

Section 23 – Personal Protective Equipment

PURPOSE The following Personal Protective Equipment (PPE) procedure will be used to identify the specific requirements for the use of PPE.

To protect employees from potential workplace hazards, control of exposure to the hazards will be performed through use of the three general control strategies in the following order: Control at the Source, Control Along the Path and Control at the Worker.

SCOPE The use of Personal Protective Equipment falls into the third and least desirable control method (Control at the Worker). Control at the Worker will only be considered as a supplement to another control method and/or if it is the most practical method.

RESPONSIBILITIES

Health and Safety Coordinator Responsibilities:

- Arrange with the Superintendent for all company supplied and site specific PPE to be purchased and distributed.
- Arrange for general (orientation) and specific (Working at Heights) training is provided as required.
- Comply with all the requirements as defined under the Occupational Health and Safety Act and Regulations.
- Assist in developing PPE Plan for all workplaces and sites.
- Distribute and communicate information to the appropriate parties regarding any nonconformance or deficiencies reported.

Senior Management Responsibilities:

- Assist in development of the PPE Program.
- Ensure the appropriate PPE is implemented across all areas of responsibility.
- Take all measures reasonably necessary in the circumstances to protect employees from exposure all related hazards at all locations.
- Review Occupational Health and Safety Act and Regulations to ensure compliance within the PPE requirements.
- Ensure that the equipment, materials and protective devices as prescribed are provided, maintained in good condition and used as prescribed.

Project Manager Responsibilities:

- Ensure equipment, materials and protective devices are provided, maintained and used as required at site and office locations.
- Provide required protective devices, measures and procedures required by the Occupational Health and Safety Act and Regulations.

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Superintendent Responsibilities:

- Arrange with the Health and Safety Coordinator for all company supplied and site specific PPE to be purchased and distributed.
- Ensure a site specific PPE for all workplaces and sites is used, maintained and in place.
- Distribute new and replace PPE as required.
- Follow-up on the findings and implement recommendations for each unsafe condition.
- Ensure equipment, materials and protective devices are provided, maintained and used as required at site and office locations.
- Provide required protective devices, measures and procedures required by the Occupational Health and Safety Act and Regulations.

Foreman Responsibilities:

- Ensure known site related hazards are defined with a site specific plan or Hazard Assessment and appropriate PPE is defined and provided as required.
- Distribute new and replace PPE as required.
- Take prompt and appropriate action when contraventions with the use or maintenance or PPE have been identified.
- Take every precaution reasonable in the circumstances for the protection of a worker.
- Where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for protection of the worker.

Workers Responsibilities:

- Use and maintain all required PPE as directed.
- Report any damage or missing PPE immediately to your Foreman.
- Works in the manner and with the protective devices, measures and procedures required by the Occupational Health and Safety Act and Regulations.
- Report to his or her Foreman any contravention of the Occupational Health and Safety Act and Regulations or the absence/defect in any equipment or protective device.

PROCEDURE

The **Health and Safety Coordinator** with the assistance of the **Senior Management** will develop a Personal Protective Equipment Program.

Once the program has been completed, the **Health and Safety Coordinator** will arrange to meet with the department **Superintendent** to review the agreed upon requirements for the PPE Program.

All required workers will receive specific training regarding their selection, use/ care and limitations of their PPE during orientation with applicable demonstrations where required.

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DISTRIBUTION The specific requirements for PPE will be documented and posted in the departments, along with appropriate warning signs.

RECORDS Documentation of Safety Talks and/ or orientation of employees will remain on file indefinitely.

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PERSONAL PROTECTIVE EQUIPMENT PROGRAM

INTRODUCTION

The primary focus of our Health and Safety Program is to eliminate or control potential hazards to which our employees could be exposed. It has been acknowledged that the use of Personal Protective Equipment (PPE) is the least desired method of controlling workplace hazards, therefore, the use of Personal Protective Equipment will only be considered after other control methods have been explored.

Potential harmful hazards exist at our locations and we will implement control measures to eliminate and/or control the harmful effects of these hazards. Engineering and Administrative Controls will be used for the most part; however, there are some circumstances and job functions which require the use of PPE to control the exposure to the hazard.

