



Personal Protective Equipment (PPE)

PPE can reduce the severity of an injury. Employees, contractors and visitors of District 22 will wear the prescribed PPE for the location they are on and for the work that is being conducted. This policy helps to meet legislative requirements as well as industry standards.

- District 22 expects all employees to use the basic Personal Protective Equipment required to complete their job safely.
- No work will commence until all required Personal Protective Equipment is being utilized.
- Absolutely no one is permitted on worksites without using the prescribed Personal Protective Equipment.

Personnel Protective Equipment (PPE) is the third and last means of protecting workers from injury. PPE is only employed when administrative and engineering controls are ineffective or insufficient. Ensuring that all jobs are well planned, that workers are properly trained and that all safe work practices are followed should minimize hazards. PPE then provides an additional degree of protection from injury.

Types of PPE

PPE falls into two categories. The first category (Basic) is the PPE that should be worn at all times by all personnel in the workplace. This includes hard hats, safety footwear and appropriate protective clothing. The second category (Specialized) covers PPE which is used only for specific jobs or for protection from specific hazards. This includes gloves, welder's goggles, respiratory protective equipment, fall arresting equipment and special clothing.

References:

- Work Safe BC Part 8 Personal Protective Clothing and Equipment
- CSA Standards
- ANSI Standards



Foot Protection

Safety footwear is designed to protect against foot hazards in the workplace. Safety footwear protects against compression, puncture injuries, and impact.

Safety footwear is divided into three grades, which are indicated by colored tags and symbols: The **tag color** tells the amount of resistance the toe will supply to different weights dropped from different heights. The **symbol** indicates the strength of the sole. For example, a **triangle** means a puncture resistance sole able to withstand 135 kg (300 lbs) of pressure without being punctured by a 5cm (2 in) nail.

CSA CERTIFICATION MARK FOR CANADA Indicates footwear is CSA-certified to Canadian national requirements CLASSES OF PROTECTION One or more of these markings will appear on the outer side or the tongue of the right shoe		
	Green triangle indicates sole puncture protection with a Grade 1 protective toe to withstand impacts up to 125 Joules.	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 any industry where accidental contact with live electrical conductors can occur.
	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.	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.



Limb and Body Protection

Personal protective equipment in this category would be items such as:

- Leg, arm, chin and belly guards
- Specialty hand pads and grips
- Leather aprons and leggings
- Full body suits
- Flame and chemical resistant clothing, and
- Various types of plastic boot covers, and overshoes

Equipment like this would be necessary for tasks like chain sawing, chemical handling, working in extreme heat. For more indication on the type of specialty PPE you require, conduct a hazard assessment and check OH&S Regulations and MSDS's.

Hand PPE (Gloves and Mitts)

PPE for the hands include: finger guards, thimbles and cots, hand-pads, mitts, gloves, and barrier creams. Choose hand PPE that will protect against the job hazards. Gloves should fit well and be comfortable. This type of PPE has to protect against chemicals, scrapes, abrasions, heat and cold, punctures and electrical shocks.

DO:

- Inspect hand PPE for defects before using
- Wash all chemicals and fluids off gloves before removing them
- Ensure that gloves fit properly and their the type required for the job
- Ensure exposed skin is covered (no gap between the sleeve and the hand PPE)

DO NOT:

- Use gloves or hand protection that is worn out or defective

References:

- CSA Z259.4 Rubber Insulating Gloves and Mitts; CSA Z259.5 Rubber Insulating Sleeves



Eye and Face Protection

This PPE is designed to protect the worker from such hazards as:

- Flying objects and particles
- Molten metals
- Splashing liquids, and
- Ultraviolet, infrared and visible radiation (welding)

There are two types of PPE:

1. **"Basic eye protection"** includes;
 - Eye cup goggles
 - Mono-frame goggles and spectacles with or without side shields
2. **"Face protection"** includes:
 - Metal mesh face shields for radiant heat or hot and humid conditions
 - Chemical and impact resistant (plastic) face shields
 - Welders' shields or helmets with specified cover
 - Filter plates and lenses

Hardened glass prescription lens and sport glasses are not an acceptable substitute for proper, industrial safety eye protection.

