



**DEPARTMENT OF LABOR AND ECONOMIC OPPORTUNITY**

**GENERAL INDUSTRY STANDARD**

Filed with the Secretary of State on June 2, 1995 (as amended February 13, 1998)  
(as amended April 5, 1999) (as amended September 20, 2000) (as amended February 6, 2014)  
**(as amended December 12, 2018)**

These rules become effective immediately upon filing with the secretary of state unless adopted under section 33, 44, or 45a(6) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a.

Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the director of the department of licensing and regulatory affairs by sections 14, 16, 19, 21, and 24 of the Michigan occupational safety and health act, 1974 PA 154, MCL 408.1014, 408.1016, 408.1019, 408.1021, and 408.1024, and Executive Reorganization Order Nos. 1996-1, 1996-2, 2003-1, 2008-4, and 2011-4, MCL 330.3101, 445.2001, 445.2011, 445.2025, and 445.2030)

R 325.60001 of the Michigan Administrative Code is amended, and R 325.60002, R 325.60002a, R 325.60002b, R 325.60003, R 325.60003a, R 325.60005, R 325.60006, R 325.60008, R 325.60008a, R 325.60009, R 325.60010, and R 325.60011 are rescinded, as follows:

**PART 433, PERSONAL PROTECTIVE EQUIPMENT**

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**R 325.60001 Scope, adoption and availability of standards.**

**Rule 1.** (1) This standard provides specifications for personal protective equipment and prescribes the use of this equipment for the protection of the employee's eyes, face, and hands during general industry operations.

(2) This standard applies to all places of general industry employment in this state and includes requirements of the employer and use by the employee of personal protective equipment and provides reasonable and adequate means, ways, and methods for the proper selection and safe use of this equipment.

(3) Personal protective safety equipment relating to eye and face protection, head protection, hand protection, feet protection, body protection, and electrical protective equipment must be in compliance with General Industry Safety and Health Standard Part 33. "Personal Protective Equipment."

(4) Hearing protection must be in compliance with General Industry Safety and Health Standard Part 380. "Occupational Noise Exposure in General Industry."

(5) Respiratory protection must be in compliance with Occupational Health Standard Part 451. "Respiratory Protection."

(6) The following federal Occupational Safety and Health Administration (OSHA) regulations are adopted by reference in these rules:

(a) 29 CFR 1910.132 "General requirements," as amended November 18, 2016.

(b) 29 CFR 1910.133 "Eye and face protection," as amended March 25, 2016.

(c) 29 CFR 1910.138 "Hand protection," as amended April 6, 1994.

(7) A reference to 29 CFR 1910.134, 1910.135, 1910.136, 1910.137, and 1910.140 means General Industry Safety and Health Standard Part 33. "Personal Protective Equipment."

(8) A reference to 29 CFR 1910.266 means General Industry Safety Standard Part 51. "Logging."

(9) The adopted federal regulations have the same force and effect as a rule promulgated under the Michigan occupational safety and health act, 1974 PA 154, MCL 408.1001 to 408.1094.

(10) The OSHA regulations adopted in these rules are available from the United States Department of Labor, Occupational Safety and Health Administration website, [www.osha.gov](http://www.osha.gov), at no charge, as of the time of adoption of these rules.

(11) The regulations adopted in these rules are available for inspection at the Department of Licensing and Regulatory Affairs, MIOSHA Regulatory Services Section, 530 West Allegan Street, P.O. Box 30643, Lansing, Michigan, 48909-8143.

(12) The regulations adopted in these rules may be obtained from the publisher or the Department of Licensing and Regulatory Affairs, MIOSHA Regulatory Services Section, 530 West Allegan Street, P.O. Box 30643, Lansing, Michigan, 48909-8143, at the cost charged in this rule, plus \$20.00 for shipping and handling.

(13) The following Michigan Occupational Safety and Health Administration (MIOSHA) standards are referenced in these rules. Up to 5 copies of these standards may be obtained at no charge from the Michigan Department of Licensing and Regulatory

Affairs, MIOSHA Regulatory Services Section, 530 West Allegan Street, P.O. Box 30643, Lansing, Michigan, 48909-8143 or via the internet at the following website: [www.michigan.gov/mioshastandards](http://www.michigan.gov/mioshastandards). For quantities greater than 5, the cost, as of the time of adoption of these rules, is 4 cents per page.

(a) General Industry Safety Standard Part 51. "Logging," R 408.15101 to R 408.15181.

(b) General Industry Safety and Health Standard Part 33. "Personal Protective Equipment," R 408.13301 to R 408.13398.

(c) General Industry Safety and Health Standard Part 380. "Occupational Noise Exposure in General Industry," R 325.60101 to R 325.60128.

(d) Occupational Health Standard Part 451. "Respiratory Protection," R 325.60051 to R 325.60052.

R 325.60002 Rescinded.

R 325.60002a Rescinded.

R 325.60002b Rescinded.

R 325.60003 Rescinded.

R 325.60003a Rescinded.

R 325.60005 Rescinded.

R 325.60006 Rescinded.

R 325.60008 Rescinded.

R 325.60008a Rescinded.

R 325.60009 Rescinded.

R 325.60010 Rescinded.

R 325.60011 Rescinded.

