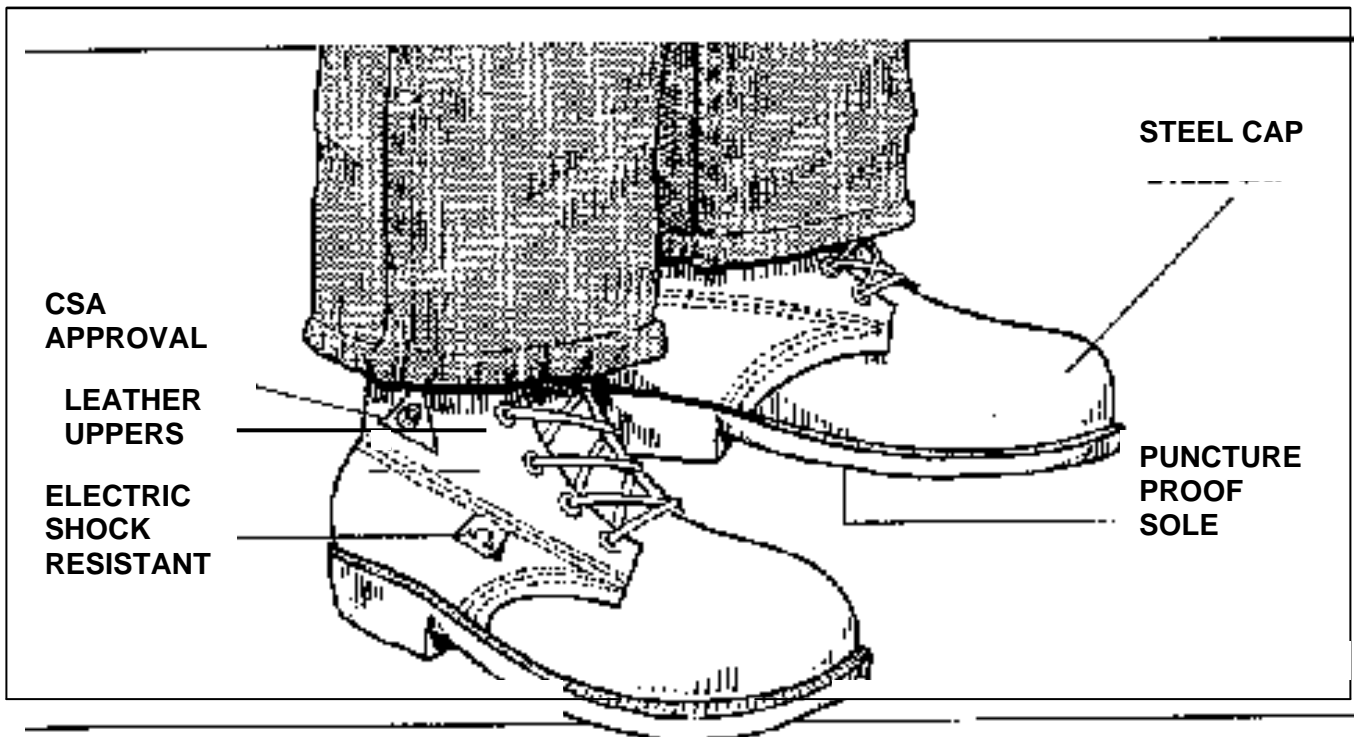


SAFE WORK

S SPOT THE HAZARD
A ASSESS THE RISK
F FIND A SAFER WAY
E EVERYDAY

No. 102
September 2008

Protective Footwear



Potential hazard:

Workers exposed to hazards such as falling objects, sharp objects, moving machinery, electrical contact, abrasives, and similar circumstances may be at risk of a foot injury.

How to control the hazard:

Protective footwear (safety shoes or boots) must be worn by all workers who may be exposed to the risk of a foot injury.

