



Hard Hats

Hard hats are required to be worn during many different work-related tasks, in both the construction and general industries. Essentially, if there is the potential for objects or debris to fall from above and strike a worker's head, if the employee has the potential to strike their head on a fixed object, or to make contact with electrical hazards, then a hard hat is required. The OSHA standards for both construction and general industry don't specifically cover criteria for hard hats. Instead, they require that they meet with ANSI Z89.1 standards, which OSHA considers compliant.

Per 'OSHA's Safety Pays Program', just *one* concussion may cost a company an average of \$52,120 in direct costs and \$57,332 in indirect costs, totaling at about \$109,452. This injury estimator can be found through the following link <https://www.osha.gov/safetypays/estimator.html>. Although the 'Hierarchy of Controls' (elimination/substitution, engineering controls, administrative controls, and personal protective equipment) should be considered, requiring and providing hard hats when needed will assist in mitigating potential injuries. Knowing when hard hats are required and providing the correct hard hat for the job is vital to protecting employees' safety. The following information should be considered regarding hard hats in the workplace.

OSHA Standards that Govern Hard Hat Requirements:

Construction: [OSHA Standard 1926.100](#)

- 1926.100(a): Employees working in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns, shall be protected by protective helmets

General Industry: [OSHA Standard 1910.135](#)

- 1910.135(a)(1): The employer shall ensure that each affected employee wears a protective helmet when working in areas where there is a potential for injury to the head from falling objects
- 1910.135(a)(2): The employer shall ensure that a protective helmet designed to reduce electrical shock hazard is worn by each such affected employee when near exposed electrical conductors which could contact the head

Hard Hat Types:

- Type 1: offers protection to the top of the head; common in the United States
 - Intended to reduce force of impact from a blow to the top of the head
 - Example: Hammer falling off a ledge from above
- Type 2: offers protection to the top and sides of the head; common in Europe
 - Intended to reduce the force of impact from either the sides of the hard hat, or the top

- Example: Low clearance room where beams with sharp edges are present and hazard of hitting side/front/top of head are evident

Hard Hat Classes:

- Class G: Hard hats rated for 2,200 volts
- Class E: Hard hats rated for 20,000 volts
- Class C: No electrical protection

ANSI Requirements (Noted on the Hard Hat):

- Manufacturer's name
- ANSI Standard that the hard hat adheres to
- ANSI type and class
- Size range
- Date of manufacture

Hard Hat Replacement Guidelines:

Hard hats should be inspected prior to each use to ensure they are in a safe working order, and should be replaced if any of the following are true:

- Hard hat is damaged (dent, crack, penetration, fatigue, etc.)
- The hard hat has reached or exceeded the manufacturer's expiration date
 - Always refer to the manufacturer's replacement and maintenance guidelines
 - General rule is to replace the support strap yearly and to replace the hard hat every five years
- New OSHA requirement is incorporated (regularly check OSHA standards for changes that may affect hard hat requirements)

Labels on Hard Hats:

- ANSI Z89.1 does not restrict the application of labels, stickers, covers, paint, etc.
- Anything added to the hard hat must not affect compliance with manufacturer's instructions
- Stickers and other markings on hard hats are generally acceptable if they do not affect the protective rating, or make it difficult to find potential defects and/or damage on the hard hat

It is crucial to ensure that employees are using the correct hard hats for the job when required. Hard hats should be properly inspected prior to use, and taken out of service if any damage or defects are present. For more information regarding hard hats and other personal protective equipment, please contact Acadia's Virtual Loss Control team at virtuallc@acadia-ins.com or 207-874-5701.

Sources:

Hard Hat Types & Class Standards: Cooper Safety Supply. (n.d.). Retrieved December 23, 2020, from <https://www.coopersafety.com/hard-hat-class-standards>

OSHA & ANSI Hard Hat Requirements. (n.d.). Retrieved December 23, 2020, from <https://www.graphicproducts.com/articles/osha-ansi-hard-hat-requirements/>

UNITED STATES DEPARTMENT OF LABOR. (n.d.). Retrieved December 23, 2020, from <https://www.osha.gov/>

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