

Oregon OSHA – Adopted Changes

Personal Protective Equipment (PPE) in Construction, And Hole Openings/Skylights in General Industry

Oregon OSHA Administrative Order 2-2013,
Adopted February 15, 2013, effective April 1, 2013

Text removed is in ~~[brackets with line through]~~.

Text added is in **bold and underlined**.

DIVISION 2 – GENERAL INDUSTRY

Division 2/D, Walking-Working Surfaces

437-002-0020 Adoption by Reference. In addition to, and not in lieu of, any other safety and health codes contained in OAR Chapter 437, the Department adopts by reference the following **federal regulations** ~~[rules as]~~printed **as part of** ~~[in]~~the Code of Federal Regulations, 29 CFR 1910, ~~[revised as of 7/1/98, and any subsequent amendments published]~~ in the Federal Register~~[as listed below]~~:

- (1) 29 CFR 1910.21 **Definitions**, published 6/27/74, Federal Register, vol. 39, no. 125, pp. 23505-23508.
- (2) 29 CFR 1910.22 **General Requirements**, published 6/27/74, FR vol. 39, no. 125, p. 23508.
- (3) 29 CFR 1910.23 **Guarding Floor and Wall Openings and Holes**, published ~~[6/27/74, FR vol. 39, no. 125, pp. 23508-23510; amended 10/24/78, FR vol. 43, p. 49744; amended]~~2/10/84, FR vol. 49, p. 5321. **Amended with Oregon OSHA AO 2-2013, f. 2/15/13, ef. 4/1/13.**
- (4) 29 CFR 1910.24 **Fixed Industrial Stairs**, published ~~[6/27/74, FR vol. 39, no. 125, pp. 23510-23511; amended 10/24/78, FR vol. 43, p. 49744; amended]~~2/10/84, FR vol. 49, p. 5321.
- (5) 29 CFR 1910.25 **Portable Wood Ladders**, REPEALED. In Oregon, OAR 437-002-0026 applies.
- (6) 29 CFR 1910.26 **Portable Metal Ladders**, REPEALED. In Oregon, OAR 437-002-0026 applies.
- (7) 29 CFR 1910.27 **Fixed Ladders**, REPEALED. In Oregon, OAR 437-002-0027 applies.
- (8) 29 CFR 1910.28 **Safety Requirements for Scaffolding**, published ~~[6/27/74, FR vol. 39, no. 125, pp. 23522-23529; amended 10/24/78, FR vol. 43, p. 49746; amended 2/10/84, FR vol. 49, p. 5321; amended]~~4/12/88, FR vol. 53, p. 12121.

(9) 29 CFR 1910.29 **Manually Propelled Mobile Ladder Stands and Scaffolds (Towers)**, published 6/27/74, FR vol. 39, no. 125, pp. 23529-23530.

(10) 29 CFR 1910.30 **Other Working Surfaces**, published [6/27/74, FR vol. 39, no. 125, p. 23530; amended 2/10/84, FR vol. 49, p. 5322;]3/7/96, FR vol. 61, no. 46, p. 9235.

(11) 29 CFR 1910.31 **Source of Standards**, published [6/27/74, FR vol. 39, no. 125, p. 23530;]3/7/96, FR vol. 61, no. 46, p. 9235.

(12) 29 CFR 1910.32 **Standards Organizations**, published [6/27/74, FR vol. 39, no. 125, p. 23530;]3/7/96, FR vol. 61, no. 46, p. 9235.

These standards are available at the Oregon Occupational Safety and Health Division, Oregon Department of Consumer and Business Services, and the United States Government Printing Office.

Stat. Auth.: ORS 654.025(2) and 656.726(~~3~~**4**).

Stats. Implemented: ORS 654.001 to 654.295.

Hist: OR-OSHA Admin. Order 4-1990, f. 1/23/90, ef. 1/23/90.

OR-OSHA Admin. Order 2-1991, f. 2/4/91, ef. 4/1/91.

OR-OSHA Admin. Order 4-1997, f. 4/2/97, ef. 4/2/97.

OR-OSHA Admin. Order 10-1999, f. 9/10/99, ef. 9/10/99.

OR-OSHA Admin. Order 2-2013, f. 2/15/13, ef. 4/1/13.

~~1910.23(e)(8) [Skylight screens shall be of such construction and mounting that they are capable of withstanding a load of at least 200 pounds applied perpendicularly at any one area on the screen. They shall also be of such construction and mounting that under ordinary loads or impacts, they will not deflect downward sufficiently to break the glass below them. The construction shall be of grillwork with openings not more than 4 inches long or of slatwork with openings not more than 2 inches wide with length unrestricted.]~~ **Oregon OSHA repealed 1920.23(e)(8) with AO 2-2013, f. 2/15/13, ef. 4/1/13. In Oregon, OAR 437-002-0023 applies.**

437-002-0023 Covers for holes. Covers for holes in floors, roofs, and other walking/working surfaces (to include skylights and skylight screens) must be capable of supporting, without failure, at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time.

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

Stats. Implemented: ORS 654.001 to 654.295.

Hist.: OR-OSHA Admin. Order 2-2013, f. 2/15/13, ef. 4/1/13.

Division 2/I, Personal Protective Equipment

437-002-0134 Personal Protective Equipment.

Application. This rule applies to personal protective equipment and other protective equipment for the eyes, face, head, extremities and torso to include protective clothing, respiratory devices, and protective shields and barriers, wherever employees encounter hazardous processes or environments, chemical hazards, radiological hazards, or mechanical irritants that are capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

Note: The assessment for eyes, face, head, hands, and feet are currently in effect. The torso and extremities (e.g. arms and legs) element of the body assessment will not be enforced until July 1, 2012.

(1) Hazard assessment and equipment selection.

(a) The employer must assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE) or other protective equipment. If such hazards are present, or likely to be present, the employer must:

(A) Select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment;

(i) All protective equipment must be of safe design and construction for the work to be performed.

(ii) Protective equipment must be worn and used in a manner which will make full use of its protective properties.

(B) Communicate selection decisions to each affected employee; and,

(C) Select PPE that properly fits each affected employee.

NOTE: Non-mandatory Appendix B contains an example of procedures that would comply with the requirement for a hazard assessment.

(b) The employer must verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment.

(2) Equipment.

(a) Where employees provide their own protective equipment, the employer is responsible to assure its adequacy, including proper maintenance, and sanitation of such equipment.

(b) All personal protective equipment must be provided, used, and maintained in a sanitary and reliable condition.

(c) Defective or damaged personal protective equipment must not be used

(d) Each employer must maintain a regular system of inspection and maintenance of personal protective equipment furnished to workers.

(3) Training.

(a) The employer must provide training to each employee who is required by this section to use PPE and each employee that is provided training must know at least the following:

(A) When PPE is necessary;

(B) What PPE is necessary;

- (C) How to properly don, doff, adjust, and wear PPE;
- (D) The limitations of the PPE; and,
- (E) The proper care, maintenance, useful life and disposal of the PPE.
- (b) Each affected employee must demonstrate an understanding of the training specified in paragraph (3)(a) of this section, and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.
- (c) When the employer has reason to believe that any affected employee who has already been trained does not have the understanding and skill required by paragraph (3)(b) of this section, the employer must retrain each such employee. Circumstances where retraining is required include, but are not limited to situations where:
 - (A) Changes in the workplace render previous training obsolete; or
 - (B) Changes in the types of PPE to be used render previous training obsolete; or
 - (C) Inadequacies in an affected employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.

(4) Payment for protective equipment.

- (a) Except as provided by paragraphs (4)(b) through (4)(f) of this section, the protective equipment, including personal protective equipment (PPE), used to comply with this part, must be provided by the employer at no cost to employees.
- (b) The employer is not required to pay for non-specialty safety-toe protective footwear (including steel-toe shoes or steel-toe boots) and non-specialty prescription safety eyewear, provided that the employer permits such items to be worn off the job-site.
- (c) When the employer provides metatarsal guards and allows the employee, at his or her request, to use shoes or boots with built-in metatarsal protection, the employer is not required to reimburse the employee for the shoes or boots.
- (d) The employer is not required to pay for:
 - (A) The logging boots required by OAR 437-007-0330 in Division 7.
 - (B) Everyday clothing, such as long-sleeve shirts, long pants, street shoes, and normal work boots; or
 - (C) Ordinary clothing, skin creams, or other items, used solely for protection from weather, such as winter coats, jackets, gloves, parkas, rubber boots, hats, raincoats, ordinary sunglasses, and sunscreen.
- (e) The employer must pay for replacement PPE, except when the employee has lost or intentionally damaged the PPE.
- (f) Where an employee provides adequate protective equipment he or she owns pursuant to paragraph (2)(a) of this section, the employer may allow the employee to use it and is not required to reimburse the employee for that equipment. The employer must not require an employee to provide or pay for his or her own PPE, unless the PPE is excepted by paragraphs (4)(b) through (4)(e) of this section.

(5) Fall Protection.