- There are many types and styles of protective footwear available and *it is very important to choose the right type of protective footwear for the job*. It is also important to get the right fit so the footwear is comfortable.
- The Canadian Standards Association (CSA) has specific design and testing requirements for protective footwear. The CSA's Guideline helps employers and footwear users to choose the proper footwear for their work environment and specific job functions (see over). The CSA logo is only applied to footwear that meets the performance criteria.
- Protective footwear is manufactured as grade 1 or 2 type, depending on the strength of the protective toe cap. The footwear is marked accordingly and may also have sole puncture protection and electrical shock resistance. **(Only safety footwear identified as meeting the standard as shown on the opposite page can be considered proper protective footwear.)**









(Over)

Workplace Safety and Health Division Contact Information:

Winnipeg: (204) 945-3446
Toll-Free: 1-866-888-8186 (Manitoba only)
24-Hour Emergency Line: (204) 945-0581

Publications/resources available at: www.safemanitoba.com



Classes of Protection: One or more of these markings will appear on the outer side or the tongue of the right shoe.		
Protection Markings	Safety Features	Recommended Use
	Green triangle indicates sole puncture protection with a Grade 1 protective toe to withstand impacts up to 125 Joules. Comparable to a 22.7 kg (50 lb) weight dropped from 0.6 m. Sole puncture protection is designed to withstand a force of not less than 1200 Newtons (270 lbs) and resist cracking after being subjected to 1.5 million flexes.	For any industry, especially construction and heavy work environments where sharp objects, such as nails are present.
	Yellow triangle indicates sole puncture protection with a Grade 2 protective toe to withstand impacts up to 90 Joules. Comparable to a 22.7 kg (50 lb) weight dropped from 0.4 m. Sole puncture protection is designed to withstand a force of not less than 1200 Newtons (270 lbs) and resist cracking after being subjected to 1.5 million flexes.	For light industrial work environments requiring puncture protection as well as toe protection.
	Blue rectangle indicates Grade 1 protective toe without sole puncture protection. Grade 1 protective toe withstands impacts up to 125 Joules. Comparable to a 22.7 kg (50 lb) weight dropped from 0.6 m.	For industrial work environments not requiring puncture protection.
	Grey rectangle indicates Grade 2 protective toe without sole puncture protection. Grade 2 protective toe withstands impacts up to 90 Joules. Comparable to a 22.7 kg (50 lb) weight dropped from 0.4 m.	For institutional and non-industrial work environments not requiring puncture protection.
	White label with green fir tree symbol indicates chainsaw protective footwear. Protective features are designed into the boots to prevent a running chainsaw from cutting all the way through the boot uppers so as to protect the shins, ankles, feet and toes.	For forestry workers and others exposed to hand-held chain saws or other cutting tools.
	White rectangle with orange Greek letter omega indicates soles that provide resistance to electric shock. Such certified footwear contains a sole and heel design assembly that, at the point of manufacturing, has electrical insulating properties intended to withstand 18,000 Volts and a leakage current not exceeding 1 mA.	For an industry where accidental contact with live electrical conductors can occur. Warning: Electrical Shock Resistance deteriorates with wear and in wet environments.
	Yellow rectangle with green "SD" and grounding symbol indicates soles are static-dissipative. The outer soles are made from an antistatic compound, chemically bound into the bottom components, capable of dissipating an electrostatic charge in a controlled manner. The test criteria are 10^6 to 10^8 Ohms. Note that SD footwear without toe protection will not have sole protection certified by CSA.	For any industry where a static discharge can create a hazard for workers or equipment.
	Red rectangle with black "C" and grounding symbol indicates soles are electrically conductive. The outer soles are made from a conductive compound that is permanently bound to the bottom components to provide electrical grounding of each foot. Test criteria are 0 to 500,000 Ohms.	For any industry where static discharge may create a hazard of explosion.

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Reference to legal requirements under workplace safety and health legislation:

- Personal Protective Equipment: Manitoba Regulation 217/2006 Part 6.12 (1), (2), (3)

Additional Information available on The Workplace Safety and Health Division

Website: www.gov.mb.ca/labour/safety/ and on: www.safemanitoba.com/