

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

OCCUPATIONAL HEALTH STANDARDS

FILED WITH THE SECRETARY OF STATE ON FEBRUARY 6, 2014

These rules become effective immediately upon filing with the Secretary of State unless adopted under section 33, 44, or 45a(6) of 1969 PA 306. 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 and 24 of 1974 PA 154, **MCL 408.1001 and 408.1094**, ~~MCL 408.1014 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, R 325.60002, R 325.60003, R 325.60005, R 325.60006, R 325.60008, R 325.60009, R 325.60010, and R 325.60011 of the Michigan Administrative Code are amended, and R 325.60002a, R 325.60002b, R 325.60003a, and R 325.60008a are added, and R 325.60004, R 325.60007, R 325.60012, and R 325.60013 are rescinded, as follows:

PART 433 PERSONAL PROTECTIVE EQUIPMENT

R 325.60001 Scope.

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.** ~~These rules apply to personal protective equipment for eyes, face, hands, and respiratory protection, except that R 325.60005 and R 325.60006 do not apply to respiratory protection. Safety standards relating to eye and face protection, head protection, foot protection, and electrical protective equipment are found in R 408.13301 et seq. of the Michigan Administrative Code. Rules applying to personal protective equipment for hearing conservation are found in R 325.60121 et seq. of the Michigan Administrative Code.~~

(2) **This standard shall apply 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 shall be in compliance with General Industry Safety Standard Part 33 "Personal Protective Equipment," as referenced in R 325.60002a.**

(4) **Hearing protection shall be in compliance with Occupational Health Standard Part 380 "Occupational Noise Exposure," as referenced in R 325.60002a.**

(5) **Respiratory protection shall be in compliance with Occupational Health Standard Part 451 "Respiratory Protection," as referenced in R 325.60002a.**

~~(2) These rules replace occupational health rule 3501.~~

R 325.60002 Application.

Rule 2. 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, ~~if~~ **wherever it is necessary by reason** because 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.

**R 325.60002a Adoption of standards by reference; access to other MIOSHA rules; appendices.**

Rule 2a. (1) **The following standards are adopted by reference in these rules and are available from IHS Global, 15 Inverness Way East, Englewood, Colorado, 80112, USA, telephone number: 1-800-854-7179 or via the internet at website: <http://global.ihs.com>; at a cost as of the time of adoption of these rules, as stated in this subrule.**

(a) **American National Standards Institute (ANSI) Z-87.1 "American National Standard Practice for Occupational and Educational Eye and Face Protection," 2003 edition. Cost \$82.00.**

(b) **ANSI Z-87.1 "American National Standard Practice for Occupational and Educational Eye and Face Protection," 1989 edition, revised 1998. Cost \$148.00.**

(c) **ANSI Z-87.1 "American National Standard Practice for Occupational and Educational Eye and Face Protection," 1989 edition. Cost: \$148.00.**

(2) The standards adopted in subrule (1) of this rule are also available for inspection at the Department of Licensing and Regulatory Affairs, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143.

(3) Copies of the standards adopted in subrule (1) of this rule may be obtained from the publisher or may also be obtained from the Department of Licensing and Regulatory Affairs, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143, at the cost charged in this rule, plus \$20.00 for shipping and handling.

(4) The following Michigan occupational safety and health standards (MIOSHA) 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 standards section, 7150 Harris Drive, P.O. Box 30643, Lansing, MI, 48909-8143 or via the internet at website: [www.michigan.gov/mioshastandards](http://www.michigan.gov/mioshastandards). For quantities greater than 5, the cost, at the time of adoption of these rules, is 4 cents per page.

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

(b) Occupational Health Standard Part 380 "Occupational Noise Exposure," R 325.60101 to R 325.30128.

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

(5) The appendices are informational only and are not intended to create any additional obligations or requirements not otherwise imposed or to detract from any established obligations or requirements.

#### R 325.60002b Definitions.

Rule 2b. (1) "Chin protector" means the portion of a device that offers protection to a wearer's chin, lower face, and neck.

(2) "Face shield" means a device commonly intended to shield the wearer's face, or portions thereof, in addition to the eyes, from certain hazards, depending on faceshield type.

(3) "Filter lens" means a lens that attenuates specific wavelengths of ultraviolet, visible, and infrared radiation.

