

Regulations and Standards for Industrial Head Protection

Types of Hard Hats

Type I/1 – Conventional hard hats that are designed to reduce the force of impact to the top of the head, neck, and spine.

Type II/2 – Designs that offer additional impact protection to the front, sides, and back, as well as the top of the head.

Bullard Model	Standard	Type and Class
 C30	ANSI/ISEA Z89.1-2009 CSA Z94.1-2005	Type I, Class E & G,  , LT, HV Type 1, Class E & G
 C33	ANSI/ISEA Z89.1-2009 CSA Z94.1-2005	Type I, Class E & G,  , LT, HV Type 1, Class E & G
 C34	ANSI/ISEA Z89.1-2009	Type I, Class E & G,  , LT, HV
 911C	ANSI/ISEA Z89.1-2009	Type I, Class E & G,  , LT, HV
 911H	ANSI/ISEA Z89.1-2009	Type I, Class E & G,  , LT, HV
 S51	ANSI/ISEA Z89.1-2009 CSA Z94.1-2005 EN397-2012	Type I, Class E & G,  , LT, HV Type 1, Class E & G Type 1, Class E & G, LT
 S61	ANSI/ISEA Z89.1-2009	Type I, Class E & G,  , LT, HV
 S62	ANSI/ISEA Z89.1-2009	Type I, Class C,  , LT, HV
 S71	ANSI/ISEA Z89.1-2009	Type I, Class E & G,  , LT, HV
 Advent®	ANSI/ISEA Z89.1-2009	Type II, Class E & G, LT
 Vector	ANSI/ISEA Z89.1-2009 CSA Z94.1-2005	Type II, Class E & G, LT, HV Type 2, Class E & G

CAN/CSA Z94.1-2005 - www.csa.ca

National Standard for Canada

This is the fifth edition of CSA Z94.1, Industrial Protective Headwear - Performance, selection, care and use. It supersedes the previous editions published in 1992, 1977, and 1966 under the title Industrial Protective Headwear. It also supersedes the Preliminary Standard, published in 1965, and replaces the protective headwear requirements specified in CSA Z94-1948, Code for Head and Eye Protection. Bullard's S51, C30, and C33 all meet CSA Z94.1-2005, Type 1, Class E & G; Bullard's Vector meets CSA Z94.1-2005, Type 2, Class E & G.

European Standard for Industrial Safety Helmets EN 397:2012

EN 397:2012 certifies that safety helmets are designed to offer protection from lateral impact or top impact. It supersedes EN 397:1995. This European Standard specifies physical and performance requirements, methods of test, and marking requirements for industrial safety helmets. The mandatory requirements of EN 397 apply to helmets for general use in industry in the European Union as mandated by 89/686/EEC for personal protective equipment. Additional optional performance requirements are included to apply only where specifically claimed by the helmet manufacturer. Industrial safety helmets (also known as headgear) are intended primarily to provide protection to the wearer against falling objects to avoid brain injury and skull fracture. EN 397:2012 is written by Technical Committee CEN/TC 158 on "Head Protection." Countries in Europe are expected to adopt it as a national standard, either by publication of an identical text or by endorsement.

Classes of Hard Hats

Class E (electrical) hats are tested to withstand 20,000 volts.

Class G (general) hats are tested at 2,200 volts.

Class C (conductive) hats provide no electrical protection.

OSHA 29 CFR 1910.135 - www.osha.gov

This standard requires head protection if any aspect of the work environment presents a risk of head injury.

ANSI/ISEA Z89.1-2009 - www.ansi.org or www.safetysupplyequipment.org

National Standard for U.S.

This standard provides performance and testing requirements for industrial helmets (commonly known as hard hats). It establishes the types and classes of protective helmets, depending on the type of hazard encountered. It includes specifications for helmets designed to offer protection from lateral impact (Type II), or top-only impact (Type I), giving employers and users the flexibility to specify the helmet that best meets the needs of their specific workplace.

This standard outlines requirements for industrial head protection relating to:


1. Impact Protection

2. Penetration Protection

3. Electrical Insulation Protection

Three non-mandatory tests were added to this newest revision of the standard (ANSI/ISEA Z89.1-2009 is the revision of the previous ANSI Z89.1-2003). Manufacturers who want to claim any of these features can (1) test their helmets according to the new procedures, and (2) label their products appropriately:

1. Reverse Donning, []

All of Bullard's Type I hard hats are marked with  to indicate that they meet the new requirements for the non-mandatory reverse donning. In order to wear your Bullard Hard Hat backwards, the user must first reverse his/her suspension, so that the nape strap is in the rear and brow pad in the front.

2. Lower Temperature, [LT]

All Bullard Hard Hats are tested to the requirements for the non-mandatory lower temperature (-30° C or -22° F) and marked with "LT." The traditional low temperature test for a helmet is -18° C or 0° F; the LT testing is even more rigorous.

3. High-Visibility, [HV]

Bullard's Hi-Viz Yellow meets the non-mandatory requirements for high-visibility, including special tests for Chromaticity and Luminescence for added visibility.

Type I/1 warning label

▲ WARNING

Hard hats are designed to provide limited protection to the head by reducing the force of falling objects striking the top of the hard hat shell. While limited protection is provided in other parts of the shell, this hard hat was not designed to provide front, side or rear impact protection. Avoid contact with electrical wires. **NEVER ALTER OR MODIFY THE SHELL OR SUSPENSION SYSTEM. ALWAYS USE BULLARD REPLACEMENT PARTS.**

Inspect your hard hat shell and suspension regularly. Check for cracks, frayed straps and any signs of damage before each use. Replace the hard hat immediately if you notice any signs of wear, damage, abuse or environmental degradation. If the hard hat has sustained a forcible blow (impact), dispose of it immediately, even if damage is not visible. Failure to follow these warnings could result in death or serious injury.