

ANSI/ISEA 107-2004

is a voluntary industry consensus standard that specifies the requirements for PPE (personal protective equipment) that is capable of visually signaling the user's presence and represents a revision to the 1999 version. Before the first publication of this standard in 1999 there was no regulation or guideline for the design, performance or materials for high-visibility apparel in the United States. Since 1999, the standard has been recognized by various federal, state and local authorities as well as private industry entities. The PPE covered by this standard are deemed to be effective at mitigating struck-by hazards.

Significant changes to the first edition (ANSI/ISEA 107-1999) include recognition of headwear as high-visibility products, the distinction between woven and knitted fabrics as background material, and removal of previous test criteria that added no value. The appendices have been expanded to include additional examples of garment designs and now include standard test reports and an apparel and headwear compliance certificate.

The ANSI/ISEA 107-2004 standard was developed with the understanding that competing hazards exist for workers that need high-visibility PPE. Other competing hazards such as severe heat/flame exposures require the use of protective garments designed to mitigate heat/flame levels that are addressed in such standards as NFPA 1951, NFPA 1971, NFPA 1977 and NFPA 1999. The use of high-temperature flame and heat-resistant shell materials may not be compatible with fluorescent pigments. Garments used for protection from high-temperature flame and heat, such as first responder protective garments or garments for utility workers, can enhance visibility by incorporating both fluorescent and retro reflective trim to garments worn by workers exposed to the hazards of "low-light conditions" and moving traffic or rescue equipment.