Eye and Face Protection Standard

1.0 PURPOSE

This standard supports the Personal Protective Equipment Policy and specifies the selection, use, inspection and care of eye and face protection at SaskPower. The Prescription Eyewear Standard has been combined with Eye and Face Protection Standard.

2.0 DEFINITIONS

2.1 Current Eye Exam Prescription

An eye exam is current when it is less than two years old.

2.2 Occupational Vision Care (OVC) Program

Program by which employees have access to prescription safety glasses guaranteed to meet this standard.

2.3 Prescription Safety Eyewear

Prescription eyewear that meets the CSA Z94.3-15 standard for lens thickness, penetration resistance and side shields.

2.4 Safety Glasses

Eye protection that meets the CSA Z94.03-15 minimum standards for lens thickness, penetration resistance and side shields. This applies to “Over the Glasses” (OTG), prescription and non-prescription safety glasses.

3.0 METHOD / PRACTICE

3.1 Selection

- The class of eye and face protection shall meet the requirements of hazard/aspect identification and risk assessment. Refer to EXHIBIT A – Guidelines for the selection of eye and face protection.
- All eye and face protectors shall meet the requirements of CSA Standard Z94.03-02.
- Employees who wear prescription glasses that are not CSA approved must wear ‘over the glasses’ (OTG) safety glasses that meet the CSA Standard.

3.3 Use

- Eye and face protection shall be worn where hazard/aspect identification and risk assessment identifies the requirement.
- Other personal protective equipment or other equipment must not compromise the level of protection provided.
- Goggles shall be contoured to the face and fit properly.
- Goggles shall be worn so that the strap rests against the back of the head and not over the back of the hard hat.
- Eye and face protection shall not be modified.

3.4 Inspection

- Safety glasses and face protectors shall be inspected for damage or defects that could decrease visibility or affect their ability to provide protection.

3.5 Care

- Safety glasses and face protectors shall be repaired or replaced when damaged or when defects decrease visibility or affect their ability to provide protection. If in doubt, replace.
- Safety glasses and face protectors shall be cleaned according to manufacturer or supplier recommendations.

3.1 Prescriptive Safety Eyewear

- Prescription safety eyewear shall meet the requirements of CSA Z94.3-15 and employee's current eye exam prescription.
    - Where possible, all safety frames shall have a minimum fitting depth of 24mm below pupil center. For those who have smaller features, attempt to fit with as much coverage as possible.
    - Safety frames shall have permanent side shields.
    - Safety lenses shall be Plastic, Trivex or Polycarbonate
        - Hi Index lenses are allowed providing sphere and cylinder when added together are greater than 6 dioptres and they are currently worn in dress glasses. Lenses shall not be less than 3mm center thickness.
    - Safety lenses shall be treated with a scratch coating.
    - Safety lenses tinting shall not exceed a 30% density when required.

3.2 Provisioning

- Non-prescription safety glasses and face protectors shall be supplied and replaced through SaskPower Central Stores or through the Division purchasing process.
- Prescription safety eyewear shall be acquired through the Occupational Vision Care Program and reimbursed by SaskPower as per the Divisions reimbursement process.
- Prescription safety eyewear shall be stamped with CSA Z94 on arm or bridge of glasses and have rigid, form fitting side shields.

4.0 REFERENCES

- *The Occupational Health and Safety Regulations, 2020*
- SaskPower (located on SafetyNet)
    - Hazard /Aspect and Risk Assessment Policy and Standard
    - Personal Protective Equipment Policy
    - Occupational Vision Care Program
    - Safety Briefing # 10: Occupational Vision Care Program
    - Safety Rulebook
    - OVC Authorization Form and Letter
    - UNIFOR Local 649 Collective Bargaining Agreement
    - IBEW Local 2067 Collective Bargaining Agreement
    - Safety Rulebook
- Third Party Standards
    - CSA Z94.3-15 Eye and Face Protectors
    - CSA Z94.3-15 Protective Eyewear - A Users Guide

EXHIBIT "A" - GUIDELINES FOR THE SELECTION OF EYE PROTECTION

Class 1 and Class 2 protectors shall be used in conjunction with recommendations for Classes 3, 4, 5, and 6 protectors.

