



Eye and face protection Information Sheet

Purpose

The purpose of this information sheet is to assist users with the selection use and maintenance of suitable eye and face protection equipment if required by a risk assessment, in accordance with the [HSW Handbook Chapter Hazard Management](#).

Q1 When should eye and/or face protection be considered as a control measure?

Personal Protective Equipment (PPE) is the **least effective** control measure as it does nothing to minimise the underlying hazard. PPE relies on human behaviour and supervision.

For these reasons higher level controls must first be considered for example, the:

- isolation of the hazardous operation;
- installation of suitable screens or guards to shield from flying fragments, particles or radiation;
- use of exhaust hoods or booths to extract dust, gases or fumes;
- damping down of dusty areas using water sprays;
- use of catchments, splash guards and baffles to confine dangerous liquids.

Where a risk of injury or illness still remains after all other control measures have been applied, the Supervisor/Person in control of the area/activity may be able to further minimise the remaining risk, by the provision and use of suitable PPE to prevent damage to the eyes and face. Refer [WHS Regulations 2012 \(SA\) \[36\]](#).

Generally this would be applied as a result of:

1. the Supervisor/Person in control of the area/activity mandating the use of eye and/or face protectors when working in or passing through an area, based on a reasonable assessment of the hazards in the area; or
2. a risk assessment for a task which requires eye and/or face protection as a control measure.

Where eye and/or face protection has been mandated, there is a responsibility to ensure it is being worn. This is the responsibility of the Supervisor/Person in control of the area/activity and the worker.

Q2 Can I use my prescription glasses as eye protection?

Standard prescription glasses e.g. reading glasses are not considered suitable for eye protection as they do not provide any side protection. Standard prescription glasses may be worn when also wearing safety glasses which have been designed to fit over the top of prescription glasses.

Prescription safety glasses can be obtained from an optometrist. Prescription safety glasses must be manufactured to meet the requirements of [AS/NZS 1337.6 \(2012\) "Personal eye protection – Prescription eye protectors against low and medium impact"](#).

Q3 Are there additional eye protection precautions for workers who wear contact lenses?

The wearing of contact lenses under eye and face protectors is satisfactory in most situations provided that the wearer has been provided with the appropriate level of information and instruction. However, some situations could be more hazardous when contact lenses are worn e.g. where the hazard is dust or harmful liquids, gases or vapours.

An analysis is necessary to evaluate the suitability of contact lens wear in such circumstances.

Staff and students are to inform their supervisor if wearing contact lenses to ensure appropriate protection is in place.

HSW Handbook	Personal Protective Equipment Information Sheet	Effective Date:	28 September 2020	V2.0
Authorised by	Director, HSW	Review Date:	28 September 2023	Page 1 of 6
Warning	This process is uncontrolled when printed. The current version of this document is available on the HSW Website			

Q4 What are some examples of hazards that require eye protection?

Please refer to Table 1 and Table 2 for a list of hazardous activities and options to control the hazards arising from them.

Table 1 Hazardous activities and recommended eye protectors (extract from [AS/NZS 1336 Eye and face protection - Guidelines](#))

Typical processes giving rise to eye hazards	Hazard (of the process)	Typical methods of controlling hazards	Suitable type of eye protectors (See Table 2)
Workshop and Trade Work			
Manual chipping, riveting, spalling, hammering, handling wire and brick cutting	Flying fragments and objects with low velocity or low mass	Fixed or mobile screens	Low impact (optionally marked S) Note: Medium impact (marked I or F) and high impact (marked V or B) and extra high impact (marked A) will give greater protection
Machine disc cutting of materials, scaling, grinding and machining metals, certain wood working operations, stone dressing	Small flying particles with medium velocity or medium mass	Fixed or mobile screens, exhaust systems, dust extractors, water	Medium impact (marked I or F) Note: High impact (marked V or B) and extra high impact (marked A) will give greater protection
Use of explosive powered tools	High velocity particles	Fixed or mobile screens	High impact (marked V or B). Note extra high impact (marked A) will give greater protection
Timber sanding, textile trades, some chemical works, leather buffing	Airborne dusts	For indoor work - exhaust systems, dust extractors, suction conveyors For outdoor work - damping down of work area, sealing of dusty surfaces, use of large fixed or mobile screens	Dust resistant (marked D or 4) Gas resistant (marked G or 5)
Pickling baths, metal cleaning, plating, handling corrosives	Liquid splash of harmful liquids and corrosives	Screens, catchments, splashguards, overflows, tilting apparatus and splash trays	Splash resistant (marked C or 3)
Chemical processes, spray painting, aerosols	Hazardous gases or vapours	Enclosures and exhaust systems, screens, catchments	Gas resistant (marked G or 5)
Chemical processes, spray painting, aerosols	Hazardous liquid splashes	Splashguards, overflows, tilting apparatus and splash trays	Splash resistant (marked C or 3)
Welding, cutting, brazing, furnace work	Non-ionizing radiation only (Refer to AS/NZS 1336 Section 5)	Fixed or mobile screens Complying with AS/NZS 3597	Marked in accordance with AS/NZS 1338 Parts 1, 2 or 3 as appropriate
Overhead cutting and welding, metal gouging, forging	Non-ionizing radiation with hot solids	Fixed or mobile screens complying with AS/NZS 3597	Welding goggles or welding helmets complying with AS/NZS 1338.1
Gas welding producing flying sparks	Non-ionizing radiation with hot solids	Fixed or mobile screens complying with AS/NZS 3597	Welding goggles or welding helmets with rearward facing indirect ventilation, with filters complying with AS/NZS 1338.1

