



# Regulations Update

## #30 —Updating OSHA Standards Based on National Consensus Standards: Personal Protective Equipment

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### **Background**

In September 2009 the United States Occupational Safety and Health Administration (OSHA) published a final rule to revise the personal protective equipment (PPE) sections of the general industry, shipyard employment, marine terminals, and longshoring standards regarding head protection, foot protection, and eye and face protection devices. These OSHA standards contain design requirements for specific PPE and require that the PPE comply with national consensus standards incorporated by reference into the new OSHA standards, unless the employer can demonstrate that the equipment is as effective as equipment that complies with the consensus standard.

The prior versions of the OSHA standards incorporated American National Standards Institute (ANSI) standards that were over 10 years old, in some instances over 20 years old, and in one case the incorporated standard had been withdrawn. In all cases, updated ANSI or

American Society for Testing and Materials (ASTM) standards had been adopted, but not incorporated by OSHA. When consensus standards are revised and updated by the standards organizations PPE manufacturers' typically design PPE to meet the requirements of the latest standards, or have existing PPE re-evaluated and tested to assure conformance to the latest standards and update markings and documentation accordingly. As a result, employees and employers experienced difficulties in obtaining PPE manufactured in accordance with the national consensus standards incorporated earlier into OSHA PPE standards. According to OSHA, incorporating the current national consensus standards will ease the burden on employers, making it easier to find PPE that complies with the OSHA standards..

To ease the financial burden on employers, OSHA will still allow the use of PPE that conforms to earlier versions of national consensus standards incorporated into earlier OSHA

PPE standards. During the rulemaking process OSHA heard from several witnesses that PPE designed under a previous standard remains safe to use even though it may not totally conform to the most current standard. OSHA agreed with this testimony and in the final rule decided to keep reference to the national consensus standards incorporated into prior versions of the standards. This will allow employers to meet the design requirements of the PPE standards by choosing PPE constructed in accordance with any of three national consensus standards – the two most recent national consensus standards and the national consensus standard incorporated in the earlier version of the OSHA standard for eye and face protection, head protection and foot protection. In allowing the use PPE conforming to multiple versions of national consensus standards employers are not forced to replace all PPE at once, but can phase in new PPE, if necessary, in a more cost effective manner

## Updating OSHA Standards Based on National Consensus Standards: Personal Protective Equipment

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### Affected Standards

The national consensus standards incorporated into the general industry, shipyard employment, marine terminals, and longshoring PPE standards are listed below. Employers may use eye and face protection, head protection, and foot protection that comply with the following national consensus standards:

### Eye and Face Protection

ANSI Z87.1 – 2003, “American National Standard for Practice for Occupational and Educational Eye and Face Protection,” or ANSI Z87.1 – 1989 (R-1989), “American National Standard for Practice for Occupational and Educational Eye and Face Protection,” or ANSI Z87.1 – 1989, “American National Standard for Practice for Occupational and Educational Eye and Face Protection.”

The earlier version of the eye and face protection standards incorporated the 1989 and 1968 versions of ANSI Z87.1, “American National Standard for Practice for Occupational and Educational Eye and Face Protection.”

### Head Protection

ANSI Z89.1 – 2003, “American National Standard for Industrial Head Protection,” or ANSI Z89.1 – 1997, “American National Standard for Industrial Head Protection,” or ANSI Z89.1 – 1986,

“American National Standard for Industrial Head Protection.”

The earlier version of the head protection standards incorporated the 1986 and 1969 versions of ANSI Z89.1, “American National Standard for Industrial Head Protection.”

### Foot Protection

ASTM F-2412-2005, “Standard Test Methods for Foot Protection”, and ASTM F-2413-2005, “Standard Specification for Performance Requirements for Protective Footwear”, or

ANSI Z41 – 1999, “American National Standard for Personal Protection - Foot Protection,” or

ANSI Z41 – 1991, “American National Standard for Personal Protection - Foot Protection.”

The earlier version of the foot protection standards incorporated ANSI Z41 – 1991, “American National Standard for Personal Protection - Foot Protection,” and ANSI Z41 – 1967, “USA Standard for Men’s Safety-Toe Footwear,” ANSI withdrew the Z41 footwear standard on March 1, 2005..