- (a) All employees must be protected from fall hazards when working on unguarded surfaces more than 10 feet above a lower level or at any height above dangerous equipment.
- (b) The employer must ensure that fall protection systems are provided, installed, and used according to the criteria in 1926.502(d), and 437-003-0502 in Division 3/M, Construction/Fall Protection.

(6) Work Clothing.

- (a) Clothing must be worn which is appropriate to the work performed and conditions encountered.

- (b) Appropriate high temperature protective clothing must be worn by workers who are exposed to possible contact with molten metals or other substances that can cause burns.
- (c) Loose sleeves, ties, lapels, cuffs, or other loose clothing must not be worn near moving machinery.
- (d) Clothing saturated or impregnated with flammable liquids, corrosive or toxic substances, irritants, or oxidizing agents must be removed immediately and not worn again until properly cleaned.
- (e) Rings, wristwatches, earrings, bracelets, and other jewelry which might contact power driven machinery or electric circuitry, must not be worn.

(7) 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.

(8) Eye And Face Protection.

- (a) The employer must 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.
- (b) The employer must 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.
- (c) The employer must 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.
- (d) Eye and face PPE must be distinctly marked to facilitate identification of the manufacturer.
- (e) The employer must 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.

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
		250-500	10
Gas Tungsten arc welding		Less than 50	8
		50-150	8
		150-500	10
Air carbon Arc cutting	(Light) (Heavy)	Less than 500 500-1000	10 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
		...	
		

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.

(f) Protective eye and face protection devices must comply with any of the following consensus standards

(A) ANSI Z87.1-2003, American National Standard Practice for Occupational and Educational Eye and Face Protection, which is incorporated by reference in 1910.6;

(B) ANSI Z87.1-1989 (R-1998), American National Standard Practice for Occupational and Educational Eye and Face Protection, which is incorporated by reference in 1910.6; or

(C) ANSI Z87.1-1989, American National Standard Practice for Occupational and Educational Eye and Face Protection, which is incorporated by reference in 1910.6.

(g) Protective eye and face protection devices that the employer demonstrates are at least as effective as protective eye and face protection devices that are constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section.

(h) 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.

(9) Head Protection.

(a) The employer must ensure that each affected employee wears a protective helmet when working in areas where there is a potential for injury to the head from falling or flying objects.

(b) The employer must ensure that a protective helmet designed to reduce electrical shock hazard is worn by each such affected employee when near exposed electrical conductors which could contact the head.

(c) Head protection must comply with any of the following consensus standards:

(A) ANSI Z89.1-2009, American National Standard for Industrial Head Protection, which is incorporated by reference in 1910.6;

~~[(A)]~~ **(B)** ANSI Z89.1-2003, American National Standard for Industrial Head Protection, which is incorporated by reference in §1910.6;

~~[(B)]~~ **(C)** ANSI Z89.1-1997, American National Standard for Industrial Head Protection, which is incorporated by reference in 1910.6; or

~~[(C)]~~ ~~ANSI Z89.1-1986, American National Standard for Personnel Protection—Protective Headwear for Industrial Workers—Requirements, which is incorporated by reference in 1910.6.]~~

(d) Head protection devices that the employer demonstrates are at least as effective as head protection devices that are constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section.

(e) Employees who are exposed to power-driven machinery or to sources of ignition shall wear caps or other head covering which completely covers the hair.

(10) Foot Protection.

(a) The employer must ensure that each affected employee use protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards.

- (b) Protective footwear must comply with any of the following consensus standards:
- (A) ASTM F-2412-2005, Standard Test Methods for Foot Protection, and ASTM F-2413-2005, Standard Specification for Performance Requirements for Protective Footwear, which are incorporated by reference in 1910.6;
 - (B) ANSI Z41-1999, American National Standard for Personal Protection –Protective Footwear, which is incorporated by reference in 1910.6; or
 - (C) ANSI Z41-1991, American National Standard for Personal Protection –Protective Footwear, which is incorporated by reference in §1910.6.
- (c) Protective footwear that the employer demonstrates is at least as effective as protective footwear that is constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section.
- (d) Special types or designs of shoes or foot guards are required where conditions exist that make their use necessary for the safety of workers.

(11) Leg protection

- (a) Leggings or high boots of leather, rubber, or other suitable material must be worn by persons exposed to hot substances or dangerous chemical spills.
 - (b) Employees using chain saws must wear chaps or leg protectors that cover the leg from the upper thigh to mid-calf. The protector must be material designed to resist cuts from the chain saw. Employers must provide this protection at no cost to the employee.
- NOTE to 437-002-0134(11)(b): Employees working in the tree and shrub services industry must follow rules on this subject in Subdivision 2/R instead of the above.

(12) Hand Protection.

- (a) Employers must select and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.
- (b) Employers must base the selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.
- (c) Gloves must not be worn by persons whose hands are exposed to moving parts in which they could be caught.

(13) Skin protection. Where the need for their use is necessary, protective covering, ointments, gloves, or other effective protection must be provided for and used by persons exposed to materials which are hazardous to the skin.

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

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 4-2011, f. 12/8/11, ef. 12/8/11.

OR-OSHA Admin. Order 2-2013, f. 2/15/13, ef. 4/1/13.

DIVISION 3, CONSTRUCTION

437-003-0001

Adoption by Reference. In addition to, and not in lieu of, any other safety and health codes contained in OAR Chapter 437, the Department adopts by reference the following federal regulations printed as part of the Code of Federal Regulations, in the Federal Register:

(1) Subdivision A – GENERAL

(a) 29 CFR 1926.1 Purpose and Scope, published 4/6/79, FR vol. 44, p. 20940.

(b) 29 CFR 1926.2 Variances from safety and health standards, published 4/6/79, FR vol. 44, p. 20940.

(c) 29 CFR 1926.3 Inspections – right of entry, published 4/6/79, FR vol. 44, p. 20940.

(d) 29 CFR 1926.4 Rules of practice for administrative adjudications for enforcement of safety and health standards, published 4/6/79, FR vol. 44, p. 20940.

(e) 29 CFR 1926.6 Incorporation by reference, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(2) Subdivision B – GENERAL INTERPRETATIONS

(a) 29 CFR 1926.10 Scope of subpart, published 4/6/79, FR vol. 44, p. 20940.

(b) 29 CFR 1926.11 Coverage under section 103 of the act distinguished, published 4/6/79, FR vol. 44, p. 20940.

(c) 29 CFR 1926.12 Reorganization plan No. 14 of 1950, published 4/6/79, FR vol. 44, p. 20940.

(d) 29 CFR 1926.13 Interpretation of statutory terms, published 4/6/79, FR vol. 44, p. 20940.

(e) 29 CFR 1926.14 Federal contracts for 'mixed' types of performance, published 4/6/79, FR vol. 44, p. 20940.

(f) 29 CFR 1926.15 Relationship to the service contract act; Walsh-Healey Public Contracts Act, published 4/6/79, FR vol. 44, p. 20940.

(g) 29 CFR 1926.16 Rules of construction, published 4/6/79, FR vol. 44, p. 20940.

(3) Subdivision C – GENERAL SAFETY AND HEALTH PROVISIONS

(a) 29 CFR 1926.20 General safety and health provisions, published 12/12/08, FR vol. 73, no. 240, pp. 75568-75589.

(b) 29 CFR 1926.21 Safety training and education, published 4/6/79, FR vol. 44, p. 20940; amended with Oregon OSHA AO 6-2012, repealed (b)(6), f. 9/28/12, ef. 4/1/13.

(c) 29 CFR 1926.22 Recording and reporting of injuries (Reserved)

(d) 29 CFR 1926.23 First aid and medical attention, published 4/6/79, FR vol. 44, p. 20940.

(e) 29 CFR 1926.24 Fire protection and prevention, published 4/6/79, FR vol. 44, p. 20940.

(f) 29 CFR 1926.25 Housekeeping, published 4/6/79, FR vol. 44, p. 20940.

(g) 29 CFR 1926.26 Illumination, published 4/6/79, FR vol. 44, p. 20940.

(h) 29 CFR 1926.27 Sanitation, published 4/6/79, FR vol. 44, p. 20940.

(i) 29 CFR 1926.28 Personal protective equipment[, published 4/6/79, FR vol. 44, p. 20940].

REPEALED with Oregon OSHA Admin. Order 2-2013, filed 2/15/13, effective 4/1/13. In Oregon, OAR 437-003-0134 applies.

(j) 29 CFR 1926.29 Acceptable certifications, published 4/6/79, FR vol. 44, p. 20940.

(k) 29 CFR 1926.30 Shipbuilding and ship repairing, published 3/7/96, FR vol. 61, no. 46, p. 9249.

(l) 29 CFR 1926.31 (Reserved).

(m) 29 CFR 1926.32 Definitions, published 6/30/93, FR vol. 58, no. 124, p. 35078.

(n) 29 CFR 1926.33 Access to employee exposure and medical records, published 6/20/96, FR vol. 61, no. 46, p. 31427.