Comfort and fit are very important in the selection of safety eye wear. Lens coatings, venting or fittings may be needed to prevent fogging.

Basic eye protection should be used when working with face shields. Face shields alone often are not enough to fully protect the eyes from work hazards. When eye and face protection is required, advice from specialists, information on Material Safety Data Sheets (MSDS) for various chemicals, or your supplier will help you select such protection.

References:

- Standards for "Industrial Eye and Face Protectors" CAN1CSA-Z94.3-99 and Z94.3.1 Protective Eyewear: A User's Guide

DO:

- Ensure your eye protection fits properly (close to the face)
- Clean safety glasses daily, or more often if needed
- Store safety glasses in a safe, clean, dry place when not in use; and
- Replace pitted, scratched, bent and poorly fitted PPE. (Damaged face/eye protection interferes with vision and will not provide the protection it is designed to deliver.)



DO NOT:

- Modify eye/face protection; or
- Use eye/face protection which does not have a proper certification.

Eye Protection for Welders

Welders and welders' helpers should also wear the prescribed equipment. Anyone else working in the area should also wear eye protection where there is a chance they could be exposed to a flash.

Hearing Protection

Hearing protection is designed to reduce the level of sound energy reaching the inner ear. Any sound over 80 dba requires hearing protection. Hearing loss can be very gradual, usually happening over a number of years.

The most common types of hearing protection in the construction industry are earplugs and earmuffs. It is important to have different styles of hearing protection available. Different styles allow a better chance of a good fit. Each person's head, ear shape and size is different. One style may not fit every person on your crew. If the hearing protection is not properly fitted, it will not supply the level of protection it was designed to deliver. If noise levels cannot be brought down to compliant levels a noise management program will be created.

References:

- CSA Standard "Hearing Protection Devices" - Performance, Selection, Care and Use Z94.2

Head Protection

Safety headgear is designed to protect the head from impact from falling objects, bumps, splashes from chemicals or harmful substances, and contact with energized objects and equipment.

In construction the recommended type of protective headwear is the Class B hard hat which has the required "dielectric strength". There are many designs but they all must meet the CSA Standard Z94.1 for Industrial Protective Headwear.



Most head protection is made up of two parts:

- The shell (light and rigid to deflect blows)
- The suspension (to absorb and distribute the energy of the blow)

Both parts of the head gear must be compatible and maintained according to manufacturer's instructions. If attachments are used with head gear, they must be designed specifically for use with the specified head gear being used.

Proper care is required for head gear to perform efficiently. The service life is affected by many factors including temperature, chemicals, sunlight and ultra violet radiation (welding).

Respiratory Protective Equipment

All respiratory equipment will be maintained according to manufacturer's specifications and will be use by trained personnel only.

Safety Belts, Lanyards and Life Lines

Body harnesses are used to provide workers working at heights with freedom of movement and protection from falls. These devices will arrest a fall and absorb some of the shock of the fall. The systems are usually worn around the body and attached to a lanyard, fall arresting device or rope grab. Better quality systems usually have some form of shock absorber in the system.

Instruction of Workers

Prior to allowing a worker to work in an area where the use of a fall protection system is required, an employer must ensure that the worker is trained in the safe use of the fall protection system and procures to be followed.

Harnesses and Safety Belts - An employer must ensure that:

- a) A worker wears a full body harness meeting the requirements of CSA Standard CAN/CSA Z259.10-M90 (R1998), Full Body Harnesses, when using a personal fall arrest system, and
- b) Safety belts are permitted only for use in travel restraint systems and must meet the requirements of CSA Standard Z259.1-95 (R1999), Safety Belts and Lanyards.



Lanyards and Safety Straps

An employer must ensure that a lanyard meets the requirements of CSA Standard CANICSA Z259.1-95 (R1999) *Safety Belts and Lanyards*.

The employer must ensure that when a tool or corrosive agent is used that could sever, abrade or burn a lanyard or safety strap, the lanyard or safety strap is made of wire rope or other material appropriate to the hazard.

Coveralls

Coveralls must be fitted as to not get caught in any moving equipment.

Note: Any article which may get caught in moving equipment must be removed or tied back.