

The logo for the International Safety Equipment Association (ISEA). It features the letters 'i', 'S', 'E', and 'A' in a bold, rounded, lime green font. The lowercase 'i' has a solid dark blue dot above it. The letters 'S', 'E', and 'A' are all in the same lime green color. The logo is set against a solid blue background.

**i**SEA

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INTERNATIONAL  
**SAFETY EQUIPMENT**  
ASSOCIATION





ARTBA Roadway Workzone Safety  
Conference  
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# Standards for Roadway Construction PPE

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Z89.1-1997

## Industrial Head Protection

Establishes Types & Classes, material and performance requirements for hard hats designed to reduce the forces of impact and penetration to the head



# Z89.1-1997 cont.

## Impact

- Type 1 - Top Impact
- Type 2 - Lateral Protection

## Electrical Classes

- Class G-general 2,200 volts
- Class E-electrical 20,000 volts
- Class C-no electrical protection

# Z89.1-1997 cont.

## Appendix A

Provides guidance on use, care and maintenance of hard hats

Recommends daily inspection of shell and suspension

States precautions for storage and use of accessories



# Most popular question on Z89.1-1997

Can I wear my hard hat backwards?

Many hard hats are not performance tested in the reverse position. You must contact your manufacturer and if they have their helmets tested in the reverse position than they can provide a written statement saying that the hard hat “provides equivalent protection in the front and back position on the head.”



# Z87.1-1989(R1998)

## Eye/face protection

Rx

Safety glasses

Goggles

Face shields

Welding shields



## Z87.1-1990(R1999)

New safety glasses marking for high impact hazards Z87+

Low hazard “glass” eyewear, Z87

Necessary for work such as jack hammering and any other task where construction debris can enter the eye

