

HIGH VISIBILITY GARMENTS / EYE AND FACE PROTECTION

437-002-0128 High Visibility Garments. *Employees exposed to hazards caused by on-highway type moving vehicles in construction zones and street/highway traffic must wear highly visible upper body garments. The colors must contrast with other colors in the area sufficiently to make the worker stand out. Colors equivalent to strong red, strong orange, strong yellow, strong yellow-green or fluorescent versions of these colors are acceptable. During hours of darkness, the garments must also have reflective material visible from all sides for 1000 feet.*

Stat. Authority: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 10-2000, f. 11/7/00, ef. 4/1/01.

§1910.133 Eye And Face Protection.

(a) General requirements.

(1) The employer shall ensure that each affected employee uses appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

(2) The employer shall ensure that each affected employee uses eye protection that provides side protection when there is a hazard from flying objects. Detachable side protectors (e.g., clip-on or slide-on side shields) meeting the pertinent requirements of this section are acceptable.

(3) The employer shall ensure that each affected employee who wears prescription lenses while engaged in operations that involve eye hazards wears eye protection that incorporates the prescription in its design, or shall wear eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses.

(4) Eye and face PPE shall be distinctly marked to facilitate identification of the manufacturer.

(5) The employer shall ensure that each affected employee uses equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation. The following is a listing of appropriate shade numbers for various operations.

(b) Criteria for protective eye and face devices.

(1) Protective eye and face devices purchased after July 5, 1994 shall comply with ANSI Z87.1-1989, "American National Standard Practice for Occupational and Educational Eye and Face Protection," which is incorporated by reference, as specified in §1910.6 or shall be demonstrated by the employer to be equally effective.

EYE AND FACE PROTECTION / ADDITIONAL OREGON RULES FOR EYE AND FACE PROTECTION

(2) Eye and face protective devices purchased before July 5, 1994 shall comply with the ANSI "USA standard for Occupational and Educational Eye and Face Protection," Z87.1-1968, which is incorporated by reference as specified in §1910.6, or shall be demonstrated by the employer to be equally effective.

[59 FR 16360, Apr. 6, 1994; 59 FR 33911, July 1, 1994, as amended at 61 FR 9238, Mar. 7, 1996; 61 FR 19548, May 2, 1996]

Stat. Auth.: ORS 654.025(2) and 656.726(3).
Hist: OR-OSHA Admin. Order 9-1993, f. 7/29/93, ef. 9/15/93.
 OR-OSHA Admin. Order 5-1994, f. 9/30/94, ef. 9/30/94.
 OR-OSHA Admin. Order 3-1997, f. 3/28/97, ef. 3/28/97.
 OR-OSHA Admin. Order 4-1997, f. 4/2/97, ef. 4/2/97.

NOTE: In Oregon, the ANSI Standard may be viewed at the OR-OSHA Resource Center located at 350 Winter Street NE, Room 26, Salem OR 97301-3882.

437-002-0130 Additional Oregon Rules for Eye and Face Protection. Lasers.
Employees whose occupation or assignment requires exposure to laser beams shall be furnished laser safety goggles as required by Occupational Health Regulations which will protect for the specific wavelength of the laser and be of optical density adequate for the energy involved.

Stat. Auth.: ORS 654.025(2) and 656.726(3).
Hist: WCB Admin. Order 9-1974, f. 3/19/74, ef. 4/15/74.
 OR-OSHA Admin. Order 9-1993, f. 7/29/93, ef. 9/15/93.
 OR-OSHA Admin. Order 5-1994, f. 9/30/94, ef. 9/30/94.

Filter Lenses for Protection Against Radiant Energy

Operations	Electrode Size 1/32 in.	Arc Current (amps)	Minimum* Protective Shade
Shielded metal arc welding	Less than 3	Less than 60	7
	3-5	60-160	8
	5-8	160-250	10
	More than 8	250-550	11
Gas metal arc welding and flux cored arc welding		Less than 60	7
		60-160	10
		160-250	10
Gas Tungsten arc welding		250-500	10
		Less than 50	8
		50-150	8
		150-500	10
Air carbon	(Light)	Less than 500	10
Arc cutting	(Heavy)	500-1000	11
Plasma arc welding		Less than 20	6
		20-100	8
		100-400	10
		400-800	11
Plasma arc cutting	(Light) **	Less than 300	8
	(Medium) **	300-400	9
	(Heavy) **	400-800	10
Torch brazing		3
Torch soldering		2
Carbon arc welding		14

ADDITIONAL OREGON RULES FOR EYE AND FACE PROTECTION

Filter Lenses for Protection Against Radiant Energy

Operations	Plate thickness – inches	Plate thickness – mm	Minimum* Protective Shade
Gas Welding:			
Light	Under 1/8	Under 3.2	4
Medium	1/8 to 1/2	3.2 to 12.7	5
Heavy	Over 1/2	Over 12.7	6
Oxygen Cutting:			
Light	Under 1	Under 25	3
Medium	1 to 6	25 to 150	4
Heavy	Over 6	Over 150	5

* As a rule of thumb, start with a shade that is too dark to see the weld zone. Then go to a lighter shade which gives sufficient view of the weld zone without going below the minimum. In oxyfuel gas welding or cutting where the torch produces a high yellow light, it is desirable to use a filter lens that absorbs the yellow or sodium line in the visible light of the (spectrum) operation.

** These values apply where the actual arc is clearly seen. Experience has shown that lighter filters may be used when the arc is hidden by the workpiece.

