

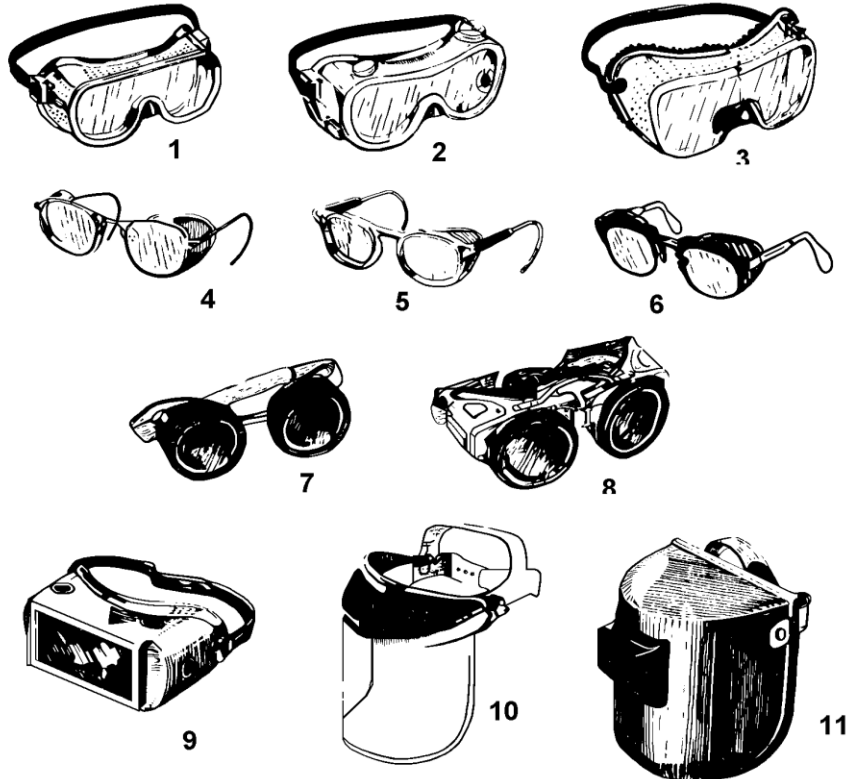
- (2) Calks or other suitable footwear, which will afford reasonable protection from slipping, must be worn while working on logs, poles, pilings, or similar forest products.
- (3) Traditional tennis shoes, shoes with canvas tops, or thin or soft soled athletic shoes, open toed sandals, slippers, dress shoes or other similar type shoes must not be worn. Soft or athletic-type soles with uppers of leather or other substantial material may be used where firm footing is desired and where minimal danger of injury to feet from falling or moving objects.
- (4) Safety-toe footwear for employees must meet the requirements and specifications in American National Standard for Men's Safety-Toe Footwear, Z41.1-1967.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 16-09-085 (Order 15-08), § 296-155-212, filed 04/19/16, effective 05/20/16. Statutory Authority: Chapter 49.17 RCW. 94-15-096 (Order 94-07), § 296-155-212, filed 7/20/94, effective 9/20/94; 89-11-035 (Order 89-03), § 296-155-212, filed 5/15/89, effective 6/30/89. Statutory Authority: RCW 49.17.040 and 49.17.050. 86-03-074 (Order 86-14), § 296-155-212, filed 1/21/86; Order 74-26, § 296-155-212, filed 5/7/74, effective 6/6/74.]

### ***WAC 296-155-215 Eye and face protection.***

- (1) **General.**
  - (a) Employees must use eye and face protection equipment when machines or operations present potential eye or face injury from physical, chemical, or radiation agents.
  - (b) Eye and face protection equipment required by this part must meet the requirements specified in American National Standards Institute, Z87.1-1968, Practice for Occupational and Educational Eye and Face Protection.
  - (c) Employees whose vision requires the use of corrective lenses in spectacles, when required by this regulation to wear eye protection, must be protected by goggles or spectacles of one of the following types:
    - (i) Spectacles whose protective lenses provide optical correction;
    - (ii) Goggles that can be worn over corrective spectacles without disturbing the adjustment of the spectacles.
    - (iii) Goggles that incorporate corrective lenses mounted behind the protective lenses.
  - (d) Face and eye protection equipment must be kept clean and in good repair. The use of this type equipment with structural or optical defects must be prohibited.
  - (e) Table C-1 must be used as a guide in the selection of face and eye protection for the hazards and operations noted.
  - (f) Protectors must meet the following minimum requirements:
    - (i) They must provide adequate protection against the particular hazards for which they are designed.
    - (ii) They must be reasonably comfortable when worn under the designated conditions.
    - (iii) They must fit snugly and must not unduly interfere with the movements of the wearer.
    - (iv) They must be durable.