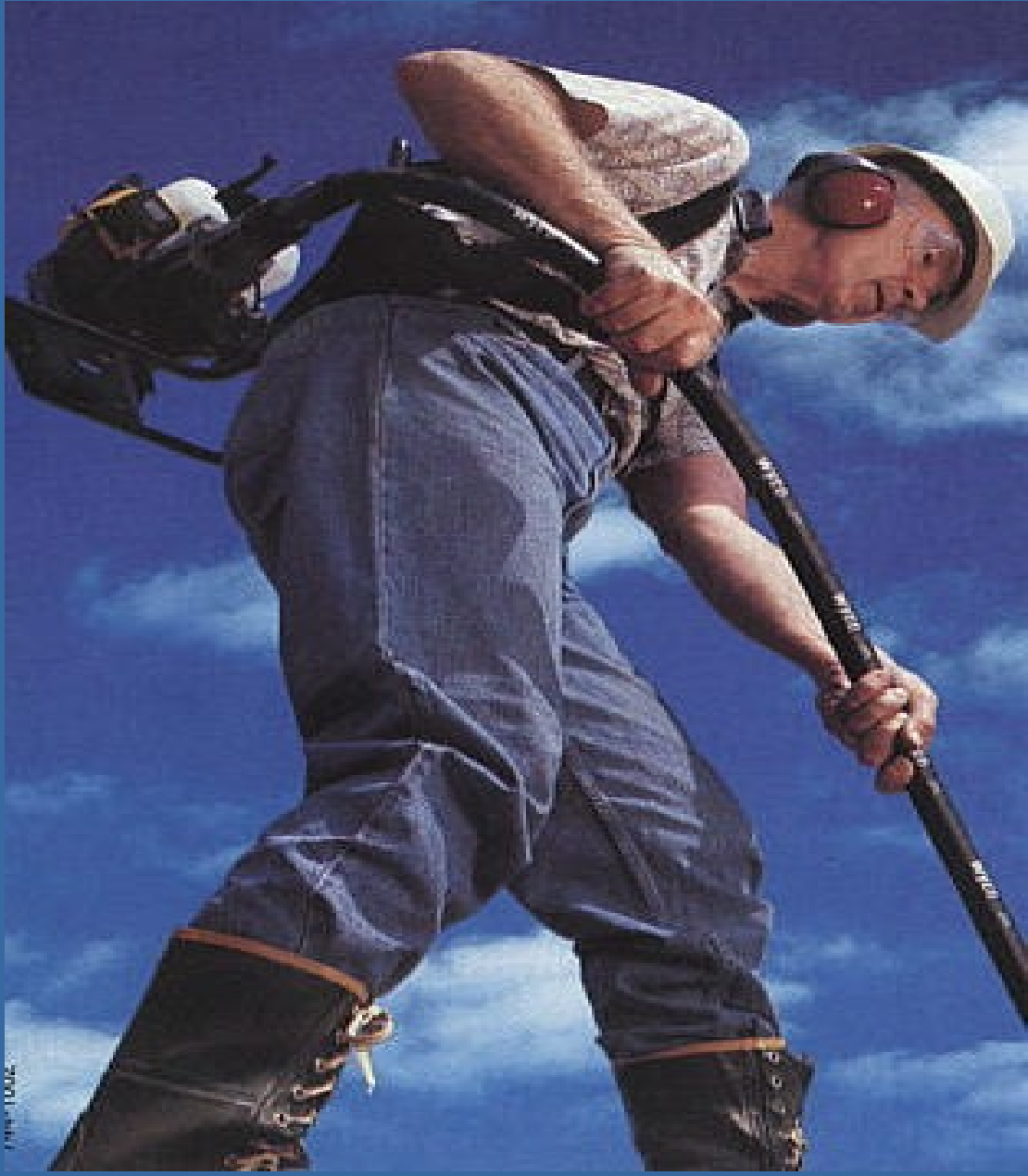


PHOTO: TOMAS



# Z358.1- 1998 Safety requirements for Personal Fall Arrest Systems and Components

Establishes performance criteria to for  
personal fall protection.

Standard to test products to.

# Fall Protection

OSHA 29 CFR

Part 1910 – General Industry

Subpart D, Walking/Working Surfaces 26-27

Subpart R, Special Industries 267-269

**Part 1926 - Construction**

Subpart M, Fall Protection 500-503

Subpart R, Steel Erection 760



# ANSI/ISEA 107-1999

## High Visibility Apparel

- *Scope*: Specifies requirements for apparel, intended to signal the users presence visually by providing conspicuity day or night.
- *Requirements*: Color, retroreflective and background materials and minimum areas.
- *Recommends patterns*



# ANSI/ISEA 107-1999 cont.

- Minimum washing cycles
- Color and performance tables
- Cites test methods for materials
- States that retroreflective materials should be placed to ensure overall visibility of the wearer
- First US standard to incorporate performance requirements for day and night time conspicuity garments.