Q4 What are some examples of hazards that require eye protection? (Continued)

Table 1 Hazardous activities and recommended eye protectors (extract from [AS/NZS 1336 Eye and face protection - guidelines](#))

Typical processes giving rise to eye hazards	Hazard (of the process)	Typical methods of controlling hazards	Suitable type of eye protectors (See Table 2)
Other work			
Outdoors	Sunglare Solar ultraviolet radiation	Suitable screens or sunshades	Low impact (optionally marked S or medium impact (marked I or F) and tinted Low impact or medium impact (marked I or F) if tinted, or outdoor untinted (marked O)
Dental treatment	Flying particles, liquid droplets, blue light cure	High velocity evacuation	Low impact (with lateral protection if spectacles) optionally marked S)
Biological hazards	Liquid (biological and chemical splashes	Splashguards, overflows, tilting apparatus and splash trays	Splash resistance (marked C or 3) and chemically resistant materials
Laser based surgical procedures	Optical and thermal hazard	Physical barriers and administrative controls	Refer to AS1337.4 and AS 1337.5 "Eye and face protection", AS/NZS IEC 60825 "Safety of laser products" and AS/NZS 4173 "Safe use of lasers and intense light sources in health care"
Medical and veterinary hazards where infection control is the issue e.g. medical and veterinary practices (biological and zoonotic diseases)	Biological splash Droplet infection Direct contamination	Physical barriers and administrative controls	Goggles (indirectly vented, marked C) Faceshields (used in addition to goggles)

Q4 Table 2 - Recommended eye protectors to control residual risk

Identification of eye protector and eye protector marking (See AS/NZS 1337)	Type of eye protector	Purpose and application of eye protection
Low Impact		
	1. Safety spectacles Optional S	Frontal protection to the eyes from low energy flying fragments and objects. Filters will provide a degree of protection from glare. Metal frames not suitable for electrical hazards.
	2. Safety spectacles with lateral protection Optional S	As for 1, but additional protection provided
	3. Wide vision goggles, with direct ventilation Optional S	As for 2 but additional protection required
	4. Safety clip-ons Optional S	As for 1
	5. Eye cup goggles Optional S	As for 2

Q4 Table 2 - Recommended eye protectors to control residual risk (Continued)

