

# General Industry Protective Equipment Fact Sheet

**PPE – Eye and Face Protection, 29 CFR 1910.133**

**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.”*

**Employer Compliance** – For detailed specifications, OSHA has two options. Employers must comply with the consensus standard: ANSI Z87.1 (1989, 2003, or 2010 version), or provide protection that “the employer demonstrates are at least as effective as protective eye and face protection devices” found in ANSI Z87.1. Also in this standard, requirements are listed for filter lenses, 1910.133(a)(5), used for radiant energy protection. Information on filter lenses is detailed in OSHACampus’ Fact Sheet 3.2.

## **Eyeglass Types**

Type 1: Reduces the force of impact from a blow to the top of the head.

Type 2: Reduces the force of impact from a blow off-center, from the side, or the top of the head.

## **Hard Hats Classes (based on the electrical protection they provide)**

Class G (general): Rated for 2,200 volts.


Class E (electrical): Rated for 20,000 volts.

Class C (conductive): No electrical protection.

## **Inspection**

Although hard hats do not have a set expiration date, service life guidelines are provided with the hard hat. The hard hat and all components need daily inspection by the employee for damage such as dents, wear, or cracks. Any damage reduces the protection levels of the hat. With plastic hats, UV light degrades the plastic over time. Replacement is needed when the hat fails to maintain shape after being compressed laterally or the shell degrades the plastic: usually giving a dull, chalky, sometimes flaky appearance.

## **Non-mandatory Features Available**

- **Reverse Donning:** A  symbol means the hat can be worn frontward or backward if done according to the manufacturer’s instructions, and that the testing requirements have been met for frontward/backward wearing.
- **Lower temperature:** An “**LT**” mark meets all the testing requirements when preconditioned to -22°F (-30°C).
- **High Visibility:** An “**HV**” mark meets all requirements for high visibility and is tested for chromaticity and luminescence.
- **Higher Temperature (2014 Version):** An “**HT**” mark meets all the testing requirements when preconditioned to 140°F with a 3.6°F variance (60°C +/- 2°C).