## 1910.132 - GENERAL REQUIREMENTS

### 1910.132(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.

### 1910.132(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.

### 1910.132(c) Design.

All personal protective equipment shall be of safe design and construction for the work to be performed.

### 1910.132(d) Hazard assessment and equipment selection.

1910.132(d)(1) The employer shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE). If such hazards are present, or likely to be present, the employer shall:

1910.132(d)(1)(i) 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;

1910.132(d)(1)(ii) Communicate selection decisions to each affected employee; and,

1910.132(d)(1)(iii) 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.

1910.132(d)(2) The employer shall 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.

### 1910.132(e) Defective and damaged equipment.

Defective or damaged personal protective equipment shall not be used.

### 1910.132(f) Training.

1910.132(f)(1) The employer shall provide training to each employee who is required by this section to use PPE. Each such employee shall be trained to know at least the following:

1910.132(f)(1)(i) When PPE is necessary;

1910.132(f)(1)(ii) What PPE is necessary;

1910.132(f)(1)(iii) How to properly don, doff, adjust, and wear PPE;

1910.132(f)(1)(iv) The limitations of the PPE; and,

1910.132(f)(1)(v) The proper care, maintenance, useful life and disposal of the PPE.

1910.132(f)(2) Each affected employee shall demonstrate an understanding of the training specified in paragraph (f)(1) of this section, and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.

1910.132(f)(3) 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 (f)(2) of this section, the employer shall retrain each such employee. Circumstances where retraining is required include, but are not limited to, situations where:

1910.132(f)(3)(i) Changes in the workplace render previous training obsolete; or

1910.132(f)(3)(ii) Changes in the types of PPE to be used render previous training obsolete; or

1910.132(f)(3)(iii) Inadequacies in an affected employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.

### 1910.132(g)

Paragraphs (d) and (f) of this section apply only to §§ 1910.133, 1910.135, 1910.136, 1910.138, and 1910.140. Paragraphs (d) and (f) of this section do not apply to §§ 1910.134 and 1910.137.

**1910.132(h) Payment for protective equipment.**

1910.132(h)(1) Except as provided by paragraphs (h)(2) through (h)(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.

1910.132(h)(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.

1910.132(h)(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.

1910.132(h)(4) The employer is not required to pay for:

1910.132(h)(4)(i) The logging boots required by 29 CFR 1910.266(d)(1)(v);

1910.132(h)(4)(ii) Everyday clothing, such as long-sleeve shirts, long pants, street shoes, and normal work boots; or

1910.132(h)(4)(iii) 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.

1910.132(h)(5) The employer must pay for replacement PPE, except when the employee has lost or intentionally damaged the PPE.

1910.132(h)(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 (h)(2) through (h)(5) of this section.

1910.132(h)(7) This paragraph (h) shall become effective on February 13, 2008. Employers must implement the PPE payment requirements no later than May 15, 2008.

Note to §1910.132(h): 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.

[39 FR 23502, June 27, 1974, as amended at 59 FR 16334, April 6, 1994; 59 FR 33910, July 1, 1994; 59 FR 34580, July 6, 1994; 72 FR 64428, Nov. 15, 2007; 76 FR 33606, June 8, 2011; 81 FR 82999, Nov. 18, 2016]

## 1910.133 - EYE AND FACE PROTECTION

### 1910.133(a) General requirements.

1910.133(a)(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.

1910.133(a)(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.

1910.133(a)(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 wears eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses.

1910.133(a)(4) Eye and face PPE shall be distinctly marked to facilitate identification of the manufacturer.

1910.133(a)(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>FILTER LENSES FOR PROTECTION AGAINST RADIANT ENERGY</b>			
<b>OPERATIONS</b>	<b>ELECTRODE SIZE 1/32 IN.</b>	<b>ARC CURRENT</b>	<b>MINIMUM* PROTECTIVE SHADE</b>
Shield 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	(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

<b>FILTER LENSES FOR PROTECTION AGAINST RADIANT ENERGY</b>			
<b>OPERATIONS</b>	<b>PLATE THICKNESS- INCHES</b>	<b>PLATE THICKNESS-mm</b>	<b>MINIMUM* PROTECTIVE SHADE</b>
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.

**1910.133(b) Criteria for protective eye and face protection.**

1910.133(b)(1) Protective eye and face protection devices must comply with any of the following consensus standards:

1910.133(b)(1)(i) ANSI/ISEA Z87.1-2010, Occupational and Educational Personal Eye and Face Protection Devices, incorporated by reference in § 1910.6;

1910.133(b)(1)(ii) ANSI Z87.1-2003, Occupational and Educational Personal Eye and Face Protection Devices, incorporated by reference in § 1910.6; or

1910.133(b)(1)(iii) ANSI Z87.1-1989 (R-1998), Practice for Occupational and Educational Eye and Face Protection, incorporated by reference in § 1910.6;

1910.133(b)(2) 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.

[59 FR 16360, April 6, 1994; 59 FR 33910, July 1, 1994; 61 FR 9227, March 7, 1996; 61 FR 19547, May 2, 1996; 74 FR 46356, Sept. 9, 2009; 81 FR 16090, March 25, 2016]

## **1910.138 - HAND PROTECTION**

### **1910.138(a) General requirements.**

Employers shall 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.

### **1910.138(b) Selection.**

Employers shall 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.

[59 FR 16362, April 6, 1994]



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