Areas of Use/Work Activity	Protective Eyewear Type	Notes on Selection
1. Class A Flying Objects Chipping, scaling, stonework, drilling; grinding, buffing, polishing; hammer mills, crushing; heavy sawing, planing; wire and strip handling; hammering, unpacking, nailing; punch press, lathework	• Standard safety glasses with side shields(Class 1A) • Class 2A,2B goggles • Class 6A face shields • Class 5A, 5B non-rigid hoods	• Eye protection must have side shields
2. Class B Flying Particles, dust wind, etc. 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	• Standard safety glasses with side shields(Class 1A) • Class 2A,2B goggles • Class 6A face shields • Class 5A, 5B non-rigid hoods	• Eye protection must have side shields
3. Class C Heat, sparks, and splash from molten materials Dusts Babbiting, casting, pouring molten metal; brazing, soldering; spot welding, stud welding; hot-dipping operations	• Standard safety glasses with side shields (Class 1B) • Class 2C goggles • Class 6B, 6C face shields • Class 5C, 5D non-rigid hood	• Safety glasses, goggles, face shields and hoods have radiation protection • Goggles non-ventilated • 5D high heat application
4. Class D Acid Splash Chemical burns, acid and alkali handling, degreasing, pickling, and plating operations; glass breakage; chemical spray; liquid bitumen handling	• Class 2B Goggles • Class 6A Face shield • Class 5B non-rigid hood	• Goggles – indirectly ventilated • Face shield, hood splash for impact splash protection
5. Class E Abrasive Blasting Sand blasting;-shot blasting;-shotcreting	• Class 2B Goggles • Class 6A Face shield • Class 5B non-rigid hood protectors and gas-tight goggles	• Goggles – indirectly ventilated • Face shield, hood splash for impact splash protection

This table cannot encompass all of the various hazards that may be encountered

Class 1 and Class 2 protectors shall be used in conjunction with recommendations for Classes 3, 4, 5, and 6 protectors.		
Areas of Use/Work Activity	**Protective Eyewear Type**	**Notes on Selection**
6. Class F Glare, stray light (where slight reduction of visible radiation is required)Radiation Reflection, bright sun, and lights;reflected welding flash;photographic copying, brazing	• Standard safety glasses with side shields(Class 1A) • Class 2A,2B goggles • Class 6A face shields • Class 5A, 5B non-rigid hoods	• Eye protection must have side shields
7. Class G Injurious optical radiation (where moderate reduction of optical radiation is required) Torch cutting, welding, brazing, furnace work; metal pouring, spot welding, photographic copying	• Standard safety glasses with side shields (Class 1A) • Class 2C goggles • Class 6B face shields • Class 5C non-rigid hood	• Safety glasses, goggles, face shields and hoods have radiation protection • Goggles non-ventilated
8. Class H Injurious optical radiation (where large reduction of optical radiation is required) Electric arc welding; heavy gas cutting; plasma spraying and cutting; inert gas shielded arc welding; atomic hydrogen welding	• Class 3 Welding Helmets • Class 4 Welding Hand Shield	• Class 1B Safety glasses with filter lenses under welding helmets or hand shields strongly recommended
9. Electrical Working on live electrical apparatus	• Standard safety glasses with side shields (Class 1A) • Refer to hot work procedures/ standard protection code	• **Safety glasses shall be non conductive where elimination of hazard of accidental contact with live electrical apparatus is not possible**
This table cannot encompass all of the various hazards that may be encountered		

Examples of Class 1 — Spectacles
(See Clause 4.2.)

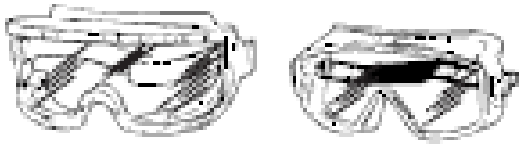
Class 1A
Spectacles with side protection

Class 1B
Spectacles with side and radiation protection

Examples of Class 2 — Goggles
(See Clause 4.3.)

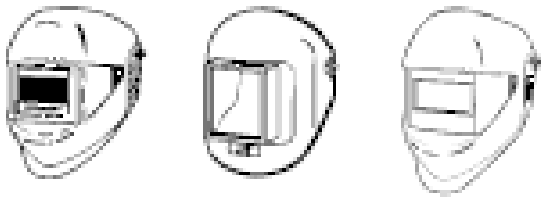
Class 2A
Direct ventilated goggles

Class 2B
Indirect ventilated goggles

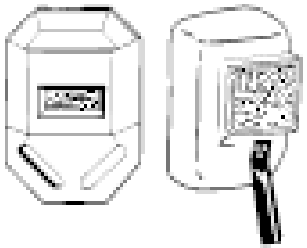


Class 2C
Direct/non-ventilated goggles with radiation protection

Examples of Classes 3 and 4 — Welding Helmets and Hand Shields
(See Clauses 4.4 and 4.5.)



