

# Updated Effective Practices: Increasing Roadway Worker Visibility Through Proper Safety Apparel

According to the 2009 edition of the Manual on Uniform Traffic Control Devices (MUTCD), "All workers, including emergency responders, within the right-of-way who are exposed either to traffic (vehicles using the highway for purposes of travel) or to work vehicles and construction equipment within the [Temporary Traffic Control] TTC zone shall wear high-visibility safety apparel that meets the Performance Class 2 or 3." A High-visibility safety apparel is defined as any garment meeting the American National Standards Institute publication "ANSI/ISEA 107-2004 entitled "American National Standard for High-Visibility Safety Apparel and Headwear" (see Section 1A.11 [of the MUTCD]), or equivalent revisions, and labeled as meeting the ANSI 107-2004 standard performance for Class 2 or 3 risk exposure [...]" Since the MUTCD standard states, "or equivalent revisions," one must turn to the current version that the Federal Highway Administration (FHWA) acknowledges in their letter of interpretation 6(09)-37(I), which is the 2015 version of

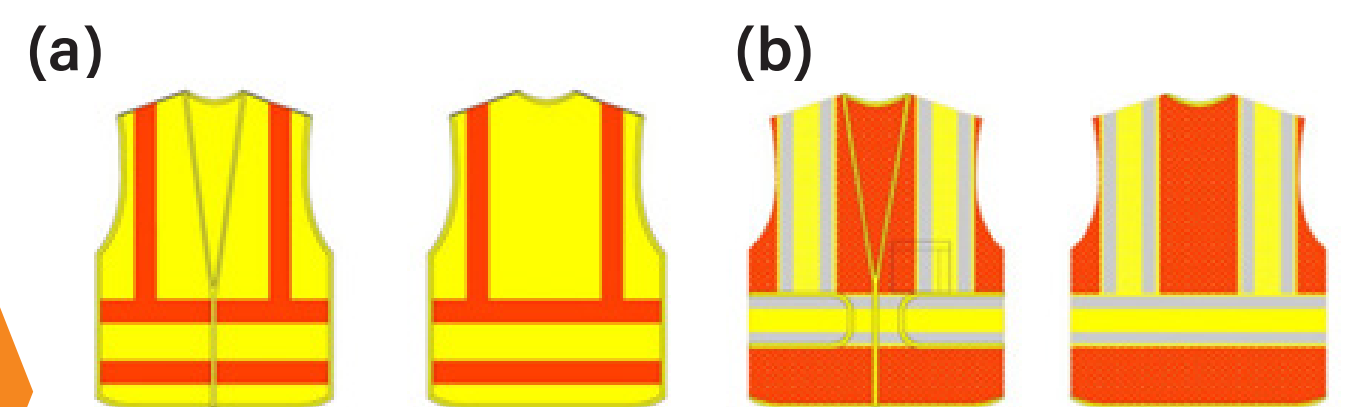
the ANSI/ISEA 107 publication. In this publication, there is a new type of apparel, "Type R", which is referring to "Roadway" and provides the latest performance requirements.

The MUTCD also states "A person designated by the employer to be responsible for worker safety shall make the selection of the appropriate class of garment." Therefore, whether you are selecting your own apparel, or the person designated by the employer is looking for information on compliance in your area, check your state and local standards as they may be more stringent than the national requirements.

Below are some **example** illustrations of high-visibility garment configurations that meet the ANSI/ISEA 107 guidance. The ANSI/ISEA 107 document provides additional illustrations for non-compliant high-visibility safety apparel.