(o) 29 CFR 1926.34 Means of egress, published 6/30/93, Federal Register, vol. 58, no. 124, p. 35083.

(4) Subdivision D – OCCUPATIONAL HEALTH AND ENVIRONMENTAL CONTROLS

- (a) 29 CFR 1926.50 Medical services and first aid, published 6/18/98, FR vol. 63, no. 117, p. 33469.
- (b) 29 CFR 1926.51 Sanitation, published 6/30/93, FR vol. 58, no. 124, p. 35084.
- (c) 29 CFR 1926.52 Occupational noise exposure, published 4/6/79, FR vol. 44, p. 20940.
- (d) 29 CFR 1926.53 Ionizing radiation, published 4/6/79, FR vol. 44, p. 20940.
- (e) 29 CFR 1926.54 Nonionizing radiation, published 4/6/79, FR vol. 44, p. 20940.
- (f) 29 CFR 1926.55 Gases, vapors, fumes, dusts, and mists, published 1/10/97, FR vol. 62, no. 7, p. 1619.
- (g) 29 CFR 1926.56 Illumination, published 4/6/79, FR vol. 44, p. 20940.
- (h) 29 CFR 1926.57 Ventilation, published 1/8/98, FR vol. 63, no. 5, p. 1295.
- (i) 29 CFR 1926.58 Reserved, §1926.58, Asbestos, tremolite, anthophyllite and actinolite is redesignated as §1926.1101, Asbestos, and §1926.58 is reserved (8/10/94, FR vol. 59, no. 153, pp. 41131-62).
- (j) 29 CFR 1926.59 Hazard Communication, published 6/20/96, FR vol. 61, p. 31427.
- (k) 29 CFR 1926.60 Methylenedianiline (MDA), published 12/12/08, FR vol. 73, no. 240, pp. 75568-75589.
- (l) 29 CFR 1926.61 Retention of DOT markings, placards and labels, published 6/20/96, FR vol. 61, p. 31427.
- (m) 29 CFR 1926.62 Lead, published 12/12/08, FR vol. 73, no. 240, pp. 75568-75589.
NOTE: Cadmium has been redesignated as §1926.1127.
- (n) 29 CFR 1926.65 Hazardous Waste Operations and Emergency Response
NOTE: Division 2/H, 1910.120, Hazardous Waste Operations and Emergency Response, applies to Construction.

(5) Subdivision E – PERSONAL PROTECTIVE AND LIFE SAVING EQUIPMENT

- (a) 29 CFR 1926.95 Criteria for personal protective equipment[, published 11/15/07, FR vol. 72, no. 220, p. 64342]. **REPEALED with Oregon OSHA Admin. Order 2-2013, filed 2/15/13, effective 4/1/13. In Oregon, OAR 437-003-0134 applies.**
 - (b) 29 CFR 1926.100 Head protection[, published 4/6/79, FR vol. 44, p. 20940]. **REPEALED with Oregon OSHA Admin. Order 2-2013, filed 2/15/13, effective 4/1/13. In Oregon, OAR 437-003-0134 applies.**
 - (c) 29 CFR 1926.101 Hearing protection[, published 4/6/79, FR vol. 44, p. 20940]. **REPEALED with Oregon OSHA Admin. Order 2-2013, filed 2/15/13, effective 4/1/13. In Oregon, OAR 437-003-0134 applies.**
 - (d) 29 CFR 1926.102 Eye and face protection[, published 6/30/93, FR vol. 58, no. 124, p. 35160]. **REPEALED with Oregon OSHA Admin. Order 2-2013, filed 2/15/13, effective 4/1/13. In Oregon, OAR 437-003-0134 applies.**
 - (e) 29 CFR 1926.103 Respiratory protection, published 1/8/98, FR vol. 63, no. 5, p. 1297.
NOTE: 29 CFR 1926.104 Removed, 8/9/94, FR vol. 59, no. 152, p. 40729.
 - (f) 29 CFR 1926.105 Reserved, 8/9/94, FR vol. 59, no. 152, p. 40729.
 - (g) 29 CFR 1926.106 Working over or near water, published 4/6/79, FR vol. 44, p. 20940.
 - (h) 29 CFR 1926.107 Definitions applicable to this subpart, published 8/9/94, FR vol. 59, no. 152, p. 40729.
- (6) Subdivision F – FIRE PROTECTION AND PREVENTION
- (a) 29 CFR 1926.150 Fire protection, published 4/6/79, FR vol. 44, p. 20940.
 - (b) 29 CFR 1926.151 Fire prevention, published 7/11/86, FR vol. 51, p. 25318.
 - (c) 29 CFR 1926.152 Flammable and combustible liquids, published 6/30/93, FR vol. 58, no. 124, p. 35162.
 - (d) 29 CFR 1926.153 Liquefied petroleum gas (LP-Gas), published 6/30/93, FR vol. 58, no. 124, p. 35170.
 - (e) 29 CFR 1926.154 Temporary heating devices, published 4/6/79, FR vol. 44, p. 20940.

- (f) 29 CFR 1926.155 Definitions applicable to this subpart, published 4/6/79, FR vol. 44, p. 20940.
- (7) Subdivision G – SIGNS, SIGNALS, AND BARRICADES
- (a) 29 CFR 1926.200 Accident prevention signs and tags, published 6/30/93, FR vol. 58, no. 124, p. 35173; amended with OR-OSHA Admin. Order 2-2003, f. 1/30/03, ef. 1/30/03.
- (b) 29 CFR 1926.201 Signaling, REPEALED with OR-OSHA Admin. Order 2-2003, f. 1/30/03, ef. 1/30/03.
- (c) 29 CFR 1926.202 Barricades, REPEALED with OR-OSHA Admin. Order 2-2003, f. 1/30/03, ef. 1/30/03.
- (d) 29 CFR 1926.203 Definitions applicable to this subpart, published 4/6/79, FR vol. 44, p. 20940; amended with OR-OSHA Admin. Order 2-2003, f. 1/30/03, ef. 1/30/03.
- (8) Subdivision H – MATERIALS HANDLING, STORAGE, USE AND DISPOSAL
- (a) 29 CFR 1926.250 General requirements for storage, published 6/30/93, FR vol. 58, no. 124, p. 35173.
- (b) 29 CFR 1926.251 Rigging equipment for material handling, published 6/30/93, FR vol. 58, no. 124, p. 35173.
- (c) 29 CFR 1926.252 Disposal of waste materials, published 4/6/79, FR vol. 44, p. 20940.
- (9) Subdivision I – TOOLS – HAND AND POWER
- (a) 29 CFR 1926.300 General requirements, published 3/7/96, FR vol. 61, no. 46, p. 9250.
- (b) 29 CFR 1926.301 Hand tools, published 4/6/79, FR vol. 44, p. 20940.
- (c) 29 CFR 1926.302 Power operated hand tools, published 6/30/93, FR vol. 58, no. 124, p. 35175.
- (d) 29 CFR 1926.303 Abrasive wheels and tools, published 6/30/93, FR vol. 58, no. 124, p. 35175.
- (e) 29 CFR 1926.304 Woodworking tools, published 3/7/96, FR vol. 61, no. 46, p. 9251.
- (f) 29 CFR 1926.305 Jacks - lever and ratchet, screw, and hydraulic, published Federal Register vol. 58, no. 124, p. 35176.
- (10) Subdivision J – WELDING AND CUTTING
- (a) 29 CFR 1926.350 Gas welding and cutting, published 6/30/93, FR vol. 58, no. 124, p. 35179.
- (b) 29 CFR 1926.351 Arc welding and cutting, published 7/11/86, FR vol. 51, p. 25318.
- (c) 29 CFR 1926.352 Fire prevention, published 4/6/79, FR vol. 44, p. 20940.
- (d) 29 CFR 1926.353 Ventilation and protection in welding, cutting, and heating, published 6/30/93, FR vol. 58, no. 124, p. 35179.
- (e) 29 CFR 1926.354 Welding, cutting, and heating in way of preservative coatings, published 4/6/79, FR vol. 44, p. 20940.
- (11) Subdivision K – ELECTRICAL
- (a) 29 CFR 1926.400 Introduction, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (b) 29 CFR 1926.401 (Reserved)
- (c) 29 CFR 1926.402 Applicability, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (d) 29 CFR 1926.403 General requirements, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (e) 29 CFR 1926.404 Wiring design and protection, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335; amended with AO 5-2002, repeal (b)(1), f. 6/28/02, ef. 10/1/03.
- (f) 29 CFR 1926.405 Wiring methods, components, and equipment for general use, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (g) 29 CFR 1926.406 Specific purpose equipment and installations, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (h) 29 CFR 1926.407 Hazardous (classified) locations, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (i) 29 CFR 1926.408 Special systems, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (j) 29 CFR 1926.409 (Reserved)