Identification of eye protector and eye protector marking (See AS/NZS 1337)	Type of eye protector	Purpose and application of eye protection
Low Impact		
	6. Coverall goggles with direct ventilations Optional S	As for 2, can be worn over prescription spectacles
	7. Wide vision goggles with direct ventilation Optional S	As for 2, some types may be worn over prescription spectacles
	8. Eyeshield Optional S	Protection to the eyes from low energy flying fragments and small particles. Filters will provide a degree of protection from glare
	9. Faceshield Optional S	Protection provided to eyes face, forehead and front of neck from low energy flying fragments and small particles. Filters will provide a degree of protection from glare.
	10. Spectacles, goggles, eyeshields and faceshields with mesh oculars Optional S	Used in a humid environment where fogging of oculars is a particular problem. Used for protection against low impact larger projectiles only.
	11. Goggles all types (5,6 and 7) with indirect ventilation Optional S, C or 3, D or 4	As for 7, splash or dust protection where marked
	12. Hoods and helmets incorporating an eyeshield or a faceshield Optional S, C or 3, D or 4	All round protection to the eyes, head and neck from flying fragments and small particles. Respiratory protection may be provided (see AS/NZS 1715 "Selection, use and maintenance of respiratory protective equipment" and AS ISO 16900 "Respiratory protective devices". Splash or dust protection where marked.
Medium Impact		
	13. Wide vision spectacles (I or F)	Frontal and side protection to the eyes from medium energy flying particles. Filters will provide a degree of protection from glare.
	14. Wide vision goggles, with direct ventilation (I or F)	All round' protection to the eyes from medium energy flying particles. Filters will provide a degree of protection from glare.
	15. Wide vision goggles with indirect ventilation (I or F)	All round' protection to the eyes from medium energy flying particles. Filters will provide a degree of protection from glare.
	16. Eyeshields	Provide protection to the eyes, upper face and forehead from medium energy flying particles. Filters will provide a degree of protection from glare.
	17. Faceshields (I or F)	Provide protection to the eyes, face, forehead and front of neck from medium energy flying particles. Filters will provide a degree of protection from glare.
	18. Wide vision spectacles, goggles, eyeshields and faceshields with mesh oculars (I or F)	Used in a humid environment where fogging of oculars is a particular problem. Used for protection against low and medium impact larger projectiles only.
	19. Hoods and helmets incorporating an eye shield or face shield (I or F)	'All round' protection to the eyes, head and neck from medium energy flying particles. Filters will provide a degree of protection from glare.
High Impact		
	20. Face shield (V or B)	As for 17. Also from high energy flying fragments and small particles.
	21. Faceshields with mesh oculars (V or B)	Used in a humid environment where fogging of oculars is a particular problem. Used for protection against low, medium and high impact larger projectiles only.

Q4 Table 2 - Recommended eye protectors to control residual risk (Continued)

Identification of eye protector and eye protector marking (See AS/NZS 1337)	Type of eye protector	Purpose and application of eye protection
Extra high Impact		
	22. Face shields (A)	As for 21. Also from extra high energy flying fragments and small particles.
	23. Faceshields with mesh oculars (V or B)	Used in a humid environment where fogging of oculars is a particular problem. Used for protection against low, medium and high impact larger projectiles only.
Specific Substances		
Molten metal	24. Face shield and wire mesh screens with plastic oculars (M or 9)	See impact protectors 17. Also providing protection from molten metal and hot solids.
Splashes	25. Wide vision spectacles (Appropriate impact grade)	For use with minor splashes of relatively innocuous chemicals where the risk has been evaluated as acceptably low. The fit should be close to the face.
	26. Wide vision goggles. With indirect ventilation (C or 3)	Protection as for Item 11, and also providing protection from harmful liquids.
	27. Eyeshields (C or 3)	Protection as for Item 8 or 16, and also providing protection from harmful liquids or splashing materials.
	28. Face shield or hood (C or 3)	Protection as for Item 9 or 12, and also providing protection from harmful liquids and splashing materials.
Dust	29. Goggles, all types, with indirect ventilation (D or 4)	Protection as for item 11, and also providing protection against dust particles and aerosols.
Gas	30. Goggles, all types, without ventilation (G or 5)	Protection as for Item 11, and also providing protection against harmful gases and vapours.
Specific Substances		
Non-ionising	31. Safety spectacles with filters and opaque lateral protection Shade Number and code number (if applicable)	Depending on filter used will provide protection, e.g. for welders' assistants against ultraviolet or infrared radiation. (a) AS 1338.1 , Table 2.2 for gas welding filters (up to shade 3). (b) AS 1338.2 for ultraviolet filters. (c) AS 1338.3 for infrared filters.
	32. Goggle all types with opaque frames, and with indirect ventilation Shade number and code number (if applicable)	Depending on filter used will provide protection for gas welding and ultraviolet or infrared radiation. For recommended filters, see (a) AS 1338.1 , Table 2.2 for gas welding filters (b) AS 1338.2 for ultraviolet filters (c) AS 1338.3 for infrared filters
	33. Welding helmets all types and hand shields Shade number and code number (if applicable)	Depending on filter used will provide protection for arc welding. For recommended filters, see AS 1338.1 for Arc welding filters.
Ionising radiation		Refer to the HSW Handbook chapter Radiation Safety for further information.

