



Weekly Safety Meeting

Eye and Face Protection

The U.S. Bureau of Labor Statistics estimates that roughly 20,000 eye injuries occur daily in the United States. These types of injuries can, in many cases, be prevented with adequate PPE and proper precautions.

The American National Standards Institute (ANSI) sets requirements for eye and face protection in work and industrial settings.

OSHA mandates that employers ensure the health and safety of their employees through training and provision of PPE to protect against a wide variety of hazards. We are going to look at what OSHA standards for general industry, maritime, and construction say about required eye and face protection.

ANSI Z87

All eye and face protection must meet the ANSI Z87 standard from the American National Standards Institute. This standard requires and details impact resistance, optical clarity, coverage, comfort, durability, disinfectability, and prescription eyewear. Markings that must be included on eyewear and Facial PPE include the ANSI Z87 standard marking (or equivalent), and indications of splash (D3), dust (D4), or fine dust (D5) protection, as well as markings to reflect levels of optical radiation protection.

OSHA Standards for General Industry

PPE is discussed in 1910 Subpart 1 of OSHA's General Industry Standard (29 CFR 1910). Eye and face protection is specifically discussed in 1910.133.

Per the standard, employers must ensure employees use adequate, ANSI or equivalent standard face and/or eye protection when exposed to flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

When there is a hazard from flying objects, side protection (such as clip on or slide on side shields) must be used as well.

For individuals who need prescription lenses, the prescription must be incorporated into the protective eyewear or eye/face protection must be worn over the prescription lenses.

Eye and face PPE should be marked to easily show the manufacturer.

Employers should ensure that filter lenses for welding and light radiation protection use the correct shade number for work being performed for operations such as welding, brazing and soldering. Also,

for gas welding and oxygen cutting, the plate thickness of the filter lenses vary from less than 1/8" to 1/2" depending on if the work is light, medium, or heavy. In general, the shade should be just light enough to see the weld zone, and one shade darker should prevent weld zone visibility where there is a clear arc to be seen.

OSHA Standards for Maritime

PPE is discussed in 1915 Subpart 1 of OSHA's Maritime Standard (29 CFR 1915, 1917, 1918). Eye and face protection is specifically discussed in 1915.153 and 1918.101.

The Subparts in 1915.153 are very similar to those of 1910.133 for Construction, but 1918.101 adds more detail concerning the condition of the eye and face protection. 1915.101 states that eye protection shall be maintained in good condition and shall be cleaned and disinfected before issuance to another employee. Wouldn't we all want to use a clean pair of protective glasses? Even if employees don't have to share eyewear, it just makes sense to keep it clean—both for visibility and good hygiene.

OSHA Standards for Construction

PPE is discussed in 1926 Subpart E of OSHA's Construction Industry Standard (29 CFR 1926). Eye and face protection is specifically discussed in 1926.102.

Similarly to the eye and face protection standards for General Industry, the employer must ensure that employees who work around flying debris, splash hazards, or chemical fumes, or light radiation, wear appropriate eye and/or face protection.

As in any instance of the possibility of flying debris in a workplace, protective side-shields are required.

In cases of prescription lenses being needed along with eye protection, the prescription can be either in the safety lens or a safety lens worn over the prescription lenses. In addition to all eyewear and face PPE being marked with the manufacturer for easy identification, 1926.102 (a) (5) adds that these should provide adequate protection against the hazards for which they are designed, be reasonably comfortable when worn during the necessary conditions, and fit snugly and not interfere with the wearer's movements. Additionally, the eyewear and facial should be durable, able to be disinfected and easily cleaned.

This section also contains tables that address the filter lens shade numbers for protection against radiant energy and a table on selecting laser safety glass.

TAKE CARE...BE AWARE!

Safety Meeting Sign-In Sheet

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature:

Name (print clearly)	Signature	Comments / Safety Concerns / Training Requests