- (k) 29 CFR 1926.415 (Reserved)
- (l) 29 CFR 1926.416 General requirements, published 8/12/96, FR vol. 61, no. 156, p. 41738.
- (m) 29 CFR 1926.417 Lockout and tagging of circuits, published 8/12/96, FR vol. 61, no. 156, p. 41739.
- (n) 29 CFR 1926.418 (Reserved)
- (o) 29 CFR 1926.430 (Reserved)
- (p) 29 CFR 1926.431 Maintenance of equipment, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (q) 29 CFR 1926.432 Environmental deterioration of equipment, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
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- (s) 29 CFR 1926.441 Battery locations and battery charging, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (t) 29 CFR 1926.442 - 29 CFR 1926.448 (Reserved)
- (u) 29 CFR 1926.449 Definitions applicable to this subpart, published 7/11/86, FR vol. 51, no. 133, pp. 25294-25335.
- (12) Subdivision L – SCAFFOLDING
 - (a) 29 CFR 1926.450 Scope, application and definitions applicable to this subpart, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
 - (b) 29 CFR 1926.451 General requirements, published 11/25/96, FR vol. 61, no. 228, p. 59831.
 - (c) 29 CFR 1926.452 Additional requirements applicable to specific types of scaffolds, published 8/30/96, FR vol. 61, no. 170, p. 46113.
 - (d) 29 CFR 1926.453 Aerial lifts, published 11/25/96, FR vol. 61, no. 228, p. 59832.
 - (e) 29 CFR 1926.454 Training, published 8/30/96, FR vol. 61, no. 170, p. 46117.
 - (f) Appendix A to Subpart L Scaffold Specifications, published 8/30/96, FR vol. 61, no. 170, p. 46117.
 - (g) Appendix B to Subpart L Criteria for determining the feasibility of providing safe access and fall protection for scaffold erectors and dismantlers (Reserved), published 8/30/96, FR vol. 61, no. 170, p. 46122.
 - (h) Appendix C to Subpart L List of National Consensus Standards, published 8/30/96, FR vol. 61, no. 170, p. 46122.
 - (i) Appendix D to Subpart L List of training topics for scaffold erectors and dismantlers, published 8/30/96, FR vol. 61, no. 170, p. 46122.
 - (j) Appendix E to Subpart L Drawing and illustrations, published 11/25/96, FR vol. 61, no. 228, p. 59832.
- (13) Subdivision M – FALL PROTECTION
 - (a) 29 CFR 1926.500 Scope, application, and definitions applicable to this subpart, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
 - (b) 29 CFR 1926.501 Duty to have fall protection, published 8/9/94, FR vol. 59, no. 152, p. 40732-40733; amended with AO 6-2002, f. and ef. 7/19/02.
 - (c) 29 CFR 1926.502 Fall protection systems criteria and practices, published 8/9/94, FR vol. 59, no. 152, p. 40733-40738; amended with AO 6-2002, f. and ef. 7/19/02.
 - (d) 29 CFR 1926.503 Training requirements. REPEALED with AO 6-2002, f. and ef. 7/19/02, replaced with OI.
 - (e) Appendix A to Subpart M Determining Roof Widths, published 8/9/94, FR vol. 59, no. 152, p. 40738-40742.
 - (f) Appendix B to Subpart M Guardrail Systems, published 8/9/94, FR vol. 59, no. 152, p. 40743.
 - (g) Appendix C to Subpart M Personal Fall Arrest Systems, published 8/9/94, FR vol. 59, no. 152, p. 40743-40746.
 - (h) Appendix D to Subpart M Positioning Device Systems, published 8/9/94, FR vol. 59, no. 152, p. 40746.

(14) Subdivision N – HELICOPTERS, HOISTS, ELEVATORS, AND CONVEYORS

- (a) 29 CFR 1926.550 (Reserved).
- (b) 29 CFR 1926.551 Helicopters, published 4/6/79, FR vol. 44, p. 20940.
- (c) 29 CFR 1926.552 Material hoists, personnel hoists, and elevators, published 4/6/79, FR vol. 44, p. 20940.
- (d) 29 CFR 1926.553 Base-mounted drum hoist, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (e) 29 CFR 1926.554 Overhead hoists, published 4/6/79, FR vol. 44, p. 20940.
- (f) 29 CFR 1926.555 Conveyors, published 4/6/79, FR vol. 44, p. 20940.

(15) Subdivision O – MOTOR VEHICLES, MECHANIZED EQUIPMENT, AND MARINE OPERATIONS

- (a) 29 CFR 1926.600 Equipment, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (b) 29 CFR 1926.601 Motor vehicles, REPEALED by OR-OSHA Admin. Order 6-2007, f. 9/26/07, ef. 9/26/07.
- (c) 29 CFR 1926.602 Material handling equipment, published 12/1/98, FR vol. 63, no. 230, p. 66274; amended by AO 7-2003, f. 12/5/03, ef. 12/5/03.
- (d) 29 CFR 1926.603 Pile driving equipment, published 4/6/79, FR vol. 44, p. 20940.
- (e) 29 CFR 1926.604 Site clearing, published 7/22/77, FR vol. 42, p. 37674.
- (f) 29 CFR 1926.605 Marine operations and equipment, published 4/6/79, FR vol. 44, p. 20940.
- (g) 29 CFR 1926.606 Definitions applicable to this subpart, published 4/6/79, FR vol. 44, p. 20940.

(16) Subdivision P – EXCAVATIONS

- (a) 29 CFR 1926.650 Scope, application, and definitions applicable to this subdivision, published 10/31/89, FR vol. 54, no. 209, pp. 45959-45961.
- (b) 29 CFR 1926.651 General requirements, published 8/9/94, FR vol. 59, no. 152, p. 40730.
- (c) 29 CFR 1926.652 Requirements for protective systems, published 10/31/89, FR vol. 54, no. 209, pp. 45961-45962.
- (d) Appendices A-F to Subdivision P, Excavations, published 10/31/89, FR vol. 54, no. 209, pp. 45962-45991.

(17) Subdivision Q – CONCRETE AND MASONRY CONSTRUCTION

- (a) 29 CFR 1926.700 Scope, application and definitions applicable to this subpart, published 10/18/90, FR vol. 55, no. 202, p. 42326.
- (b) 29 CFR 1926.701 General requirements, published 8/9/94, FR vol. 59, no. 152, p. 40730.
- (c) 29 CFR 1926.702 Requirements for equipment and tools, published 6/16/88, FR vol. 53, p. 22612.
- (d) 29 CFR 1926.703 Requirements for cast-in-place concrete, published 6/16/88, FR vol. 53, p. 22612.
- (e) 29 CFR 1926.704 Requirements for precast concrete, published 10/5/89, FR vol. 54, no. 192, p. 41088.
- (f) 29 CFR 1926.705 Requirements for lift-slab construction operations, published 10/18/90, FR vol. 55, no. 202, p. 42326.
- (g) Appendix A to 1926.705 Lift-slab operations, published 10/18/90, FR vol. 55, no. 202, p. 42326.
- (h) 29 CFR 1926.706 Requirements for masonry construction, published 6/16/88, FR vol. 53, p. 22612; amended with OR-OSHA Admin. Order 1-2003, f. 1/30/03, ef. 4/30/03.

(18) Subdivision R – STEEL ERECTION

- (a) 29 CFR 1926.750 Scope, published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (b) 29 CFR 1926.751 Definitions, published 7/17/01, FR vol. 66, no. 137, p. 37137; amended with AO 6-2002, f. and ef. 7/19/02; amended with AO 8-2003, f. 12/30/03, ef. 1/1/04.
- (c) 29 CFR 1926.752 Site layout, site-specific erection plan and construction sequence, published 7/17/01, FR vol. 66, no. 137, p. 37137.