Q5 What information/instruction is required for eye and face protection?

The Supervisor/Person in control of the activity/area is required to provide all persons with the relevant level of information and instruction where eye and face protectors are required to be worn prior to commencing the work for the first time. (Refer to the HSW Handbook chapter "[Provision of information, instruction and training](#)" for further information.)

Q6 What are the requirements for the issue and fitting of eye and face protectors?

The Supervisor/Person in control of the activity/area is to arrange for the appropriate type of eye and face protection based on the activity and the appropriate fit and size for the wearer.

Eye and face protectors may be issued in any of the following ways:

- For exclusive use by one person;
- For temporary use by a person for a particular task;
- For temporary use by a visitor.

The choice between an issue for exclusive use by one person and temporary issue to different people will depend on the frequency and duration of exposure to hazards, and the type of eye and face protector provided. In general, the issue for exclusive use by one person is recommended.

HSW Handbook	Personal Protective Equipment Information Sheet	Effective Date:	28 September 2020	V2.0
Authorised by	Director, HSW	Review Date:	28 September 2023	Page 5 of 6
Warning	This process is uncontrolled when printed. The current version of this document is available on the HSW Website			

Q7 What are the maintenance requirements for eye and face protection?

Where workers are required to wear eye and face protection, the Supervisor/Person in control of the area/activity is required to:

- provide proper facilities for storage, cleaning, servicing and replacement;
- have in place a system to ensure that all workers are familiar with the arrangements for cleaning, repairing and replacing damaged or faulty equipment;
- have in place a system to ensure that all eye and face protectors are checked at regular intervals to ensure it continues to minimise the risk to the worker who uses it.

Q8 What are the specific requirement for eye and face protection against ultraviolet and infrared radiation?

The [AS/NZS 1336](#) "Eye and face protection – guidelines (Section 5 and 6) sets out the requirements for activities such as:

- Spot welding;
- Gas welding and cutting;
- Arc welding and cutting operations (including stray radiation processes nearby);
- Working outside and exposure to solar radiation;
- Laser use.

Q9 What are the requirements for signage where eye and/or face protection is mandatory prior to entering an area?

Where eye and/or face protection is mandatory prior to entering an area, appropriate signage complying with [AS 1319 \(1994\) "Safety signs for the occupational environment"](#) must be displayed.

This is a sample of some approved safety signs under [AS 1319 \(1994\) "Safety signs for the occupational environment"](#). You must ensure any signage you purchase or install meets this standard.



Face protection to be worn



Eye protection must be worn

Q10 Where can I obtain further information?

- The University's [HSW Handbook Chapter Hazard Management](#) which outlines the application of the hierarchy of control measures (i.e. Elimination, Substitution, Engineering/Isolation, Administration and PPE);
- [WHS Regulations 2012 \(SA\)](#);
- [AS 1319 \(1994\) "Safety signs for the occupational environment"](#)
- [AS/NZS 1336 "Eye and face protection - Guidelines"](#);
- [AS/NZS 1337.0 \(Int\): 2010 "Personal eye protection – Eye and face protectors – Vocabulary"](#);
- [AS/NZS 1337.1 2010 – eye and face protectors for occupational application](#)
- [AS/NZS 1337.4: 2011 "Eye and face protection: Filters and eye-protectors against laser radiation \(laser eye-protectors\)"](#);
- [AS/NZS 1337.5: 2011 "Eye and face protection: Eye-protectors for adjustment work on lasers and laser systems \(laser adjustment eye-protectors\)"](#);
- [AS/NZS 1337.6: 2012 "Personal eye protection – Prescription eye protectors against low and medium impact"](#);
- [AS/NZS 1338.1: 2012 "Filters for protection against radiation generated in welding and allied operations"](#).
- [AS/NZS 1338.2: 2012 "Filters for eye protections – Filters for protection against ultraviolet radiation"](#)
- [AS/NZS 1338.3: 2012 "Filters for eye protectors – Filters for protection against infra-red radiation"](#)

If you would like more information about the Personal Protective Equipment chapter of the HSW Handbook please contact your local [HSW team](#)

HSW Handbook	Personal Protective Equipment Information Sheet	Effective Date:	28 September 2020	V2.0
Authorised by	Director, HSW	Review Date:	28 September 2023	Page 6 of 6
Warning	This process is uncontrolled when printed. The current version of this document is available on the HSW Website			