

ANSI/ISEA 207-2006: American National Standard for High-Visibility Public Safety Vests

What is the New ANSI 207 Standard?

This public safety vest standard was created in response to public safety user group demand in 2005 for a high-visibility safety vest garment differentiated from ANSI/ISEA 107-2004 compliant apparel. The primary concern was a need for flexibility of designs that would provide tactical capability not achievable with ANSI 107 garments. Additionally, user groups expressed a desire to have a high-visibility garment standard intended for law enforcement and emergency responders that would be distinct from ANSI 107, therefore avoiding interchangeability with “construction vests”.

After receiving guidance from the National Traffic Incident Management Coalition, the ANSI Reflective Products Committee began drafting the new standard in November 2005. The standard was approved by technical committee and the ISEA (International Safety Equipment Association) in November 2006. The new standard, ANSI/ISEA 207-2006 American National Standard for High-Visibility Public Safety Vests, was published in December 2006.

Significant Differences with the ANSI 107 standard

The primary distinction of the ANSI 207 standard is that the required fluorescent background material (450 in.²) falls between ANSI 107 Class 1 (217 in.²) and ANSI 107 Class 2 (775 in.²). See chart on reverse page. This difference allows for design accommodation of equipment belts. The new standard also allows for increased design flexibility to incorporate colored panels to enhance easy, on-scene identification of wearers, as well as other options such as shoulder breakaways.

Please note: In ANSI 207, the minimum area of required retroreflective material is 201 in.², the same as the ANSI 107 requirement.

ANSI/ISEA 207-2006 Summary Points

- ANSI 207 is a new standard with a specific name, “Public Safety Vests” (PSV).
- Area requirements for fluorescent background material fall between ANSI 107 Class 1 and Class 2.
- A lesser background area requirement allows for short designs giving tactical access to equipment belts.
- Retroreflective area requirements are the same as those for ANSI 107 Class 2.

ANSI/ISEA 207-2006 Summary Points *(continued)*

- Retroreflective performance requirements are almost the same as ANSI 107, except only Level 2 (330 R_A table) is included.
- ANSI 207 is not intended to replace, or be interchangeable with ANSI 107 Class 2 apparel. Law enforcement officers performing traffic control duties are still encouraged to follow ANSI 107 Class 2 or Class 3 guidelines whenever possible.
- The new standard suggests use of many design options, such as breakaways, colored identifiers, loops, pockets, badge holders, and ID panels.
- The design options are intended to encourage innovative ways to meet end-user needs for design functionality, while still offering an effective high-visibility safety garment.

ANSI/ISEA 107-2004 Garment Class Requirements Compared to the ANSI/ISEA 207-2006 Public Safety Vest					
Minimum area of visible material					
Requirement	Performance Class 3	Performance Class 2	Public Safety Vest	Performance Class 1	Performance Class E
Background material	1240 in. ² (0.80 m ²)	775 in. ² (0.50 m ²)	450 in. ² (0.29 m ²)	217 in. ² (0.14 m ²)	465 in. ² (0.30 m ²)
Retroreflective or combined-performance material used in conjunction with background material	310 in. ² (0.20 m ²)	201 in. ² (0.13 m ²)	201 in. ² (0.13 m ²)	155 in. ² (0.10 m ²)	108 in. ² (0.07 m ²)
Combined-performance material used without background material	NA	NA	NA	310 in. ² (0.20 m ²)	NA
Minimum width of retroreflective material	2 in. (50 mm)	1.375 in. (35 mm)	2 in.	1 in. (25 mm) or 2 in. (50 mm) (combined-performance material, without background material)	2 in. (50 mm)
Minimum number of yards per retroreflective material width	4.3 yds. of 2 in. (50 mm) width	4 yds. of 1.375 in. (35 mm) width, or 2.8 yds. of 2 in. (50 mm) width	2.8 yds. of 2 in. (50 mm) width	4.3 yds. of 1 in. (25 mm) width, or 2.15 yds. of 2 in. (50 mm) width	1.5 yds. of 2 in. (50 mm) width
Photometric performance	Level 2 (Table 5) or Level 1 (Table 6)	Level 2 (Table 5) or Level 1 (Table 6)	Level 2 (Table 5)	Level 2 (Table 5) or Level 1 (Table 6)	Level 2 (Table 5) or Level 1 (Table 6)



Occupational Health and Environmental Safety Division
3M Visibility and Insulation Solutions
 3M Center, Building 0235-02-F-06
 St. Paul, MN 55144-1000
 800-328-7098
 Scotchlite.com

3M Canada
 P.O. Box 5757
 London, Ontario N6A 4T1
 800-267-4414 Technical Service
 800-364-3577 3M HELPS
 3M.com/ca/besaferbeseen

3M and Scotchlite are trademarks of 3M.
 Please recycle. Printed in U.S.A.
 © 3M 2008. All rights reserved.
 75-0501-0019-9