- (d) 29 CFR 1926.753 Hoisting and rigging, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (e) 29 CFR 1926.754 Structural steel assembly, published 4/3/06, FR vol. 71, no. 63, p. 16669.
- (f) 29 CFR 1926.755 Column anchorage, published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (g) 29 CFR 1926.756 Beams and columns, published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (h) 29 CFR 1926.757 Open web steel joists, published 7/17/01, FR vol. 66, no. 137, p. 37137; amended with AO 8-2003, f. 12/30/03, ef. 1/1/04.
- (i) 29 CFR 1926.758 Systems-engineered metal buildings, published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (j) 29 CFR 1926.759 Falling object protection, published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (k) 29 CFR 1926.760 Fall protection, published 7/17/01, FR vol. 66, no. 137, p. 37137; amended with AO 8-2003, f. 12/30/03, ef. 1/1/04.
- (l) 29 CFR 1926.761 Training, published 12/12/08, FR vol. 73, no. 240, pp. 75568-75589.
- (m) Appendix A to Subpart R Guidelines for establishing the components of a site-specific erection plan: Nonmandatory Guidelines for Complying with §1926.752(e), published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (n) Appendix B to Subpart R Reserved.
- (o) Appendix C to Subpart R Illustrations of bridging terminus points: Nonmandatory Guidelines for Complying with §1926.757(a)(10) and §1926.757(c)(5), published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (p) Appendix D to Subpart R Illustration of the use of control lines to demarcate controlled decking zones (CDZs): Nonmandatory Guidelines for Complying with §1926.760(c)(3), REPEALED with AO 6-2002, f. and ef. 7/19/02; amended with AO 8-2003, f. 12/30/03, ef. 1/1/04.
- (q) Appendix E to Subpart R Training: Nonmandatory Guidelines for Complying with §1926.761, published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (r) Appendix F to Subpart R Perimeter columns: Nonmandatory Guidelines for Complying with §1926.756(e) to Protect the Unprotected Side or Edge of a Walking/Working Surface, published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (s) Appendix G to Subpart R Fall protection systems criteria and practices from §1926.502: Nonmandatory Guidelines for Complying with §1926.760(d), REPEALED with AO 6-2002, f. and ef. 7/19/02; amended with AO 8-2003, f. 12/30/03, ef. 1/1/04.
- (t) Appendix H to Subpart R Double connections: Illustration of a clipped end connection and a staggered connection: Non-Mandatory Guidelines for Complying with §1926.756(c)(1), published 7/17/01, FR vol. 66, no. 137, p. 37137.
- (19) Subdivision S – UNDERGROUND CONSTRUCTION, CAISSONS, COFFERDAMS, AND COMPRESSED AIR
 - (a) 29 CFR 1926.800 Tunnels and shafts, published 8/17/12, FR vol. 77, no. 160, p. 49722.
 - (b) 29 CFR 1926.801 Caissons, published 4/6/79, FR vol. 44, p. 20940.
 - (c) 29 CFR 1926.802 Cofferdams, published 4/6/79, FR vol. 44, p. 20940.
 - (d) 29 CFR 1926.803 Compressed air, published 7/11/86, FR vol. 51, p. 25318.
 - (e) 29 CFR 1926.804 Definitions applicable to this subpart, published 4/6/79, FR vol. 44, p. 20940.
 - (f) Appendix A to Subpart S Decompression Tables, published 4/6/79, FR vol. 44, p. 20940.
- (20) Subdivision T – DEMOLITION
 - (a) 29 CFR 1926.850 Preparatory operations, published 4/6/79, FR vol. 44, p. 20940.
 - (b) 29 CFR 1926.851 Stairs, passageways, and ladders, published 4/6/79, FR vol. 44, p. 20940.
 - (c) 29 CFR 1926.852 Chutes, published 4/6/79, FR vol. 44, p. 20940.
 - (d) 29 CFR 1926.853 Removal of materials through floor openings, published 4/6/79, FR vol. 44, p. 20940.

- (e) 29 CFR 1926.854 Removal of walls, masonry sections, and chimneys, published 4/6/79, FR vol. 44, p. 20940.
- (f) 29 CFR 1926.855 Manual removal of floors, published 4/6/79, FR vol. 44, p. 20940.
- (g) 29 CFR 1926.856 Removal of walls, floors, and materials with equipment, published 8/17/12, FR vol. 77, no. 160, p. 49722.
- (h) 29 CFR 1926.857 Storage, published 4/6/79, FR vol. 44, p. 20940.
- (i) 29 CFR 1926.858 Removal of steel construction, published 8/17/12, FR vol. 77, no. 160, p. 49722.
- (j) 29 CFR 1926.859 Mechanical demolition, published 4/6/79, FR vol. 44, p. 20940.
- (k) 29 CFR 1926.860 Selective demolition by explosives, published 4/6/79, FR vol. 44, p. 20940.
- (21) Subdivision U – BLASTING AND USE OF EXPLOSIVES
- (a) 29 CFR 1926.900 General provisions, published 4/6/79, FR vol. 44, p. 20940.
- (b) 29 CFR 1926.901 Blaster qualifications, published 4/6/79, FR vol. 44, p. 20940.
- (c) 29 CFR 1926.902 Surface transportation of explosives, published 6/30/93, FR vol. 58, no. 124, p. 35311.
- (d) 29 CFR 1926.903 Underground transportation of explosives, published 4/6/79, FR vol. 44, p. 20940.
- (e) 29 CFR 1926.904 Storage of explosives and blasting agents, published 6/30/93, FR vol. 58, no. 124, p. 35311.
- (f) 29 CFR 1926.905 Loading of explosives or blasting agents, published 6/30/93, FR vol. 58, no. 124, p. 35184.
- (g) 29 CFR 1926.906 Initiation of explosive charges – electric blasting, published 6/18/98, FR vol. 63, no. 117, p. 33469.
- (h) 29 CFR 1926.907 Use of safety fuse, published 4/6/79, FR vol. 44, p. 20940.
- (i) 29 CFR 1926.908 Use of detonating cord, published 4/6/79, FR vol. 44, p. 20940.
- (j) 29 CFR 1926.909 Firing the blast, published 4/6/79, FR vol. 44, p. 20940.
- (k) 29 CFR 1926.910 Inspection after blasting, published 4/6/79, FR vol. 44, p. 20940.
- (l) 29 CFR 1926.911 Misfires, published 4/6/79, FR vol. 44, p. 20940.
- (m) 29 CFR 1926.912 Underwater blasting, published 4/6/79, FR vol. 44, p. 20940.
- (n) 29 CFR 1926.913 Blasting in excavation work under compressed air, published 4/6/79, FR vol. 44, p. 20940.
- (o) 29 CFR 1926.914 Definitions applicable to this subpart, published 6/30/93, FR vol. 58, no. 124, p. 35184, 35311.
- (22) Subdivision V – POWER TRANSMISSION AND DISTRIBUTION
- (a) 29 CFR 1926.950 General requirements, published 4/6/79, FR vol. 44, p. 20940.
- (b) 29 CFR 1926.951 Tools and protective equipment, published 8/9/94, FR vol. 59, no. 152, p. 40730.
- (c) 29 CFR 1926.952 Mechanical equipment, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (d) 29 CFR 1926.953 Material handling, published 4/6/79, FR vol. 44, p. 20940.
- (e) 29 CFR 1926.954 Grounding for protection of employees, published 4/6/79, FR vol. 44, p. 20940.
- (f) 29 CFR 1926.955 Overhead lines, published 4/6/79, FR vol. 44, p. 20940.
- (g) 29 CFR 1926.956 Underground lines, published 4/6/79, FR vol. 44, p. 20940.
- (h) 29 CFR 1926.957 Construction in energized substations, published 4/6/79, FR vol. 44, p. 20940.
- (i) 29 CFR 1926.958 External load helicopters, published 4/6/79, FR vol. 44, p. 20940.
- (j) 29 CFR 1926.959 Lineman’s body belts, safety straps, and lanyards, published 4/6/79, FR vol. 44, p. 20940.
- (k) 29 CFR 1926.960 Definitions applicable to this subpart, published 4/6/79, FR vol. 44, p. 20940.

(23) Subdivision W – ROLLOVER PROTECTIVE STRUCTURES: OVERHEAD PROTECTION

(a) 29 CFR 1926.1000 Rollover protective structures (ROPS) for material handling equipment, published 4/6/79, FR vol. 44, p. 20940.

(b) 29 CFR 1926.1001 Minimum performance criteria for rollover protective structure for designated scrapers, loaders, dozers, graders, and crawler tractors, published 4/6/79, FR vol. 44, p. 20940.

(c) 29 CFR 1926.1002 Protective frame (ROPS) test procedures and performance requirements for wheel-type agricultural and industrial tractors used in construction, published 7/20/06, FR vol. 71, no. 139, p. 41127..

(d) 29 CFR 1926.1003 Overhead protection for operators of agricultural and industrial tractors, published 2/28/06, FR vol. 71, no. 39, p. 9909.

(24) Subdivision X – STAIRWAYS AND LADDERS

(a) 29 CFR 1926.1050 Scope, application and definitions applicable to this Subdivision, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(b) 29 CFR 1926.1051 General requirements, published 11/14/90, FR vol. 55, no. 220, p. 47688.

(c) 29 CFR 1926.1052 Stairways, published 8/23/91, FR vol. 56, no. 164, pp. 41793-41794.

(d) 29 CFR 1926.1053 Ladders, published 8/23/91, FR vol. 56, no. 164, pp. 41793-41794.

(e) 29 CFR 1926.1054 (Reserved)

(f) 29 CFR 1926.1055 (Reserved)

(g) 29 CFR 1926.1056 (Reserved)

(h) 29 CFR 1926.1057 (Reserved)

(i) 29 CFR 1926.1058 (Reserved)

(j) 29 CFR 1926.1059 (Reserved)

(k) 29 CFR 1926.1060 Training requirements, published 11/14/90, FR vol. 55, no. 220, p. 47691.

(25) Subdivision Z – TOXIC AND HAZARDOUS SUBSTANCES

(a) 29 CFR 1926.1101 Asbestos, published 1/9/09, FR vol. 74, no. 6, p. 858.

(b) 29 CFR 1926.1126 Chromium (VI), published; 3/17/10, FR vol. 75, no. 51, pp. 12681-12686.

(c) 29 CFR 1926.1127 Cadmium, published 12/12/08, FR vol. 73, no. 240, pp. 75568-75589.

(d) 29 CFR 1926.1152 Methylene Chloride, published 12/18/97, FR vol. 62, no. 243, p. 66275.