### Additional Changes

In addition to the standards addressed above, OSHA amended the general industry ventilation standard 29 CFR 1910.94 to require footwear that complies with the general industry footwear standard 29

CFR 1910.136(b)(1), and the general requirements under the welding, cutting and brazing standard (29 CFR 1910.252) to require that filter lenses meet the energy and transmission requirements of ANSI Z87.1 – 2003, “American National Standard for Practice for Occupational and Educational Eye and Face Protection,” which was incorporated in 29 CFR 1910.133 – Eye and Face Protection.

### Future Standard Updates

The final PPE rules continue to allow employers the option of using PPE that is not constructed in accordance with one of the listed consensus standards as long as the employer can demonstrate that the PPE offers the same protection as PPE manufactured in accordance with one of the incorporated consensus standards.

In the future, OSHA plans on updating the national consensus standards referenced in the PPE standards as new editions become available. Appropriate rulemaking, including direct-final rulemaking will be used to remove outdated editions and incorporate new editions into the regulatory text. Currently ANSI Z87.1, “American National Standard for Practice for Occupational and Educational Eye and Face

## Updating OSHA Standards Based on National Consensus Standards: Personal Protective Equipment

---

Protection,” and ANSI Z89.1, “American National Standard for Industrial Head Protection,” are both under revision.

### **Amended Regulatory Text to OSHA General Industry PPE Regulations**

#### **§ Part 1910—[Amended]**

#### **§ 1910.94 Ventilation**

Revised paragraph (a)(5)(v)(a) to read as follows:

1910.94 Ventilation.

(a) \* \* \*

(5) \* \* \*

(v) \* \* \*

(a) Protective footwear must comply with the requirements specified by 29 CFR 1910.136(b)(1).

#### **§ 1910.133 Eye and Face Protection**

Revise paragraph (b) to read as follows:

(b) Criteria for protective eye and face protection.

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

(i) ANSI Z87.1–2003, “American National Standard Practice for Occupational and Educational Eye and Face Protection,” which is incorporated by reference in § 1910.6;

(ii) 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

(iii) ANSI Z87.1–1989, “American National Standard Practice for Occupational and Educational Eye and Face Protection,” which is incorporated by reference in § 1910.6.

(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.

#### **§ 1910.135 Head Protection**

Revise paragraph (b) to read as follows:

(b) Criteria for head protection.

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

(i) ANSI Z89.1–2003, “American National Standard for Industrial Head Protection,” which is incorporated by reference in § 1910.6;

(ii) ANSI Z89.1–1997, “American National Standard for Industrial Head Protection,” which is incorporated by reference in § 1910.6; or

(iii) ANSI Z89.1–1986, “American

National Standard for Personnel Protection—Protective Headwear for Industrial Workers—Requirements,” which is incorporated by reference in § 1910.6.

(2) 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.

#### **§ 1910.136 Foot Protection**

Revise paragraph (b) to read as follows:

(b) *Criteria for protective footwear.* (1) Protective footwear must comply with any of the following consensus standards:

(i) 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;

# Regulation Update #30

## Updating OSHA Standards Based on National Consensus Standards: Personal Protective Equipment

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

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

(2) 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.

### Appendix B to Subpart I to Part 1910—Non-Mandatory Compliance Guidelines for Hazard Assessment and Personal Protective Equipment Selection

Add a paragraph at the end of paragraph 9 in Appendix B to subpart I that reads as follows:

9. Selection guidelines for head protection.

Beginning with the ANSI Z89.1–1997 standard, ANSI updated the classification system for protective helmets. Prior revisions used type classifications to distinguish between caps and full brimmed hats. Beginning in 1997, Type I designated helmets designed to reduce the force of impact resulting from a blow only to the top of the head, while Type II designated helmets designed to reduce the force of impact resulting from a blow to the top or sides of the head.

Accordingly, if a hazard assessment indicates that lateral impact to the head is foreseeable, employers must select Type II helmets for their employees. To improve comprehension and usefulness,

the 1997 revision also redesignated the electrical protective classifications for helmets as follows: “Class G—General”; helmets designed to reduce the danger of contact with low-voltage conductors; “Class E—Electrical”; helmets designed to reduce the danger of contact with conductors at higher voltage levels; and “Class C—Conductive”; helmets that provide no protection against contact with electrical hazards.

### § 1910.252 General Requirements

(b) \* \* \*

(2) \* \* \*

(ii) \* \* \*

(I) Filter lenses must meet the test for transmission of radiant energy prescribed by any of the consensus standards listed in 29 CFR 1910.133(b)(1).

For more information, please contact:

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