

Eye and Face Protection Program

Occupational Health and Safety
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EYE AND FACE PROTECTION PROGRAM

1.0 PURPOSE

The purpose of this program is to prevent potential eye injuries from flying objects, particles, chemicals and optical radiation by providing guidance for the selection and use of proper eye and face protection.

2.0 SCOPE

This program applies to all College Departments, staff, students, visitors and contractors who perform tasks at Mohawk College that may expose them to an eye injury hazard.

3.0 REFERENCES

Occupational Health and Safety Act
Regulations for Industrial Establishments (O.Reg 851)
CSA Standard Z94.3-02 "Eye and Face Protectors".
Mohawk College Safety Policy CR871

4.0 DEFINITIONS

Protective Eyewear: Includes safety glasses with side shields; goggles; welding helmets and hand shields and face shields. Note: Class 1 Safety Spectacles (i.e. "standard" or "typical" safety glasses) are required to be equipped with side shields. Eye and face protection shall be CSA approved.

Plano: Refers to a plane, non-prescription lens.

Prescription Lens: A lens manufactured for an individual's corrective prescription.

Side Shield: A component attached to safety glasses to provide side protection.

Supervisor: A person who has charge over a workplace or authority over a worker. Depending on the particular reporting relationship, a Supervisor includes, but is not limited to any of the following: Manager, Associate Dean, Director, Vice President or President.

5.0 RESPONSIBILITIES

Supervisors are responsible for:

- Identifying tasks or areas requiring protective eyewear and recommending the appropriate eyewear to be worn.
- Providing non-prescription protective eyewear, including over-the-glass eyewear.
- Covering costs for staff requiring industrial protection prescriptive glasses.
- Ensuring the proper eye protection is worn as required.
- Posting signage "Eye Protection Required" or similar wording, near the entrance to areas designated for eye protection.

Employees are responsible for:

- Assisting in the identification of tasks requiring protective eyewear to be worn.
- Wearing the appropriate protective eyewear as required.
- Storing protective eyewear in clean areas safe from physical or chemical damage.
- Replacing worn or damaged eyewear.

Occupational Health and Safety Department is responsible for:

- Providing assistance and guidance to departments regarding the assessment of eye hazards and the selection of appropriate protective eyewear.
- Monitoring safety standards for eye and face protection.
- Reviewing and updating the Eye and Face Protection Program.

Contractors and Students are responsible for:

- Providing their own protective eyewear.
- Wearing protective eyewear when working in designated eye protection areas.
- Working in accordance with the requirement of this program.

6.0 GENERAL PROCEDURE: SELECTION OF PROTECTIVE EYEWEAR

This procedure provides the framework for assessing the hazards and selecting the appropriate eye and face protection.

6.1 CSA Classification

The risk of an eye injury exists in many areas and operations of the College. The Occupational Health and Safety Act requires eye protection appropriate in the circumstances to be worn when there is a risk of eye injury and CSA approved protective eyewear must be worn wherever there is a risk of eye injury. The following table summarizes the various CSA classes of eye and face protectors.

**Table #1
Summary CSA Classification of Eye and Face Protectors¹**

CSA Classification	Type of Eyewear	Description
1A	Spectacles	Equipped with side shields and/or top protection from impact
1B	Spectacles	Equipped with side shields and radiation protection
2A	Goggles	Direct vented
2B	Goggles	Indirect vented
2C	Goggles	Direct/Indirect vent with radiation protection
3	Welding Helmets	Variety of configurations
4	Welding Hand Shields	Hand-held devices
5	Non-Rigid Helmets (Hoods)	Equipped with protective windows
6A	Face Shield	Impact and splash protection
6B	Face Shield	Radiation protection

¹ CSA Standard Z94.3-02 "Eye and Face Protectors"

CSA Classification	Type of Eyewear	Description
6C	Face Shield	High heat application
7	Respirator Facepieces	Variety of configurations

6.2 Prescription Eyewear and Safety Glasses

For those who wear prescription glasses, there are two options for obtaining the required degree of protection for Class 1 spectacles:

- 1) Wear CSA approved “over-the-glass” eyewear. These are larger glasses that fit over the user’s regular prescription glasses.