(26) Subdivision AA – (Reserved)

(27) Subdivision BB – (Reserved)

(28) Subdivision CC – Cranes and Derricks in Construction

(a) 29 CFR 1926.1400 Scope, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(b) 29 CFR 1926.1401 Definitions, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(c) 29 CFR 1926.1402 Ground conditions, published 8/9/10, FR vol. 75, no. 152. Pp. 47906-48177.

(d) 29 CFR 1926.1403 Assembly/Disassembly – selection of manufacturer or employer procedures, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(e) 29 CFR 1926.1404 Assembly/Disassembly – general requirements (applies to all assembly and disassembly operations), published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(f) 29 CFR 1926.1405 Disassembly – additional requirements for dismantling of booms and jibs (applies to both the use of manufacturer procedures and employer procedures), published 8/9/10, FR vol. 75, no. 152. Pp. 47906-48177.

(g) 29 CFR 1926.1406 Assembly/Disassembly – employer procedures – general requirements, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(h) 29 CFR 1926.1407 Power line safety (up to 350 kV) – assembly and disassembly, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(i) 29 CFR 1926.1408 Power line safety (up to 350 kV) – equipment operations, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

- (j) 29 CFR 1926.1409 Power line safety (over 35 kV), published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (k) 29 CFR 1926.1410 Power line safety (all voltages) – equipment operations closer than the Table A zone, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (l) 29 CFR 1926.1411 Power line safety – while traveling, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (m) 29 CFR 1926.1412 Inspections, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (n) 29 CFR 1926.1413 Wire rope – inspection, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (o) 29 CFR 1926.1414 Wire rope – selection and installation criteria, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (p) 29 CFR 1926.1415 Safety devices, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (q) 29 CFR 1926.1416 Operational aids, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (r) 29 CFR 1926.1417 Operation, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (s) 29 CFR 1926.1418 Authority to stop operation, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (t) 29 CFR 1926.1419 Signals – general requirements, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (u) 29 CFR 1926.1420 Signals – radio, telephone or other electronic transmission of signals, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (v) 29 CFR 1926.1421 Signals – voice signals – additional requirements, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (w) 29 CFR 1926.1422 Signals – hand signal chart, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (x) 29 CFR 1926.1423 Fall protection, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (y) 29 CFR 1926.1424 Work area control, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (z) 29 CFR 1926.1425 Keeping clear of the load, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (aa) 29 CFR 1926.1426 Free fall and controlled load lowering, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (bb) 29 CFR 1926.1427 Operator qualification and certification, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (cc) 29 CFR 1926.1428 Signal person qualifications, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (dd) 29 CFR 1926.1429 Qualifications of maintenance & repair employees, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (ee) 29 CFR 1926.1430 Training, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (ff) 29 CFR 1926.1431 Hoisting personnel, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (gg) 29 CFR 1926.1432 Multiple-crane/derrick lifts – supplemental requirements, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (hh) 29 CFR 1926.1433 Design, construction and testing, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (ii) 29 CFR 1926.1434 Equipment modifications, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (jj) 29 CFR 1926.1435 Tower cranes, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (kk) 29 CFR 1926.1436 Derricks, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.
- (ll) 29 CFR 1926.1437 Floating cranes/derricks and land cranes/derricks on barges, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(mm) 29 CFR 1926.1438 Overhead & gantry cranes, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(nn) 29 CFR 1926.1439 Dedicated pile drivers, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(oo) 29 CFR 1926.1440 Sideboom cranes, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(pp) 29 CFR 1926.1441 Equipment with a rated hoisting/lifting capacity of 2,000 pounds or less, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(qq) 29 CFR 1926.1442 Severability, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(rr) Appendix A to Subdivision CC of 1926 – Standard Hand Signals, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(ss) Appendix B to Subdivision CC of 1926 – Assembly/Disassembly – Sample Procedures for Minimizing the Risk of Unintended Dangerous Boom Movement, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

(tt) Appendix C to Subdivision CC of 1926 – Operator Certification – Written Examination – Technical Knowledge Criteria, published 8/9/10, FR vol. 75, no. 152, pp. 47906-48177.

These standards are available at the Oregon Occupational Safety and Health Division, Oregon Department of Consumer and Business Services, and the United States Government Printing Office.

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

Stats. Implemented: ORS 654.001 through 654.295.

Hist: APD Admin. Order 5-1989, f. 3/31/89, ef. 5/1/89 (temp).

APD Admin. Order 8-1989, f. 7/7/89, ef. 7/7/89 (perm).

APD Admin. Order 14-1989, f. 7/20/89, ef. 8/1/89 (temp).

APD Admin. Order 15-1989, f. 9/13/89, ef. 9/13/89 (perm).

APD Admin. Order 16-1989 (temp), f. 9/13/89, ef. 9/13/89.

OR-OSHA Admin. Order 2-1989, f. 10/17/89, ef. 10/17/89.

OR-OSHA Admin. Order 3-1990, f. 1/19/90, ef. 1/19/90 (temp).

OR-OSHA Admin. Order 7-1990, f. 3/2/90, ef. 3/2/90 (perm).

OR-OSHA Admin. Order 8-1990, f. 3/30/90, ef. 3/30/90.

OR-OSHA Admin. Order 13-1990, f. 6/28/90, ef. 8/1/90 (temp).

OR-OSHA Admin. Order 19-1990, f. 8/31/90, ef. 8/31/90 (perm).

OR-OSHA Admin. Order 27-1990, f. 12/12/90, ef. 2/1/91.

OR-OSHA Admin. Order 6-1991, f. 3/18/91, ef. 4/15/91.

OR-OSHA Admin. Order 7-1991, f. 4/25/91, ef. 4/25/91.

OR-OSHA Admin. Order 15-1991, f. 12/13/91, ef. 12/13/91.

OR-OSHA Admin. Order 16-1991, f. 12/16/91, ef. 1/1/92.

OR-OSHA Admin. Order 6-1992, f. 5/18/92, ef. 5/18/92.

OR-OSHA Admin. Order 11-1992, f. 10/9/92, ef. 10/9/92.

OR-OSHA Admin. Order 1-1993, f. 1/22/93, ef. 1/22/93.

OR-OSHA Admin. Order 16-1993, f. 11/1/93, ef. 11/1/93 (Lead).

OR-OSHA Admin. Order 1-1994, f. 4/27/94, ef. 4/27/94.

OR-OSHA Admin. Order 4-1994, f. 8/4/94, ef. 8/4/94 (HazCom).

OR-OSHA Admin. Order 6-1994, f. 9/30/94, ef. 9/30/94.

OR-OSHA Admin. Order 1-1995, f. 1/19/95, ef. 1/19/95 (DOT markings, placards & labels).

OR-OSHA Admin. Order 3-1995, f. 2/22/95, ef. 2/22/95 (Haz Waste).

OR-OSHA Admin. Order 4-1995, f. 3/29/95, ef. 3/29/95 (Asbestos).

OR-OSHA Admin. Order 5-1995, f. 4/6/95, ef. 4/6/95 (HazCom).

OR-OSHA Admin. Order 6-1995, f. 4/18/95, ef. 6/1/95 (Fall Protection).

OR-OSHA Admin. Order 8-1995, f. 8/25/95, ef. 8/25/95 (Asbestos).

