

Personal Protective Equipment Selection of Eye and Face Protection

Hazard	Activities	 Spectacles with side shields	 Direct ventilated goggles	 Indirect ventilated goggles	 Welding helmet	 Face shield	 Hood	 Hand shield plus spectacles
Group A Flying objects	Chipping/Drilling/Scaling	■	■	■		★		
	Grinding/Polishing/Buffering	■	▲	▲		★		
	Riveting/Punching/Shearing	■	■	■				
	Hammer mills/Crushing	■	■	■				
	Heavy sawing/planing		▲	▲		★		
	Wire and strip handling	■	■	■				
	Hammering/Unpacking/Nailing	■	■	■		★		
	Punch press/Lathe work	■	■	■		★		
Group B Flying particles/ Dust/Wind	Woodworking/Sanding	■	▲	▲		★		
	Light metal working/machining	■	▲	▲		★		
	Exposure to wind/dust	■	▲	▲				
	Resistance welding	●	●	●		★		
	Sand/cement handling		▲	▲			★	
	Painting		▲	▲		★	★	
	Plastering/Concrete work	■	▲	▲		★		
	Material batching/mixing	■	▲	▲		★		
Group C Heat/Glare/Sparks/ Molten metal splash	Working with molten metal		▲ +	▲ +		★		
	Soldering/Brazing	●	●	●		★		
	Spot/stud welding		●	●		★		
	Hot dipping		▲ +	▲ +		★		
Group D Chemical splash	Handling acid/alkali		▲ +	▲ +		★	★	
	De-greasing		▲	▲		★		
	Spraying chemicals		▲ +	▲ +		★	★	
	Glass breakage		■ +	■ +		★		
	Handling liquid bitumen		▲ +	▲ +		★		
Group E Abrasive blasting	Sandblasting		▲	▲			★	
	Shot blasting						★	
	Shotcreting						★	
Group F Glare/Stray light	Reflection/Sunlight	●	●	●				
	Reflected welding flash	●	●	●				
	Metal pouring/Furnace work	● +	● +	● +				
	Spot/stud welding		●	●		★		
Group G Injurious optical radiation	Gas cutting/welding		●	●		●		
	Furnace work	● +	● +	● +				
Group H Injurious optical radiation	Electric arc welding				● ◆			●
	Heavy gas cutting				● ◆			●
	Plasma spraying/cutting				● ◆			●
	Inert gas shielded arc welding				● ◆			●
	Atomic hydrogen welding				● ◆			●
Group I Laser Radiation	Laser radiation		►	►				
	Laser cutting		►	►				
	Laser surgery		►	►				
	Laser etching		►	►				
Group J Electric Arc Protection	Electric Arch Flash		↘	↘		↘	↘	
	Electrical installation		↘	↘		↘	↘	
	Maintenance and trouble shooting		↘	↘		↘	↘	
	Disconnecting live electrical systems		↘	↘		↘	↘	

This chart is adapted from Canadian Standards Association (CSA) found in "Eye and face protectors, Z94.3-15".
CSA Z94.3-15 states that Class 3, 4 and 5 protectors, or welding protection, shall be used only in conjunction with Class 1 or 2 protectors (spectacles or goggles).

LEGEND			
■ For impact	● For radiation	+ Must be worn with face shield	► Laser radiation
▲ For dust/splash	★ Other option	◆ Must be worn with spectacles or goggles	↘ Electric arc production