Note: For comfort and subsequent compliance with the requirement to wear protective eyewear, this option may not be suitable, especially for situations where protective glasses are required to be worn for long periods. Option #2 below may be preferred.

- 2) Those who wish to purchase customized prescriptive safety glasses should have their eyes tested by a qualified person (usually an optometrist or ophthalmologist) and request “*industrial protection*” lenses and frames.

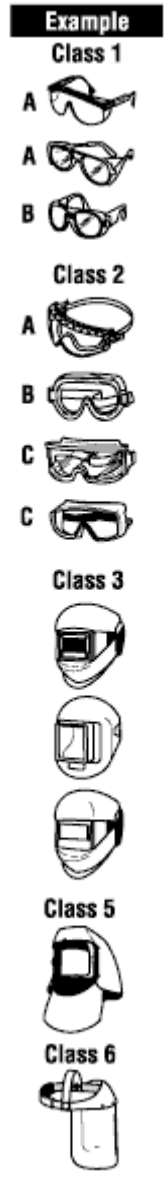
6.3 Selection of Eye and Face Protection

Upon request, Occupational Health and Safety will assist in the assessment of eye hazards and the selection of appropriate protective eyewear. Refer to the following “Eye and Face Section Chart” to aid in the selection of the appropriate protective eyewear.

Note: Face shields, helmets or hoods (Classes 3, 4, 5 and 6) must be worn in conjunction with spectacles or goggles (Class 1 and Class 2).

“Eye and Face Selection Chart”²

Selection of Eye and Face Protection														
<p>Note: This table cannot cover all possible hazards and combinations that may occur. Examine each situation carefully and select the appropriate protector or combination of protectors.</p> <p>*indicates recommended protection</p>	Spectacles (Class 1)		Goggles (Class 2)			Welding Helmet (Class 3)	Welding Hand Shield (Class 4)	Non-Rigid Hoods (Class 5)				Face Shields (Class 6)		
	A	B	A	B	C			A	B	C	D	A	B	C
<i>Flying Objects</i>														
Chipping, drilling, scaling, grinding, polishing, buffing, riveting, punching, shearing, hammer mills, crushing, heavy sawing, planing, wire and strip handling, hammering, unpacking, nailing, punch press, lathework, etc.	*		*	*					*	*		*		
<i>Flying particles, dust, wind, etc.</i>														
Woodworking, sanding, light metal working and machining, exposure to dust and wind, resistance welding (no radiation exposure), sand, cement, aggregate handling, painting, concrete work, plastering, material batching and mixing	*		*	*					*	*		*		
<i>Heat, sparks and splash from molten materials</i>														
Babbiting, casting, pouring molten metal, brazing, soldering, spot welding, stud welding, hot dipping operations		*			*					*	*	*	*	
<i>Acid splash, chemical burns</i>														
Acid and alkali handling, degreasing, pickling and plating operations, glass breakage, chemical spray, liquid bitumen handling				*						*		*		
<i>Abrasive blasting materials</i>														
Sand blasting, shot blasting, shotcreting				*						*		*		
<i>Glare, stray light (for reduction of visible radiation)</i>														
Reflecting, bright sun and lights, reflected welding flash, photographic copying	*		*	*					*	*		*		



² Reprinted with permission from Canadian Centre of Occupational Health and Safety (CCOHS).

<i>Injurious optical radiation (moderate reduction of optical radiation)</i>											
Torch cutting, welding, brazing, furnace work, metal pouring, spot welding, photographic copying		*			*					*	*
<i>Injurious optical radiation (large reduction of optical radiation)</i>											
Electric arc welding, heavy gas cutting, plasma spraying and cutting, inert gas shielded arc welding, atomic hydrogen welding					*	*					

From: "Z94.3.1-02 Protective Eyewear: A User's Guide" by Canadian Standards Association, 2002.