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| ***REPLACE WITH YOUR MASTHEAD*** | | |
| **VFIS logo black JPG** | **SOG Title:** | |
| **SOG Number:** | |
| **Original Date:** | **Revision Date:** |
| **ABC Fire Department General Operating Guideline** | | |

**Reflective Striping and Roadway Vests**

***This is a sample of a standard operating guideline (SOG) on this topic. You should review the content, modify as appropriate for your organization, have it reviewed by your leadership team and if appropriate your legal counsel. Once adopted, make sure the SOG is communicated to members, implemented and performance monitored for effective implementation.***

**Purpose:**

To provide guidance for proper protection of personnel and equipment while on the scene of an incident through visibility utilizing reflective striping; and to reduce the risk of injury or death to personnel and to reduce damage to company vehicles while working in or near traffic; to prevent death, injury and property damage.

**Procedure:**

The following are basic key points to consider and should be supplemented with your own organizational characteristics or needs.

All personnel will don personal protective equipment (PPE) (coats, vests, pants) that meet or exceed the minimum requirements of reflective striping as established by the American National Standards Institute (ANSI)/International Safety Equipment Association (ISEA) 107 and the U.S. Department of Transportation' s (DOT) Manual on Uniform Traffic Control Devices (MUTCD) Section 6E.02.

The ANSI/ISEA 207-2006 public safety vest standard was developed in response to public safety user group demand for a high visibility safety vest garment differentiated from ANSI/ISEA 107- 2004 compliant apparel. The primary distinction of the ANSI 207 standard is that the required fluorescent background material falls between ANSI 107 Class 1 and ANSI 107 Class 2. On November 24, 2008, a provision in the MUTCD went into effect requiring public safety officers, including volunteer firefighters and EMS personnel responding to an incident in the right-of-way of a federal aid highway, to wear a safety vest that meets the Performance Class II or III requirements of the ANSI/ ISEA 107-2004 publication. There is an exception for firefighters directly engaged in fire suppression, as the vests may catch fire or melt if exposed to flame.

Minimum requirements for ANSI/ISEA compliant garments include use of fluorescent yellow­ green, orange-red, or red background material with 360 degree retro-reflective visibility. Garments should be labeled as compliant with ANSI/ISEA 107-2004 or ANSI/ISEA 207-2006.

All apparatus will meet or exceed the reflective striping standards of the current edition of NFPA 1901.

All barrier or directional devices will meet or exceed the MUTCD and the Federal Highway Administration's (FHWA) standards for reflective striping.

**Definitions:**

**Class I** – safety vests when traffic speeds are less than 25 mph, workers are separated from approaching traffic and workers can give full attention to the traffic.

**Class II** – safety vests when traffic speeds exceed 25 mph, work takes place in or near moving traffic or during inclement weather, and workers’ attention is occasionally diverted from traffic.

**Class III** – work environment is high task load, wide range of weather conditions, traffic can exceed speeds of 50 mph, the nature of the work forces the worker to utilize full range of motion, and workers’ attention must be focused on the task.

**Personal Protection:**

MUTCD states that all workers shall wear bright, highly visible clothing when working in or near moving traffic. ANSI/ISEA 107 and 207 recommends specific types of reflective equipment be worn while working in or near moving traffic such as the following:

1. Emergency responders shall wear Class III Level III PPE garments while involved in vehicle extrication, fire suppression, accident clean up, or incident investigation that subjects ESO personnel to moving traffic.
2. Emergency responders who are involved in medial triage and stabilization and all other support functions are required to wear Class III Level II PPE.

**Emergency Response Vehicles (per NFPA 1901):**

1. Reflective striping is required around all four (4) sides of the vehicle. The stripe or combination of stripes must be at least four (4) inches high and cover at least 50% of the cab and body length on each side, 50% of the rear width and 25% of the front width.
2. A reflective graphic design, such as a door shield or lettering, may replace a part of the required length or width.

**Traffic Cones:**

Traffic cones guide the direction of traffic flow around an incident. Any traffic cone used at night or at an incident where traffic speeds exceed 45 mph must meet the following criteria:

1. Be twenty-eight (28) inches tall
2. Have two 3-inch retro-reflective bands around the top and a maximum of 6 inches between the bands
3. Be orange in color

**Vertical Panels:**

Apparatus chevron striping can be used to warn and direct traffic away from a highway incident. All vehicles that are utilized in this manner shall comply with MUTCD Section 6F.57.

The chevron pattern shall slant downward on both sides of the vehicle at an angle of 45 degrees, pointing in the direction of the bottom rear corner of the tailboard. The pattern should resemble an inverted V with the point at the top and center of the apparatus.

1. The following alternating color patterns may be used:
   1. Red and yellow
   2. Orange and white
   3. Red and white
   4. Blue and yellow
   5. Blue and white.
2. Vertical panels must meet these standards:
   1. 8 to 12 inches wide and at least 24 inches in height
   2. Use alternating colors of retro-reflective stripes at least 4 inches in width. If the panel height is greater than 36 inches, the stripes must be 6 inches wide
   3. Sloped down at 45 degrees and have a minimum of 270 square inches of retro­ reflective area facing traffic.

***This is a sample guideline furnished to you by VFIS. Your organization should review this guideline and make the necessary modifications to meet your organization’s needs. The intent of this guideline is to assist you in reducing exposure to the risk of injury, harm or damage to personnel, property and the general public. For additional information on this topic, contact your VFIS Risk Control representative.***

**References:**

*United States Department of Transportation Federal Highway Administration's Manual on Uniform Traffic Control Devices, Section 6E.02 Occupational Safety and Health Administration (29 CFR 1926.200 through 29 CFR 1926.203) NFPA 1901 - Automotive Fire Apparatus Standard 2003 American National Standard for High Visibility Safety Apparel 107 American National Standard for High Visibility Safety Apparel 207*

*NVFC Emergency Vehicle Safe Operations for Volunteer and Small Combination Organizations*