(4) "Frame" means a device, which holds the lens or lenses on the wearer.

(5) "Front" means the part of a spectacle or goggle frame that is intended to contain the lens or lenses.

(6) "Goggle" means a protective device intended to fit the face surrounding the eyes in order to shield the eyes from certain hazards, depending on goggle type.

(7) "Handshield" means a hand-held welding helmet. See "welding helmet."

(8) "Headband" means the part of the harness that encircles the head.

(9) "Helmet" also called a hard hat or cap, means a device that is worn on the head and that is designed to provide limited protection against impact, flying particles, or electric shock.

(10) "Lens" means the transparent part of a protective device through which the wearer sees, also referred to as a plate or window for some devices.

(11) "Lift-front" means a type of supplementary lens and holder that covers the viewing area of a protector immediately in front of the wearer's eyes and that can be positioned outside the line of sight.

(12) "Light" means optical radiation weighted by its ability to cause visual sensations.

(13) "Manufacturer" means a business entity that marks or directs the permanent marking of the components or complete devices as compliant with this standard, and sells them as compliant.

(14) "Non-removable lens" means a lens and holder that are homogeneous and continuous.

(15) "Prescription lens" means a lens manufactured to the wearer's individual corrective prescription.

(16) "Protector" means a device that provides eye or face protection against the hazards of processes encountered in employment.

(17) "Radiant energy or radiation" means the 3 kinds of radiant energy which are pertinent to this standard including the following:

(a) Ultraviolet.

(b) Visible light.

(c) Infrared.

(18) "Sanitizing" means an act or process of destroying organisms that may cause disease.

(19) "Side shield" means a part of, or attachment to, a spectacle that provides side impact resistance.

(20) "Spectacles" also known as "safety glasses," means a protective device intended to shield the wearer's eyes from certain hazards, depending on the spectacle type; also means a device patterned after conventional-type spectacle eyewear, but of more substantial construction, with or without side shields, and with plano or corrective impact resistant lenses of clear or absorptive filter glass or plastic.

(21) "Temple" means the part of a spectacle frame commonly attached to the front and generally extending behind the ear of the wearer.

(22) "Welding goggle" means a goggle intended for limited welding applications.

(23) "Welding faceshield" means a faceshield intended for limited welding applications. Faceshields shall be used only in conjunction with spectacles or goggles, or both.

(24) "Welding helmet" means a protective device intended to provide protection for the eyes and face against optical radiation and weld spatter, which shall be worn only in conjunction with spectacles or goggles.

(25) "Window," means the lens portion of a faceshield (see definition of "lens" in R 325.60002b(10)).

R 325.60003 **Employer's and employee's responsibilities.** ~~Employee-owned equipment.~~

Rule 3. (1) Where employees provide their own protective equipment, ~~an~~ the employer shall be responsible for ensuring the adequacy of the equipment, including proper maintenance, and for the sanitation of the equipment.

(2) An employer shall not permit defective or damaged personal protective equipment to be used.

#### PAYMENT FOR PERSONAL PROTECTIVE EQUIPMENT

R 325.60003a **Payment for personal protective equipment (PPE).**

Rule 3a. (1) An employer shall provide at no cost to employees the personal protective equipment necessary to protect against hazards that the employer is aware of as a result of any required assessments.

(2) An employer shall pay for replacement PPE, as necessary, under either of the following conditions:

(a) When the PPE no longer provides the protection it was designed to provide.

(b) When the previously provided PPE is no longer adequate or functional.

(3) When an employee has lost or intentionally damaged the PPE issued to him or her, an employer is not required to pay for its replacement and may require the employee to pay for its replacement.

(4) An employer is not required to pay for prescription safety eyewear with removable or permanent sideshields as long as the employer provides safety eyewear that fits over an employee's prescription lenses.

(5) An employer is not required to pay for non-specialty prescription safety eyewear, provided that the employer permits these items to be worn off the job-site.

(6) An employer is not required to pay for either of the following:

(a) Everyday clothing, which includes any of the following:

(i) Long-sleeve shirts.

(ii) Long pants.

(iii) Street shoes.

(iv) Normal work boots.

(v) Ordinary clothing.

(vi) Skin creams.

(b) Other items used solely for protection from weather, which includes any of the following:

(i) Winter coats.