- (v) They must be capable of being disinfected.
- (vii) They must be easily cleanable.
- (g) Every protector must be distinctly marked to facilitate identification only of the manufacturer.
- (h) When limitations or precautions are indicated by the manufacturer, they must be transmitted to the user and care taken to see that such limitations and precautions are strictly observed.



<b>Table C-1 Eye and Face Protection Selection Guide</b>	
1.	GOGGLES, flexible fitting, regular ventilation
2.	GOGGLES, flexible fitting, hooded ventilation
3.	GOGGLES, cushioned fitting, rigid body
*4.	SPECTACLES, metal frame, with sideshields
*5.	SPECTACLES, plastic frame with sideshields
*6.	SPECTACLES, metal-plastic frame, with sideshields
**7.	WELDING GOGGLES, eyecup type, tinted lenses (illustrated)
7A.	CHIPPING GOGGLES, eyecup type, clear safety lenses (not illustrated)
**8.	WELDING GOGGLES, coverspec type tinted lenses (illustrated)
8A.	CHIPPING GOGGLES, coverspec type, clear safety lenses (not illustrated)
**9.	WELDING GOGGLES, coverspec type, tinted plate lens
10.	FACE SHIELD (available with plastic or mesh window)
11.	WELDING HELMETS
*	Nonside shield spectacles are available for limited hazard use requiring only frontal protection.
**	See Table C-2 in (2) of this section, Filter lens shade numbers for protection against radiant energy.

<b>Applications</b>		
<b>OPERATION</b>	<b>HAZARDS</b>	<b>RECOMMENDED PROTECTORS:</b>  <b>Underscored Numbers Signify Preferred Protection</b>
ACETYLENE-BURNING ACETYLENE-CUTTING ACETYLENE-WELDING	SPARKS, HARMFUL RAYS, MOLTEN METAL, FLYING PARTICLES	<u>7,8,9</u>
CHEMICAL HANDLING	SPLASH, ACID BURNS, FUMES	<u>2,10</u> (for severe exposure and <u>10</u> over 2)
CHIPPING ELECTRIC (ARC) WELDING	FLYING PARTICLES SPARKS, INTENSE RAYS, MOULTEN METAL	<u>1,3,4,5,6,7A, 8A</u>  <u>9,11</u> ( <u>11</u> in combination with 4,5,6 in tinted lenses, advisable)
FURNACE OPERATIONS	GLARE, HEAT MOLTEN METAL	<u>7,8,9</u> (for severe exposure add <u>10</u> )

<b>Applications (Continued)</b>		
<b>OPERATION</b>	<b>HAZARDS</b>	<b>RECOMMENDED PROTECTORS:  Underscored Numbers Signify Preferred Protection</b>
GRINDING LIGHT	FLYING PARTICLES	<u>1,3,4,5,6</u> ,10
GRINDING HEAVE	FLYING PARTICLES	<u>1,3,7A, 8A</u> (for severe exposure add 10)
LABORATORY	CHEMICAL SPLASH GLASS BREAKAGE	<u>2</u> (10 when in combination with <u>4,5,6</u> )
MACHINING	FLYING PARTICLES	<u>1,3,4,5,6</u> ,10
MOLTEN METALS	HEAT, GLARE SPARKS, SPLASH	<u>7,8</u> (10 in combination with <u>4,5,6</u> , in tinted lenses)
SPOT WELDING	FLYING PARTICLES SPARKS	<u>1,3,4,5,6</u> ,10

- (2) **Protection against radiant energy.** (a) Selection of shade numbers for welding filter. Table C-2 must be used as a guide for the selection of the proper shade numbers of filter lenses or plates used in welding. Shades more dense than those listed may be used to suit the individual's needs.