## Type R Performance Class 2 - Required

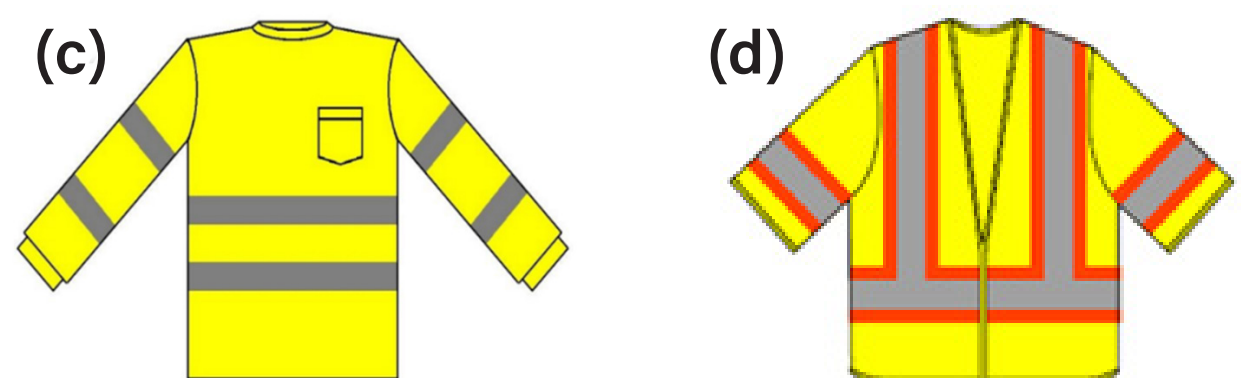
- Minimum requirement for all workers within the roadway right-of-way who are exposed to traffic or construction equipment.
- Effectively outlines the human form.
- Shall utilize at least one horizontal band of retroreflective or combined performance material around the torso.
- Shall include at least the minimum amounts of retroreflective or combined-performance material (i.e., 201 in<sup>2</sup>) in the shoulder area if encircling bands are not present on sleeves.



ANSI/ISEA 107-2020 Type R, Class 2 Vest

(a) Without pocket (top left) (b) With front pocket (top right)

Source (a) and (b): ANSI/ISEA 107-2020



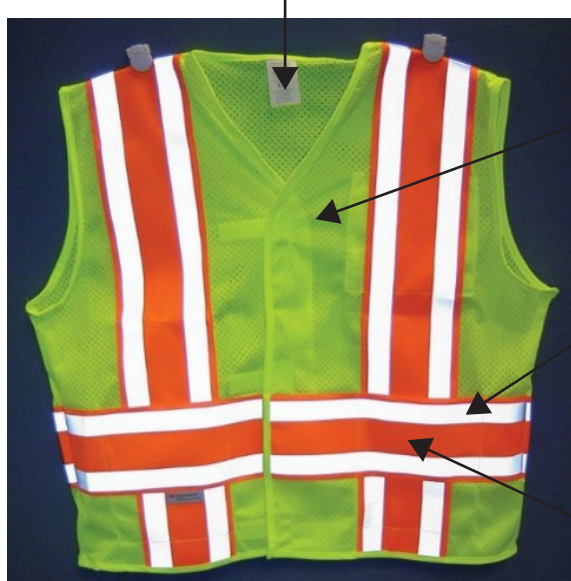
Source (c) and (d): ANSI/ISEA 107-2020



Examples of ANSI/ISEA 107-2020 Type R, Class 3 Garments

- (c) Long-Sleeve Shirt Design with No Shoulder Strip (top left)
- (d) Short-sleeve Jacket/shirt with Single Arm Band (top right)
- (e) Class 3 Ensemble (bottom)

Source (e): ATSSA



Source: ATSSA

### Compliant background material colors:

- Fluorescent orange-red; or
- Fluorescent yellow-green.

### Retroreflective material:

- Colors may be either orange, yellow, white, silver, yellow green, or a fluorescent version of these colors.
- Shall be visible at a minimum distance of 1,000 feet.

### Combined-performance material colors:

- Fluorescent orange-red; or
- Fluorescent yellow-green.



Label Example

Manufacturer's name or other means of identification of the manufacturer or authorized representative.

ANSI Standard name and year.

Type of material used.

Pictogram showing the Performance Class and Type of apparel and flame resistance statement.

This and more information can be found at [ATSSA.com](https://www.atssa.com).



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