FYS

Industrial Head Protection

ANSI/ISEA Z89.1-2014

The updated ANSI/ISEA Z89.1-2014 standard is a voluntary industry standard that establishes the types and classes of industrial helmets and provides performance and testing requirements for them. This standard includes specifications for helmets designed to offer protection from top and/or lateral impact.

Three classes included in this standard indicate the helmet's electrical insulation rating.

Electrical Performance

1. **CLASS E (Electrical)** Helmets intended to reduce the danger of exposure to high-voltage electrical conductors, proof-tested at 20,000 volts.
2. **CLASS G (General)** Helmets intended to reduce the danger of exposure to low-voltage electrical conductors, proof-tested at 2,200 volts.
3. **CLASS C (Conductive)** Helmets not intended to provide protection from electrical conductors.

The test requirements for Industrial Head Protection per ANSI/ISEA Z89.1-2014 are separated by helmet type: Type I helmets protect the wearer from top impact, while Type II helmets protect the wearer from top and lateral impact. The test requirements for ANSI/ISEA Z89.1-2014 are available from the Industrial Safety Equipment Association (safetyequipment.org).

Non-Manditory ANSI/ISEA Z89.1-2014 Tests

Reverse Donning

In order for a helmet to be worn in reverse or a swing ratchet suspension to be used in a helmet, that particular helmet must be marked for reverse donning which indicates that it meets the non-mandatory reverse donning test. In order to do this, the helmets suspension must be reversed so that the nape strap is in the rear (back of wearer's head).

Lower Temperature (LT)

The traditional low temperature test for a helmet is -18°C or 0°F. Helmets that meet the ANSI/ISEA Z89.1 requirements for LOWER temperatures (-30°C or -22°F) can be marked with LT by the manufacturer.

High Visibility (HV)

Helmets that meet the non-mandatory requirements for high visibility, including special tests for Chromaticity and Luminescence for added visibility, can be marked with HV by the manufacturer.