The following program will identify the need for PPE and the implementation of a program designed to protect our workers. This program will encompass the following areas:

- Selection/ use
- Maintenance
- Monitoring
- Employee training

PERSONAL PROTECTIVE EQUIPMENT (PPE) POLICY

In order to determine the required PPE for the workplace, health and safety audits must be performed by the Health and Safety Coordinator and the Superintendents. Once hazardous conditions warranting the use of PPE have been identified, the appropriate selection of such equipment may begin.

In our Orientation program (Red Book), all our requirements for the use of PPE have been identified with the Workplace Task Standards and will be communicated.

The selection of PPE should be based on the following three criteria:

1. Protection of workers
2. Compliance with legislative requirements
3. Technical feasibility

The following are the minimum requirements for PPE which will be used. It may be necessary for workers to use alternative PPE where all PPE must be CSA Approved or equivalent and maintained in proper working order.

Note: Specialized PPE is defined as equipment that requires specific training for the care, use and maintenance for the appropriate use.

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Foot Protection

- In all our Construction projects, the Mechanical Shop and the Asphalt Plant workplace, all workers must wear CSA Certified Grade 1 Footwear (Green Patch/ heavy duty with sole protection) as a minimum must be worn which provide appropriate foot protection for the location.
- Foot Protections or safety boots must be high cut and properly laced and tied at all times.
- Foot Protections or safety boots must have proper sole to protect against electric shock under dry conditions (OMEGA patch).

Head Protection

- Where exposed to the hazard of being struck by falling objects, an CSA Class E approved hard hat, in good condition, must be worn
- Hard hats are required at all times on construction projects.
- Workers must visually inspect the hard hat every day before using it.
- Workers must check the shell for cracks, dents, deep cuts, or gouges. If the surface appears dull or chalky rather than shiny, the hard hat may have become brittle.
- Workers must check the suspension for cracks or tears. Make sure straps are not twisted, cut, or frayed.
- If a worker finds any signs of damage or degradation, remove the hard hat from service immediately.
- Never wear a baseball cap or other material under the hard hat.
- Hard hats should normally be worn facing forward. It may be worn backwards only if it has reverse orientation markings.

High Visibility Safety Clothing

- Where required, all workplace parties shall wear a retro-reflective vest or retro-reflective garments in addition to his/her other personal protective equipment when exposed to vehicular traffic and/or mobile equipment hazards or as required by project owner's requirements. High Visibility Safety Clothing shall be Fluorescent Blaze or International Orange in colour only.
- Leg Bands are provided for night work on construction projects.

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Eye Protection

- In all our Construction projects, all workers must wear required CSA approved safety eyewear as necessary for work that has the potential to cause eye injury.
- At the Asphalt Plant workplace, all workers must wear required CSA approved safety eyewear when performing all work.
- All work that has the potential to cause eye injury. Examples include grinding, saw cutting, hammering and pumping liquids.
- Face shields in addition to safety glasses must be worn when there is a risk of facial injury in order to protect the face.

Respiratory Protection

- Workers are required to wear NIOSH approved respirators where workers will be exposed to hazards from toxic gases, fumes or dust.
- The respirator type used must be approved for the specific hazard.
- Workers must ensure that they are using the appropriate respiratory protection for the hazard
- Workers will be trained in the proper donning, fitting and seal checks as well as the applications and limitations for the type of respiratory protection issued.

Skin Protection

- Shirts with sleeves to the elbow or long sleeve shirts and long pants are required at all times at all Construction projects, the Mechanical Shop and the Asphalt Plant.
- Remember to wear the cuff of your pants over your boots.
- Aprons, coveralls and other job specific clothing (i.e. Tyvek suits) may be required for some job functions and will be available when necessary.

Hand Protection

- Gloves will be worn as required for the prevention of hand injuries.
- Use the right gloves for the job as hands also need protection against chemicals. Check the MSDS or Suppliers Label to see whether a product must be handled with gloves and what types of gloves are required.