OR-OSHA Admin. Order 5-1996, f. 11/29/96, ef. 11/29/96.
OR-OSHA Admin. Order 6-1996, f. 11/29/96, ef. 11/29/96.
OR-OSHA Admin. Order 2-1997, f. 3/12/97, ef. 3/12/97.
OR-OSHA Admin. Order 4-1997, f. 4/2/97, ef. 4/2/97.
OR-OSHA Admin. Order 6-1997, f. 5/2/97, ef. 5/2/97.
OR-OSHA Admin. Order 7-1997, f. 9/15/97, ef. 9/15/97 (Fall Protection).
OR-OSHA Admin. Order 8-1997, f. 11/14/97, e. 11/14/97 (Methylene Chloride).
OR-OSHA Admin. Order 1-1998, f. 2/13/98, e. 2/13/98 (Methylene Chloride).
OR-OSHA Admin. Order 3-1998, f. 7/7/98, ef. 7/7/98 (Respiratory Protection).
OR-OSHA Admin. Order 6-1998, f. 10/15/98, ef. 10/15/98 (Slings 3/H).
OR-OSHA Admin. Order 7-1998, f. 12/28/98, ef. 12/28/98 (Asbestos).
OR-OSHA Admin. Order 1-1999, f. 3/22/99, e. 3/22/99 (Methylene Chloride).
OR-OSHA Admin. Order 4-1999, f. 4/30/99, ef. 4/30/99.
OR-OSHA Admin. Order 6-1999, f. 5/26/99, ef. 5/26/99.
OR-OSHA Admin. Order 3-2000, f. 2/8/00, ef. 2/8/00.
OR-OSHA Admin. Order 3-2001, f. 2/5/01, ef. 2/5/01 (Fall Protection/Oregon Exceptions).
OR-OSHA Admin. Order 3-2002, f. 4/15/02, ef. 4/18/02 (Steel Erection).
OR-OSHA Admin. Order 5-2002, f. 6/28/02, ef. 10/1/03 (GFCI 3/K).
OR-OSHA Admin. Order 6-2002, f. 7/19/02, ef. 7/19/02 (Fall Protection/Steel Erection).
OR-OSHA Admin. Order 1-2003, f. 1/30/03, ef. 4/30/03 (3/Q Masonry Wall Bracing).
OR-OSHA Admin. Order 2-2003, f. 1/30/03, ef. 1/30/03 (3/G).
OR-OSHA Admin. Order 7-2003, f. 12/5/03, ef. 12/5/03 (3/O).
OR-OSHA Admin. Order 8-2003, f. 12/30/03, ef. 1/1/04 (3/R).
OR-OSHA Admin. Order 1-2005, f. 4/12/05, ef. 4/12/05 (3/D and 3/Z).
OR-OSHA Admin. Order 2-2006, f. 4/28/06, ef. 4/28/06 (3/R).
OR-OSHA Admin. Order 4-2006, f. 7/24/06, ef. 7/24/06.
OR-OSHA Admin. Order 5-2006, f. 8/7/06, ef. 1/1/07.
OR-OSHA Admin. Order 6-2006, f. 8/30/06, ef. 8/30/06.
OR-OSHA Admin. Order 10-2006, f. 11/30/06, ef. 11/30/06.
OR-OSHA Admin. Order 6-2007, f. 9/26/07, ef. 9/26/07 (3/O).
OR-OSHA Admin. Order 5-2008, f. 5/1/08, ef. 5/15/08 (PPE).
OR-OSHA Admin. Order 5-2009, f. 5/29/09, ef. 5/29/09.
OR-OSHA Admin. Order 3-2010, f. 6/10/10, ef. 6/15/10.
OR-OSHA Admin. Order 1-2011, f. 2/9/11, ef. 2/9/11.
OR-OSHA Admin. Order 4-2011, f. 12/8/11, ef. 12/8/11.
OR-OSHA Admin. Order 5-2011, f. 12/8/11, ef. 7/1/12.
OR-OSHA Admin. Order 1-2012, f. 4/10/12, ef. 4/10/12.
OR-OSHA Admin. Order 5-2012, f. 9/25/12, ef. 9/25/12.
OR-OSHA Admin. Order 1-2013, f. 2/14/13, ef. 2/14/13.
OR-OSHA Admin. Order 2-2013, f. 2/15/13, ef. 4/1/13.

Division 3/C, General Safety and Health Provisions

~~[437-003-0128 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. Auth.: ORS 654.025(2) and 656.726(3).~~

~~Stats. Implemented: ORS 654.001 through 654.295.~~

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

~~[1926.28 Personal Protective Equipment.~~

~~(a) The employer is responsible for requiring the wearing of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions or where this part indicates the need for using such equipment to reduce the hazards to the employees.~~

~~(b) Regulations governing the use, selection, and maintenance of personal protective and lifesaving equipment are described under Subpart E of this part.~~

~~Stat. Auth.: ORS 654.025(2) and 656.726(3).~~

~~Stats. Implemented: ORS 654.001 through 654.295.~~

~~Hist: APD Admin. Order 4-1989, f. 3/31/89, ef. 5/1/89 (temp).~~

~~— APD Admin. Order 8-1989, f. 7/7/89, ef. 7/7/89 (perm).]~~

Division 3/E, Personal Protective & Life Saving Equipment

~~[1926.95 Criteria for Personal Protective Equipment.~~

~~(a) Application. Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.~~

~~(b) Employee-owned equipment. Where employees provide their own protective equipment, the employer shall be responsible to assure its adequacy, including proper maintenance, and sanitation of such equipment.~~

~~(c) Design. All personal protective equipment shall be of safe design and construction for the work to be performed.~~

~~(d) Payment for protective equipment.~~

~~(1) Except as provided by paragraphs (d)(2) through (d)(6) of this section, the protective equipment, including personal protective equipment (PPE), used to comply with this part, shall be provided by the employer at no cost to employees.~~

- ~~(2) The employer is not required to pay for non-specialty safety-toe protective footwear (including steel-toe shoes or steel-toe boots) and non-specialty prescription safety eyewear, provided that the employer permits such items to be worn off the job-site.~~
- ~~(3) When the employer provides metatarsal guards and allows the employee, at his or her request, to use shoes or boots with built-in metatarsal protection, the employer is not required to reimburse the employee for the shoes or boots.~~
- ~~(4) The employer is not required to pay for:~~
- ~~(i) Everyday clothing, such as long-sleeve shirts, long pants, street shoes, and normal work boots; or~~
- ~~(ii) Ordinary clothing, skin creams, or other items, used solely for protection from weather, such as winter coats, jackets, gloves, parkas, rubber boots, hats, raincoats, ordinary sunglasses, and sunscreen.~~
- ~~(5) The employer must pay for replacement PPE, except when the employee has lost or intentionally damaged the PPE.~~
- ~~(6) Where an employee provides adequate protective equipment he or she owns pursuant to paragraph (b) of this section, the employer may allow the employee to use it and is not required to reimburse the employee for that equipment. The employer shall not require an employee to provide or pay for his or her own PPE, unless the PPE is excepted by paragraphs (d)(2) through (d)(5) of this section.~~
- ~~(7) This section shall become effective on February 13, 2008. Employers must implement the PPE payment requirements no later than May 15, 2008.~~

~~Note: Oregon OSHA did not adopt 1926.95(d)(7). In Oregon, 1926.95(d) is adopted May 1, 2008 and becomes effective May 15, 2008.~~

~~Note to §1926.95(d): When the provisions of another OSHA standard specify whether or not the employer must pay for specific equipment, the payment provisions of that standard shall prevail.~~

~~Stat. Auth.: ORS 654.025(2) and 656.726(3).~~

~~Stats. Implemented: ORS 654.001 through 654.295.~~

~~Hist: OR OSHA Admin. Order 4-1999, f. 4/30/99, ef. 4/30/99.~~

~~— OR OSHA Admin. Order 5-2008, f. 5/1/08, ef. 5/15/08.]~~

~~[1926.100 Head Protection.~~

~~(a) Employees working in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns, shall be protected by protective helmets.~~

~~(b) Helmets for the protection of employees against impact and penetration of falling and flying objects shall meet the specifications contained in American National Standards Institute, Z89.1-1969, Safety Requirements for Industrial Head Protection.~~

~~(c) Helmets for the head protection of employees exposed to high voltage electrical shock and burns shall meet the specifications contained in American National Standards Institute, Z89.2-1971.~~

~~Stat. Auth.: ORS 654.025(2) and 656.726(3).~~

~~Hist: APD Admin. Order 4-1989, f. 3/31/89, ef. 5/1/89 (temp).~~

~~— APD Admin. Order 8-1989, f. 7/7/89, ef. 7/7/89 (perm).]~~

[1926.101 Hearing Protection.

(a) ~~Wherever it is not feasible to reduce the noise levels or duration of exposures to those specified in Table D-2, Permissible Noise Exposures, in §1926.52, ear protective devices shall be provided and used.~~

(b) ~~Ear protective devices inserted in the ear shall be fitted or determined individually by competent persons.~~

(c) ~~Plain cotton is not an acceptable protective device.~~

Stat. Auth.: ORS 654.025(2) and 656.726(3).

Hist: APD Admin. Order 4-1989, f. 3/31/89, ef. 5/1/89 (temp).

— APD Admin. Order 8-1989, f. 7/7/89, ef. 7/7/89 (perm).]

[1926.102 Eye and Face Protection.

(a) ~~General.~~

(1) ~~Employees shall be provided with eye and face protection equipment when machines or operations present potential eye or face injury from physical, hemical, or radiation agents.~~

(2) ~~Eye and face protection equipment required by this Part shall meet the requirements specified in American National Standards Institute, Z87.1-1968, Practice for Occupational and Educational Eye and Face Protection.~~

(3) ~~Employees whose vision requires the use of corrective lenses in spectacles, when required by this regulation to wear eye protection, shall 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.~~

(4) ~~Face and eye protection equipment shall be kept clean and in good repair. The use of this type equipment with structural or optical defects shall be prohibited.~~

(5) ~~Table E-1 shall be used as a guide in the selection of face and eye protection for the hazards and operations noted.~~

(6) ~~Protectors shall meet the following minimum requirements:~~

(i) ~~They shall provide adequate protection against the particular hazards for which they are designed.~~

(ii) ~~They shall be reasonably comfortable when worn under the designated conditions.~~

(iii) ~~They shall fit snugly and shall not unduly interfere with the movements of the wearer.~~

(iv) ~~They shall be durable.~~

(v) ~~They shall be capable of being disinfected.~~

(vi) ~~They shall be easily cleanable.~~

(7) ~~Every protector shall be distinctly marked to facilitate identification only of the manufacturer.~~

(8) ~~When limitations or precautions are indicated by the manufacturer, they shall be transmitted to the user and care taken to see that such limitations and precautions are strictly observed.~~

~~Table E-1—Eye and Face Protector Selection Guide~~

(b) ~~Protection against radiant energy.~~

(1) ~~Selection of shade numbers for welding filter. Table E-2 shall 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.~~

~~Table E-2—Filter Lens Shade Numbers for Protection Against Radiant Energy~~

(2) ~~Laser protection.~~

~~(i) Employees whose occupation or assignment requires exposure to laser beams shall be furnished 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 E-3 lists the maximum power or energy density for which adequate protection is afforded by glasses of optical densities from 5 through 8.~~

~~Table E-3—Selecting Laser Safety Glass~~

~~(ii) All protective goggles shall 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.~~

~~Stat. Auth.: ORS 654.025(2) and 656.726(3).~~

~~Stats. Implemented: ORS 654.001 through 654.295.~~

~~Hist: APD Admin. Order 4-1989, f. 3/31/89, ef. 5/1/89 (temp).~~

~~— APD Admin. Order 8-1989, f. 7/7/89, ef. 7/7/89 (perm).~~

~~— OR-OSHA Admin. Order 3-2000, f. 2/8/00, ef. 2/8/00.]~~

437-003-0134 Personal Protective Equipment.