<b>Welding Operation</b>	<b>Shade Number</b>
Shielded metal-arc welding 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	10
Gas-shielded arc welding (nonferrous) 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	11
Gas shielded arc welding (ferrous) 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	12
Shielded metal-arc welding 3/16-, 7/32-, 1/4-inch diameter electrodes	12
5/15-, 3/8-inch diameter electrodes	14
Atomic hydrogen welding	10-14
Carbon-arc welding	14
Soldering	2
Torch brazing	3 or 4
Light cutting, up to 1 inch	3 or 4
Medium cutting, 1 inch to 6 inches	4 or 5
Heavy cutting, over 6 inches	5 or 6
Gas welding (light), up to 1/8 inch	4 or 5
Gas welding (medium), 1/8 inch to 1/2 inch	5 or 6
Gas welding (heavy), over 1/2 inch	6 or 9

- (a) Laser protection.
  - (i) Employees whose occupation or assignment requires potentially hazardous exposure (see WAC 296-62-09005(4)) to laser radiation must wear suitable laser safety goggles which will protect for the specific wavelength of the laser and be of optical density (O.D.) adequate for the energy involved. Table C-3 lists the maximum power or energy density for which adequate protection is afforded by glasses of optical densities from 5 through 8.

<b>Intensity</b>		<b>Attenuation</b>
CW maximum power density (watts/cm <sup>2</sup> )	Optical Density (O.D.)	Attenuation factor
10 <sup>2</sup>	5	10 <sup>5</sup>
10 <sup>1</sup>	6	10 <sup>6</sup>
1.0	7	10 <sup>7</sup>
10.0	8	10 <sup>8</sup>

Output levels falling between lines in this table must require the higher optical density.

- (ii) All protective goggles must bear a label identifying the following data:
  - (A) The laser wavelengths for which use is intended;
  - (B) The optical density of those wavelengths.
  - (C) The visible light transmission.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 16-09-085 (Order 15-08), § 296-155-215, filed 04/19/16, effective 05/20/16. Statutory Authority: Chapter 49.17 RCW. 94-15-096 (Order 94-07), § 296-155-215, filed 7/20/94, effective 9/20/94. Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-155-215, filed 12/11/84; Order 74-26, § 296-155-215, filed 5/7/74, effective 6/6/74.]

## **WAC 296-155-220 Respiratory protection.**

The respiratory protection requirements applicable to construction work under this section are identical to those set forth in chapter [296-842](#) WAC.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 05-03-093 (Order 04-41), § 296-155-220, filed 01/18/05, effective 03/01/05. Statutory Authority: RCW 49.17.010, .040, .050. 99-10 (Order 98-10), § 296-155-220, filed 05/04/99, effective 09/01/99. Statutory Authority: RCW 49.17.040 and 49.17.050. 83-15-017 (Order 83-19), § 296-155-220, filed 7/13/83, effective 9/12/83; Order 74-26, § 296-155-220, filed 5/7/74, effective 6/6/74.]

## **WAC 296-155-235 Working over or adjacent to water.**

- (1) When an employee is employed under conditions which expose them to a risk of drowning, they must wear a U.S. Coast Guard approved life saving device, unless it can be shown that conditions, such as shallow water, are such that flotation would not be achieved.
- (2) Prior to and after each use, the buoyant life saving device must be inspected for defects which would alter their strength or buoyancy. Defective units must not be used.
- (3) Ring buoys with at least 90 feet of line must be provided and readily available for emergency rescue operations. Distance between ring buoys must not exceed 200 feet.
- (4) At least one lifesaving skiff must be immediately available at locations where employees are working over or adjacent to water. Each skiff, or skiffs, must:
  - (a) Be suitable for conditions where used.
  - (b) Be equipped with oar locks securely attached to gunwales, oars, one boat hook, and one cork ring buoy with 50 feet of suitable line attached.
- (5) Whenever boats or skiffs cannot be used, due to swift currents, life lines close to the water surface must be provided and, wherever practicable, a line must be stretched across the stream with tag lines.
- (6) Where workers are transported by boat or barge, only such number of persons must be carried that can be safely accommodated on fixed seats. Capacity showing number of persons must be plainly marked on vessel.