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Face Protection

- Full-face protection, **face shield**, must be worn to protect workers against the hazards of flying projectiles, hot liquids or hazardous chemicals (for example hot asphalt cement or saw cutting concrete). If respiratory protection is also required the best solution is a **full face respirator** which provides eye, face and respiratory protection.
- A face shield is not eye protection. Safety glasses must be worn under a face shield.

Hearing Protection

- Hearing protection is required in workplaces and when working near equipment where noises levels exceed 85 decibels (dBs). Hearing protection will be either plugs or muffs. The type of hearing protection used may vary according to the noise levels, therefore, specific types of hearing protection will be provided for employees exposed to excessive noises.
- **Dual Protection** may be required in certain high noise situations. This requires wearing ear muffs and ear plugs. See charts below for further details.

Level of Noise Exposure L_{EX} (dBA)	Grade	Class
< 90	1	C
< 95	2	B
< 100	3	A
< 105	4	A
< 110	Dual*	
> 110	Dual†	

* Dual hearing protection required. Use a minimum of a Grade 2 or Class B earmuff and a Grade 3 or Class A earplug.

† Dual hearing protection required. It is also recommended that exposure durations be limited, octave-band analysis be conducted for attenuation predictions, and twice-annual audiometry be provided to the affected individuals.

Note: These recommendations are based on a daily 8-hour exposure. Adapted from CSA Standard Z94.2-02

Recommended Hearing Protection

Excerpt from the CSA Z94.2 Hearing Protection standard.

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Specialized Personal Protective Equipment

Fall Arrest Equipment

- A CSA approved full body harnesses and shock absorbing lanyards must be worn at heights of 10 feet or over from the edge of any raised work surfaces or roof edges, unless properly scaffolded or guard rails provided.
- All components of the fall arrest system involved in arresting the worker in the fall shall be gathered and taken out of service. Lanyard and full body harness shall be disposed of after the completion of all investigation(s).
- Workers will Receive specific training in Working at Heights for all applicable workers as work applies to the below information.
- **All employees working at heights must use fall protection if they are exposed to following hazards:**
 1. Falling more than 3 meters (10ft)
 2. Falling more than 1.2 meters (4ft) if the work area is used as a path for a wheelbarrow or similar equipment:
 - Falling into operating machinery
 - Falling into water or another liquid
 - Falling into or onto a hazardous substance or object
 - Falling through an opening on a work surface
 3. Over and above #1 if a worker is exposed to a fall of 2.4 meters (8ft) or more from the any of the following work surfaces:
 - The surface of a bridge
 - A roof while formwork is in place
 - A floor, including the floor of a mezzanine or balcony
 - A scaffold or other work platform, runway or ramp

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MAINTENANCE OF PPE

All employees will be trained on the limitations and proper care and maintenance of their Personal Protective Equipment by the Health and Safety Coordinator. This instruction will be done according to the manufacturer's specifications.

All defective, damaged or non-repairable items will be taken out of service and replaced with suitable replacements as required.

In addition, all clothing that has come into contact with solvents or other corrosive material must be removed from use as required.

MONITORING

Monitoring for use of the required PPE will be conducted by all Foreman / Superintendent and the Health and Safety Coordinator where applicable. Foreman / Superintendent will visually check all workers to ensure that everyone is adequately wearing/ using their PPE where required according to the manufacturer's specifications and the job requirements.

Health and Safety Coordinator and Foreman / Superintendent are responsible to ensure that the PPE and equipment required for the project are present and functional at all times. They will use Progressive Disciplinary Action for those employees who fail to wear the appropriate Personal Protective Equipment. The Foreman / Superintendent reserve the right to remove anyone who causes unsafe conditions or practices, or who performs in a manner not consistent with the requirements of the Occupational Health and Safety Act and/or its Regulations.

All workers will immediately report missing or broken PPE to their supervisor for replacement or repairs as required.

TRAINING

Training for the proper use, care and limitations of the PPE provided to employees will be arranged by the Health and Safety Coordinator. This training will cover the following topics:

- How to obtain required PPE
- How to use the Protective Equipment
- How to clean the equipment
- How and where to store the equipment
- The limitations of the equipment

All training sessions provided to workers will be documented and maintained on file. New employees will receive this training during their Orientation to the workplace and during specific task training.