Application. This rule applies to personal protective equipment and other protective equipment for the eyes, face, head, extremities and torso to include protective clothing, respiratory devices, and protective shields and barriers, wherever employees encounter hazardous processes or environments, chemical hazards, radiological hazards, or mechanical irritants that are capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

(1) Hazard assessment and equipment selection.

(a) The employer must assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE) or other protective equipment. If such hazards are present, or likely to be present, the employer must:

(A) Select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment;

(i) All protective equipment must be of safe design and construction for the work to be performed.

(ii) Protective equipment must be worn and used in a manner which will make full use of its protective properties.

(B) Communicate selection decisions to each affected employee; and,

(C) Select PPE that properly fits each affected employee.

NOTE: Non-mandatory Appendix B contains an example of procedures that would comply with the requirement for a hazard assessment.

(2) Equipment.

(a) Where employees provide their own protective equipment, the employer is responsible to assure its adequacy, including proper maintenance, and sanitation of such equipment.

- (b) All personal protective equipment must be provided, used, and maintained in a sanitary and reliable condition.
- (c) Defective or damaged personal protective equipment must not be used
- (d) Each employer must maintain a regular system of inspection and maintenance of personal protective equipment furnished to workers.

(3) Training.

(a) The employer must provide training to each employee who is required by this section to use PPE and each employee that is provided training must know at least the following:

- (A) When PPE is necessary;
- (B) What PPE is necessary;
- (C) How to properly don, doff, adjust, and wear PPE;
- (D) The limitations of the PPE; and,
- (E) The proper care, maintenance, useful life and disposal of the PPE.

(b) Each affected employee must demonstrate an understanding of the training specified in paragraph (3)(a) of this section, and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.

(c) When the employer has reason to believe that any affected employee who has already been trained does not have the understanding and skill required by paragraph (3)(b) of this section, the employer must retrain each such employee. Circumstances where retraining is required include, but are not limited to situations where:

- (A) Changes in the workplace render previous training obsolete; or
- (B) Changes in the types of PPE to be used render previous training obsolete; or
- (C) Inadequacies in an affected employee's knowledge or use of assigned PPE

indicate that the employee has not retained the requisite understanding or skill.

(4) Payment for protective equipment.

(a) Except as provided by paragraphs (4)(b) through (4)(f) of this section, the protective equipment, including personal protective equipment (PPE), used to comply with this part, must be provided by the employer at no cost to employees.

(b) The employer is not required to pay for non-specialty safety-toe protective footwear (including steel-toe shoes or steel-toe boots) and non-specialty prescription safety eyewear, provided that the employer permits such items to be worn off the job-site.

(c) When the employer provides metatarsal guards and allows the employee, at his or her request, to use shoes or boots with built-in metatarsal protection, the employer is not required to reimburse the employee for the shoes or boots.

(d) The employer is not required to pay for:

- (A) The logging boots required by OAR 437-007-0330 in Division 7.
- (B) Everyday clothing, such as long-sleeve shirts, long pants, street shoes, and normal work boots; or

(C) Ordinary clothing, skin creams, or other items, used solely for protection from weather, such as winter coats, jackets, gloves, parkas, rubber boots, hats, raincoats, ordinary sunglasses, and sunscreen.

(e) The employer must pay for replacement PPE, except when the employee has lost or intentionally damaged the PPE.

(f) Where an employee provides adequate protective equipment he or she owns pursuant to paragraph (2)(a) of this section, the employer may allow the employee to use it and is not required to reimburse the employee for that equipment. The employer must not

require an employee to provide or pay for his or her own PPE, unless the PPE is excepted by paragraphs (4)(b) through (4)(e) of this section.

(6) Work Clothing.

(a) Clothing must be worn which is appropriate to the work performed and conditions encountered.

(b) Appropriate high temperature protective clothing must be worn by workers who are exposed to possible contact with molten metals or other substances that can cause burns.

(c) Loose sleeves, ties, lapels, cuffs, or other loose clothing must not be worn near moving machinery.

(d) Clothing saturated or impregnated with flammable liquids, corrosive or toxic substances, irritants, or oxidizing agents must be removed immediately and not worn again until properly cleaned.

(e) Rings, wristwatches, earrings, bracelets, and other jewelry which might contact power driven machinery or electric circuitry, must not be worn.

(7) 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.

(8) Eye And Face Protection.

(a) The employer must 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.

(b) The employer must 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.

(c) The employer must 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.

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

(e) The employer must 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.

Filter Lenses for Protection Against Radiant Energy

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

Filter Lenses for Protection Against Radiant Energy

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

* 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.

(f) Protective eye and face protection devices must comply with any of the following consensus Standards.

(A) ANSI Z87.1-2003, American National Standard Practice for Occupational and Educational Eye and Face Protection, which is incorporated by reference in 1910.6;

(B) ANSI Z87.1-1989 (R-1998), American National Standard Practice for Occupational and Educational Eye and Face Protection, which is incorporated by reference in 1910.6; or

(C) ANSI Z87.1-1989, American National Standard Practice for Occupational and Educational Eye and Face Protection, which is incorporated by reference in 1910.6.

(g) Protective eye and face protection devices that the employer demonstrates are at least as effective as protective eye and face protection devices that are constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section.

(h) 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.

(9) Head Protection.

(a) The employer must ensure that each affected employee wears a protective helmet when working in areas where there is a potential for injury to the head from falling or flying objects.

(b) The employer must ensure that a protective helmet designed to reduce electrical shock hazard is worn by each such affected employee when near exposed electrical conductors which could contact the head.

(c) Head protection must comply with any of the following consensus standards:

(A) ANSI Z89.1-2009, American National Standard for Industrial Head Protection, which is incorporated by reference in 1910.6;

(B) ANSI Z89.1-2003, American National Standard for Industrial Head Protection, which is incorporated by reference in 1910.6;

(C) ANSI Z89.1-1997, American National Standard for Industrial Head Protection, which is incorporated by reference in 1910.6; or

(d) Head protection devices that the employer demonstrates are at least as effective as head protection devices that are constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section.

(e) Employees who are exposed to power-driven machinery or to sources of ignition shall wear caps or other head covering which completely covers the hair.

(10) Foot Protection.

(a) The employer must ensure that each affected employee use protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards.

(b) Protective footwear must comply with any of the following consensus standards:

(A) ASTM F-2412-2005, Standard Test Methods for Foot Protection, and ASTM F-2413-2005, Standard Specification for Performance Requirements for Protective Footwear, which are incorporated by reference in 1910.6;

(B) ANSI Z41-1999, American National Standard for Personal Protection – Protective Footwear, which is incorporated by reference in 1910.6; or

(C) ANSI Z41-1991, American National Standard for Personal Protection – Protective Footwear, which is incorporated by reference in §1910.6.

(c) Protective footwear that the employer demonstrates is at least as effective as protective footwear that is constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section.

(d) Special types or designs of shoes or foot guards are required where conditions exist that make their use necessary for the safety of workers.

(11) Leg protection

(a) Leggings or high boots of leather, rubber, or other suitable material must be worn by persons exposed to hot substances or dangerous chemical spills.

(b) Employees using chain saws must wear chaps or leg protectors that cover the leg from the upper thigh to mid-calf. The protector must be material designed to resist cuts from the chain saw. Employers must provide this protection at no cost to the employee.

(12) Hand Protection.

(a) Employers must select and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.

(b) Employers must base the selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.

(c) Gloves must not be worn by persons whose hands are exposed to moving parts in which they could be caught.

(13) Skin protection. Where the need for their use is necessary, protective covering, ointments, gloves, or other effective protection must be provided for and used by persons exposed to materials which are hazardous to the skin.

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

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 2-2013, f. 2/15/13, ef. 4/1/13.