# ANSI/ISEA 107-1999 cont.

## Conspicuity Classes:

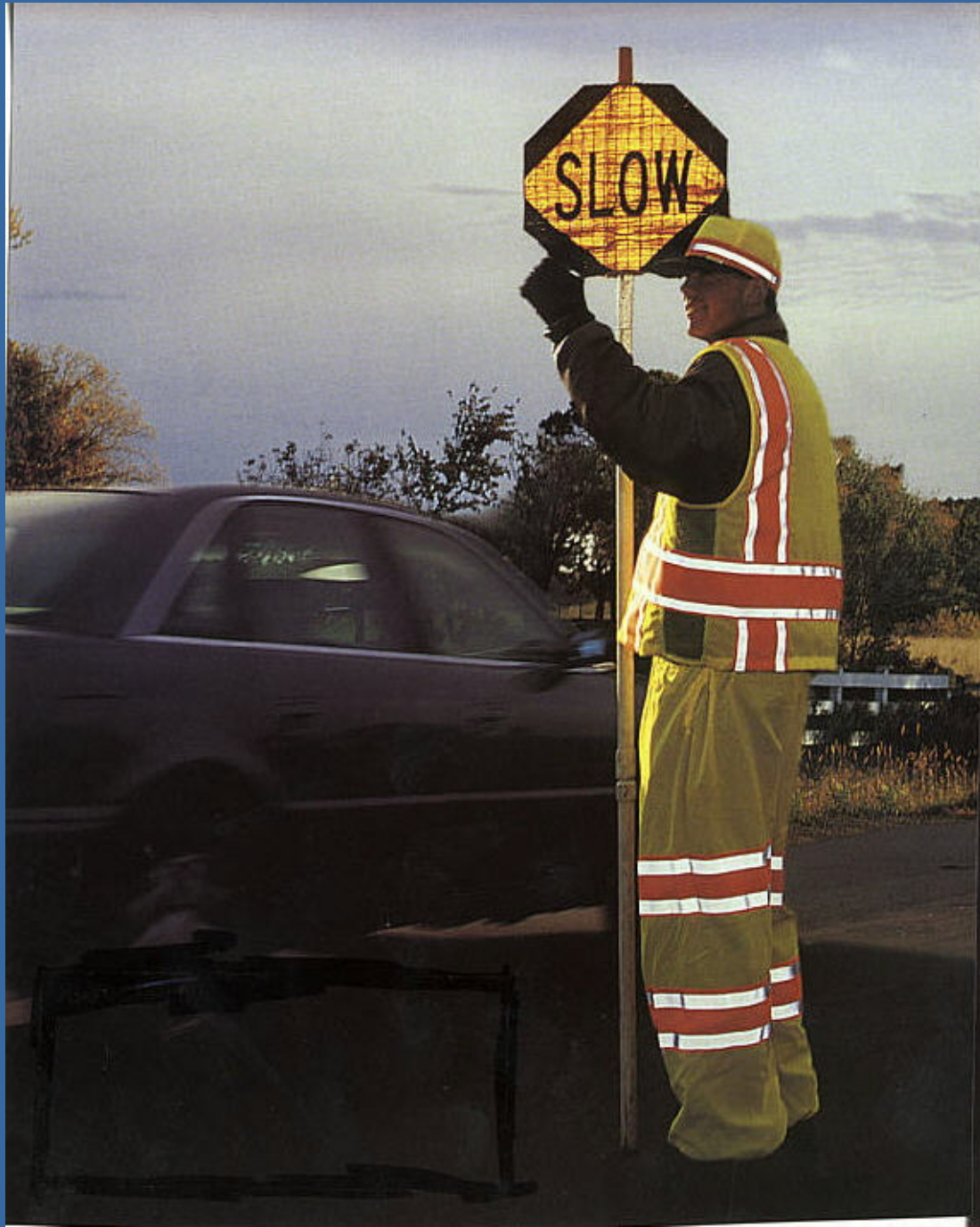
1. vehicle speeds < 25mph  
separation from traffic
2. vehicle speeds >25mph  
close proximity to traffic
3. vehicle speeds >50mph  
working on the roadway, high worker task  
load

# Examples

Class 3:

Roadway construction personnel and flaggers, utility workers, survey crews, and emergency response personnel.

Anyone who has a high task load and is in close proximity to moving equipment or traffic at high speeds





# Examples

Class 2:

forestry operations

ship cargo loading operations

roadway construction workers

utility workers

survey crews

railway workers

school crossing guards



# Examples

Class 2: continued  
delivery vehicle drivers

high-volume parking and/or toll gate  
personnel

airport baggage handlers/ground crew  
emergency response personnel,

law enforcement personnel

trash collection and recycling

operations accident site investigators







For Safety...

For Style...





