

Selecting the Appropriate Eye and Face Protection

FACT SHEET 63-012-0916

A primary goal of occupational safety is to prevent injury and to reduce the consequence of injuries should an accident occur. For eye and face protection, properly fitted and well maintained personal protective equipment (PPE) that is appropriate for the tasks and hazards is very important. The new ANSI/ISEA Z87.1-2015, "American National Standard for Occupational and Educational Personal Eye and Face Protection Devices," fine tunes the 2010 version with updates on "magnifiers" or "readers," minimum thickness requirements for non-prescription protectors, and angular dependence requirements of luminance transmittance for welding filters. The 2015 version maintains the hazard-based structure for protectors, which was a major change introduced in the 2010 version aimed to make selection of protective eyewear easier. The Eye and Face Protector Selection Guide from ANSI/ISEA Z87.1-2015 is available for download from International Safety Equipment Association's website, www.safetyequipment.org.

Hazard Assessment

The safety hazard assessment of a workplace is required under the Occupational Safety and Health Administration (OSHA) requirement, 29 CFR 1910.132(d). The employers are required to assess hazard and determine the types of PPE required. Employers are required to provide needed PPE at no cost to employees and to provide the training needed on the proper use and care of PPE. Hazard assessment should be led by an industrial hygienist (IH) or a safety officer but should also involve workers and their supervisors. The importance of a written hazard assessment that clearly documents the hazards and protection requirements cannot be overstated. Information related to conducting assessments for eye and face hazards as well as protector selection and use has been expanded in the ANSI/ISEA Z87.1-2015.

Selecting the Right Protection

The best source for appropriate eye protection is the ANSI/ISEA Z87.1-2015. However, it is important to recognize that it is the OSHA's Eye and Face Protection Standards which regulate eye and face safety devices. On 28 March 2016, OSHA published a new "final rule" updating references in OSHA's protection standards (29 CFR 1910.133(b)). As a consequence, as of 25 April 2016, ANSI/ISEA Z87.1-2010 version is recognized and the reference to the 1986 version has been now deleted. This means that OSHA standards now reference 1989 (R-1989), 2003 and 2010 versions of the Z87.1 and the protectors marked with them can continued to be used. However, any eye and face protectors marked with Z87.1-1986 should be discarded. With this "final rule", OSHA also updated standards for construction industry by deleting the reference to the 1968 version of ANSI. Now, there is consistency across all OSHA Eye and Face Protection Standards. Tri-Service Vision Conservation Readiness (TSVCR) program recommends that newly purchased protectors meet Z87.1-2016 standards.

The TSVCR program recommends use of impact rated eye and face protectors in all cases. In addition, faceshields which are designed to be used as secondary protectors over impact protective goggles or spectacles, should not be used as primary impact protectors regardless whether they are impact rated or not. TSVCR program also recommends the use of safety glasses with side protection that extends back at least 10 mm from the front plane of cornea of the eye.

A copy of ANSI/ISEA Z87.1-2015 Eye and Face Selection Guide is available for download from ISEA's website, <u>www.safetyequipment.org.</u> OHSA's PPE selection guide, an additional source for eye protection selection, is available at: http://www.osha.gov/SLTC/etools/eyeandface/ppe/selection.html.