(ii) Jackets.

(iii) Gloves.

(iv) Parkas.

(v) Rubber boots.

(vi) Hats.

(vii) Raincoats.

(viii) Ordinary sunglasses.

(ix) Sunscreen.

(7) An employer shall pay for protection when ordinary weather gear is not sufficient to protect an employee and special equipment or extraordinary clothing is needed to protect the employee from unusually severe weather conditions. Clothing used in artificially-controlled environments with extreme hot or cold temperatures, such as freezers, is not considered part of the weather gear exception.

(8) All of the following apply to upgraded and personalized PPE:

(a) An employer is not required to pay for PPE requested by an employee that exceeds the PPE requirements, provided that the employer provides PPE that meets the standards at no cost to the employee.

(b) If an employer allows an employee to acquire and use upgraded or personalized PPE, then the employer is not required to reimburse the employee for the equipment, provided that the employer has provided adequate PPE at no cost to the employee.

(c) An employer shall evaluate an employee's upgraded or personalized PPE to ensure that it complies with all of the following:

(i) Adequate to protect from hazards present in the workplace.

(ii) Properly maintained.

(iii) Kept in a sanitary condition.

(9) When the provisions of another MIOSHA standard specify whether the employer shall pay for specific equipment, the payment provisions of that standard prevails.

R 325.60004 **Rescinded.** ~~Design.~~

~~Rule 4. All personal protective equipment shall be designed and constructed to be safe for the work to be performed.~~

## HAZARD ASSESSMENT

R 325.60005 **Personal protective hazard** Hazard assessment and equipment selection.

Rule 5. (1) An employer shall assess the workplace to determine if hazards are present, or are likely to be present, that necessitate the use of personal protective equipment. ~~If hazards are present, or are likely to be present, and if the employer cannot eliminate the hazards by feasible engineering controls, then the employer shall do all of the following:~~

~~(a) Select, and have each affected employee use, the types of personal protective equipment that will protect the affected employee from the hazards identified in the hazard assessment.~~

~~(b) Communicate selection decisions to each affected employee.~~

~~(c) Select personal protective equipment that properly fits each affected employee~~

**(2) If hazards are present, or are likely to be present, and if the employer cannot eliminate the hazards by feasible engineering controls, then the employer shall do all of the following:**

**(a) Select, and have each affected employee use, the types of personal protective equipment that will protect the affected employee from the hazards identified in the hazard assessment.**

**(b) Communicate selection decisions to each affected employee.**

**(c) Select personal protective equipment that properly fits each affected employee.**

**(d) Select personal protective equipment that shall be designed and constructed to be safe for the work to be performed.**

**(3) Non-mandatory Appendix B contains an example of procedures that complies with the requirement for a hazard assessment.**

~~(4)(2) An employer shall verify, through a written certification that is identified as a certification of hazard assessment, that the required workplace hazard assessment has been performed performed. The certification, shall identify through a written certification which identifies~~ all of the following information:

~~(a) The workplace evaluated.~~

~~(b) The person certifying that the evaluation has been performed.~~

~~(c) The date or dates of the personal protective hazard assessment~~

~~(d) The document is a certification of hazard assessment.~~

~~(3) An employer shall not permit defective or damaged personal protective equipment to be used.~~

## TRAINING

R 325.60006. **Personal protective equipment training.** ~~Training.~~

Rule 6. (1) An employer shall **provide training to** each employee who is required by these rules to use personal protective equipment. The training shall include all of the following:

(a) When and why personal protective equipment is necessary.

(b) What personal protective equipment is necessary.

(c) How to properly don, doff, adjust, and wear the personal protective equipment.

(d) The limitations of the personal protective equipment.

(e) The proper care, maintenance, useful life, and disposal of the personal protective equipment.

(2) Each affected employee shall demonstrate an understanding of the training specified in subrule (1) of this rule and the ability to use the equipment properly before being allowed to perform work requiring the use of personal protective equipment.

(3) ~~When an~~ **If** the employer has reason to believe that any affected employee who has already been trained does not have the understanding and skill required by subrule (2) of this rule, the employer shall retrain the employee. The occurrence of any of the following circumstances requires retraining:

(a) Changes in the workplace **that** render previous training obsolete.

(b) Changes in the types of personal protective equipment to be used **that** render previous training obsolete.