# Examples

Class 1:

parking lot attendants,

people retrieving shopping carts from parking areas,

workers exposed to the hazards of warehouse equipment traffic and roadside “right-of-way” or sidewalk maintenance workers

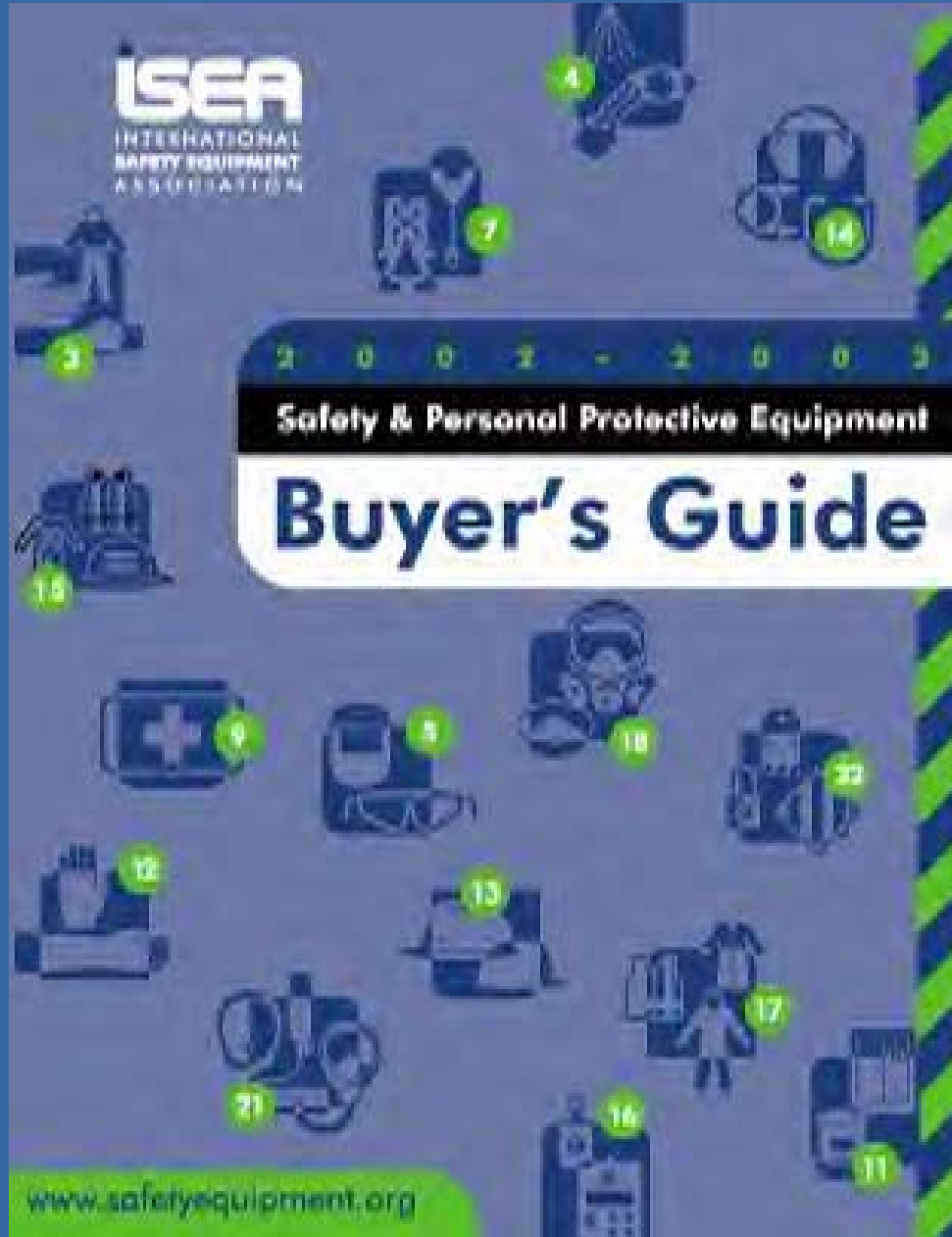
some delivery vehicle drivers.



# USER GUIDANCE

- Use & Selection Guide For Non-Powered Air Purifying Particulate Respirators
- Use & Selection Guide For Personal Fall Protection Equipment
- Hearing Protection Products
- High Visibility Apparel Guide
- Selection Guide for Eye & Face Protection







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