Class 3
Welding helmets



Class 4
Welding hand shields

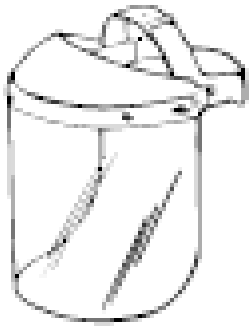
(Continued)

Figure 1
Examples of Eye and Face Protectors
(See Clauses 4.2–4.8.)

Examples of Class 5 — Non-rigid Helmets (Hoods)
(See Clause 4.6.)

Class 5A Non-rigid helmet (hood) with impact-resistant window
Class 5B Non-rigid helmet (hood) for dust, splash, and abrasive materials protection
Class 5C Non-rigid helmet (hood) with radiation protection
Class 5D Non-rigid helmet (hood) for high-heat applications

Examples of Class 6 — Face Shields
(See Clause 4.7.)

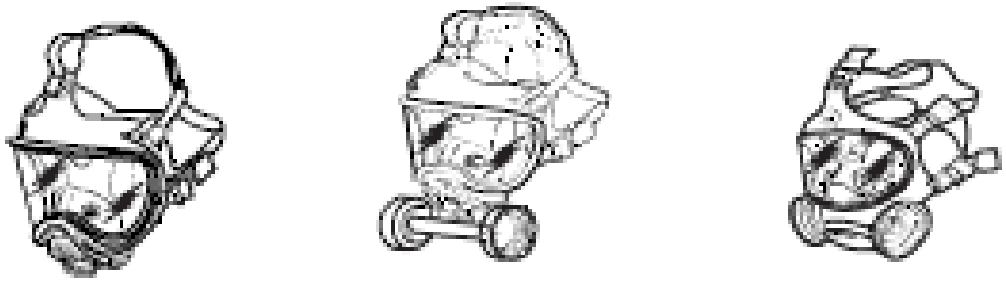


Class 6A Face shield for impact and splash protection
Class 6B Face shield for radiation protection
Class 6C Face shield for high-heat application

(Continued)

Figure 1 (Continued)

Examples of Class 7 — Respirator Facepieces
(See Clause 4.8.)



Class 7A
Respirator facepiece for impact and splash protection

Class 7B
Respirator facepiece for radiation protection

Class 7C
Respirator facepiece with loose-fitting hood or helmet

Class 7D
Respirator facepiece with loose-fitting hood or helmet for radiation protection

Figure 1 (Concluded)

EXHIBIT "A" - GUIDELINES FOR THE SELECTION OF EYE PROTECTION

Areas of Use/Work Activity	Protective Eyewear Type	Notes on Selection
10. Flying fragments/objects • chipping • riveting • spelling • hammering • handling wire and strip • stone and brick cutting	• Standard safety glasses with side shields	• General purpose protectors where all round protection is required; eye protection must have side shields
11. Small flying particles • scaling • grinding and machining metals • wood working operations • stone dressing	• Standard safety glasses with side shields	• Safety glasses – where frontal protection only is required • Face shield – where additional face protection is required (i.e. chainsaw use) • Dust goggles – where additional protection from small particles is required
12. Dusts • road work • coal handling • textile trades • some chemical works • leather buffing • sanding	• Dust goggles or other types which will exclude dust	• Where respiratory protection is required, eye protection may be incorporated into the respiratory protective device
13. Splashing metals, materials and corrosives • overhead cutting and welding • lead jointing • hot welding • metal baths • metal cleaning and plating • handling corrosives	• Standard safety glasses with side shields	• Face shield or a hood incorporating eye protection
14. Harmful liquids, gases and vapours • chemical processes • spray painting	• Chemical protectors and gas-tight goggles	• Face shields • Unventilated types needed for gases and vapours • Where respiratory protection is required, eye protection may be incorporated into the respiratory device
15. Radiation • welding • cutting • brazing	• Welding goggles, helmet or handshields	
16. Safety frames for employees required to work near energized electrical apparatus shall be made from non-conductive material.		