(c) Inadequacies in an affected employee's knowledge or use of assigned personal protective equipment **which** indicate that the employee has not retained the requisite understanding or skill.

~~(4) An employer shall verify that each affected employee has received and understood the required training through a written certification that contains all of the following information:~~

~~(a) The name of each employee trained.~~

~~(b) The date of training.~~

~~(c) The subject of the certification.~~

R 325.60007. **Rescinded.** Applicability of requirements for hazard assessments and training.

Rule 7. R 325.60005 and R 325.60006 apply only to face, eye, and hand protection. R 325.60005 and R 325.60006 do not apply to O.H. rule 325.60051 et. seq., Part 451. respiratory protection.

## EYE AND FACE PROTECTION

R 325.60008. **Use of eye and face protection.** ~~Face and eye protection, generally.~~

Rule 8. (1) An employer shall ensure that each affected employee uses appropriate eye or face protection when exposed to eye or face hazards from any of the following:

- (a) Flying particles.
- (b) Molten metal.
- (c) Liquid chemicals.
- (d) Corrosive materials.
- (e) Air contaminants.
- (f) Radiation.

~~Table 1 of this rule, and table 1, face and eye protector selection chart of R 408.13312, shall be used to select the proper eye and face protection.~~

**(2) See Appendix B, Appendix Table 1, "Eye and Face Protector Selection Chart," and Appendix Figure 1, "Eye and Face Protective Devices Chart," which shall be used as a guide in the selection of the proper eye and face protection.**

**(3)(2)** An 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, such as clip-on or slide-on sideshields, that are in compliance with the **pertinent applicable** requirements of this rule are acceptable.

**(4)(3)** An 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.

**(5)(4)** An employer shall ensure that eye and face personal protective equipment **shall be** is distinctly marked to facilitate identification of the manufacturer.

~~(5) An employer shall ensure that each affected employee uses equipment that has filter lenses which have a shade number appropriate for the work being performed for protection from injurious light radiation.~~

~~Table 1 is a listing of appropriate shade numbers for various operations.~~

~~(6) Table 1 reads as follows:~~

~~Table 1 **Figure for 325.60008**~~

FILTER LENSES FOR PROTECTION AGAINST RADIANT ENERGY			
Operations	Electrode Size 1/32 In.	Arc Current	Minimum* Protective Shade
Shield metal arc welding	Less than 3	Less than 60	7
	3 to 5	60 to 160	8
	More than 5 to 8	161 to 250	10
	More than 8	251 to 500	11
Gas metal arc welding and flux cored arc welding		Less than 60	7
		60 to 160	10
		161 to 250	10
		251 to 500	10
Gas tungsten arc welding		Less than 50	8
		50 to 150	8
		151 to 500	10
Air carbon Arc cutting	(Light)	Less than 500	10
	(Heavy)	500 to 1000	11
Plasma arc welding		Less than 20	6
		20 to 100	8
		101 to 400	10
		401 to 800	11
Torch brazing			3
Torch soldering			2
Carbon arc welding			14
<b>Gas Welding:</b>			
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
<b>Oxygen Cutting:</b>			
Light	Under 1	Under 25	3
Medium	1 to 6	25 to 150	4
Heavy	Over 6	Over 150	5

## R 325.60008a Filter lenses.

Rule 8a. (1) An employer shall ensure that each affected employee uses equipment that has filter lenses which have a shade numbers appropriate for the work being performed for protection from injurious light radiation.

(2) Table 1 is a listing of appropriate shade numbers for various operations.

(3) Table 1 reads as follows:

TABLE 1 FILTER LENSES FOR PROTECTION AGAINST RADIANT ENERGY			
OPERATIONS	PLATE THICKNESS (INCHES)	PLATE THICKNESS (MM)	MINIMUM* PROTECTIVE SHADE
Gas Welding: Light Medium Heavy	Under 1/8 1/8 to 1/2 Over 1/2	Under 3.2 3.2 to 12.7 Over 12.7	4 5 6
Oxygen Cutting Light Medium Heavy	Under 1 1 to 6 Over 6	Under 25 25 to 150 Over 150	3 4 5
OPERATIONS	ELECTRODE SIZE 1/32 IN.	ARC CURRENT	MINIMUM* PROTECTIVE SHADE
Shield metal Arc welding	Less than 3	Less than 60	7
	3 to 5	60 to 160	8
	more than 5 to 8	161 to 250	10
	more than 8	251 to 550	11
Gas metal arc welding and flux	cored arc welding	Less than 60	7
		60 to 160	10
		161 to 250	10
		251 to 500	10
Gas tungsten arc	welding	Less than 50	8
		50 to 150	8
		151 to 500	10
Air carbon Arc cutting	(Light)	Less than 500	10
	(Heavy)	500 to 1000	11
Plasma arc welding		Less than 20	6
		20 to 100	8
		101 to 400	10
		401 to 800	11
Plasma arc cutting	(Light)** (Medium)** (Heavy)**	Less than 300	8
		300 to 400	9
		401 to 800	10
Torch brazing			3
Torch soldering			2
Carbon arc welding			14

\* As a rule of thumb, start with a shade that is too dark to see the weld zone. Then go to a lighter shade that gives a 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 light filters may be used when the arc is hidden by the workpiece.

R 325.60009 **Eye and face** ~~Face and eye protection; consensus standards. criteria.~~

Rule 9. (1) ~~Protective~~ **All protective** eye and face **protection** devices, purchased after July 5, 1994, shall be in compliance with **any of the following consensus standards:** American national standards institute standard Z-87.1-1989, entitled "American National Standard Practice for Occupational and Educational Eye and Face Protection," or shall be demonstrated by the employer to be equally effective. The standard is adopted by reference in these rules and is available from the American National Standards Institute, 11 West 42nd Street, New York, New York 10036, or from the Michigan Department of Consumer and Industry Services, MIOSHA Standards Division, P.O. Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$18.00.

(a) **ANSI Z-87.1 "American National Standard Practice for Occupational and Educational Eye and Face Protection," 2003 edition, as adopted in R 325.60002a.**

(b) **ANSI Z-87.1 "American National Standard Practice for Occupational and Educational Eye and Face Protection," 1989 (Revised 1998) edition, as adopted in R 325.60002a.**

(c) **ANSI Z-87.1 "American National Standard Practice for Occupational and Educational Eye and Face Protection," 1989 edition, as adopted in R 325.60002a.**

(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 1 of the consensus standards adopted in subrule (1) of this rule shall be considered to be in compliance with this rule.** ~~Eye and face protective devices, purchased before July 5, 1994, shall be in compliance with American national standards institute standard Z-87.1-1968, entitled "USA "Standard for Occupational and Educational Eye and Face Protection," or shall be demonstrated by the employer to be equally effective. The standard is adopted by reference in these rules and is available from the American National Standards Institute, 11 West 42nd Street, New York, New York 10036, or from the Michigan Department of Consumer and Industry Services, MIOSHA Standards Division, P.O. Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$18.00.~~

## HAND PROTECTION

R 325.60010 Hand protection, generally.

Rule 10. An employer shall select and require employees to use appropriate hand protection when employees' hands are exposed to hazards, such as **those from** any of the following:

- (a) Skin absorption of harmful substances.
- (b) Severe cuts or lacerations.
- (c) Severe abrasions.
- (d) Punctures.
- (e) Chemical burns.
- (f) Irritating materials.
- (g) Thermal burns.
- (h) Harmful temperature extremes.

R 325.60011 Hand protection, selection.

Rule 11. An employer shall base the selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection relative to all of the following:

- (a) The task **or tasks** to be performed.
- (b) Conditions present.
- (c) Duration of use.
- (d) The hazards and potential hazards identified.

R 325.60012 **Rescinded.** ~~Appendices.~~

~~Rule 12. Appendices A and B to these rules are informational only and are not intended to create any additional obligations or requirements not otherwise imposed or to detract from any established obligations or requirements. They are identical to appendices A and B to 29 C.F.R. §§1910.132, 1910.133, and 1910.138, from which these rules were derived.~~

R 325.60013 **Rescinded.** ~~Availability of rules and appendices; permission to copy.~~

~~Rule 13. (1) Copies of these rules and related appendices are available at no cost from the Michigan Department of Consumer and Industry Services, MIOSHA Standards Division, P.O. Box 30643, Lansing, Michigan 48909.~~

~~(2) Permission to copy any of these documents in full is granted by the director of the department of consumer and industry services.~~