




## ANSI/ISEA Z89.1-2009 Revised to Include Three Non-Mandatory Features for Head Protection

The updated ANSI/ISEA Z89.1-2009 Standard has been released. This voluntary industry standard establishes the types and classes of industrial helmets and provides performance and testing requirements for them. Additions to this standard are easy to understand, and the basics of Z89.1 regarding Types I & II classifications have not changed.

Three non-mandatory tests have been added. Manufacturers who want to claim any of these features can (1) test their helmets according to the new procedures, and (2) mark their products appropriately.

### Three Non-Mandatory Tests Outlined in ANSI/ISEA Z89.1-2009

#### 1 – 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 with the “” to indicate that it meets the new ANSI/ISEA Z89.1-2009 non-mandatory reverse donning test. In order to do this, the helmet’s suspension must be reversed so that the nape strap is in the rear (back of wearer’s head).

#### 2 – Lower Temperature [LT]

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

#### 3 – 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.

### All MSA helmets have been tested per the mandatory and non-mandatory Z89.1-2009 requirements:










- MSA Hi-Viz™ Yellow-Green and Hi-Viz Orange helmets have been modified in order to meet the High Visibility tests as is reflected by the “HV” marking.
- All MSA helmets have been third-party tested in order to verify that our helmets meet mandatory and/or non-mandatory requirements (results listed below).
- New designations on helmet labels will not appear until current inventory has been exhausted.

### Basics of ANSI/ISEA Z89.1 Remain the Same

Industrial head protection is tested for penetration resistance (Type I & II) and impact attenuation (Type II only). Helmets that meet the requirements of this standard are classified as a Type I helmet (meets the standard for top impact protection) or a Type II helmet (meets the standard for top and lateral impact protection).

Three classes indicate the helmet’s electrical insulation rating: Class E (electrical) tested to 20,000 volts; Class G (general) tested at 2,200 volts; and Class C (conductive) provides no electrical protection.

### MSA helmets that meet the , LT, and/or HV non-mandatory requirements include:

V-Gard® Cap and Hat	 , LT, HV
V-Gard 500 Cap (formerly Advance Cap)	 , LT, HV
SmoothDome® Cap	 , LT, HV
Topgard® Cap and Hat	 , LT
Thermalgard® Cap and Hat	 , LT, HV
Thermal-E™ Cap	 , LT
Skullgard® Cap and Hat	 , LT, HV
Vanguard™ Cap	 , LT, HV
Super-V® Cap	 , LT, HV
Comfo Cap	LT