

3M Be Safer Be Seen!

The publication that highlights relevant safety issues and offers industry insight and solutions.

SEEN IN THE RAIN

Rainwear should be more than just raingear. There are many hazards that apply to rainwear since it is an outer garment, but the one least thought about and probably most deadly to the roadside work zone worker is low visibility. Low visibility not only always occurs in rain, it also occurs at night and especially at dusk. Two methods of combating this hazard are fluorescent colors and retroreflective trim. These two features work together to make rainwear more visible. Fluorescent colors stand out from the background by taking ultraviolet light and shifting it into the visible range through a chemical reaction. Though these colors are very stable in many rainwear materials, those meeting the new ANSI 107-1999 High Visibility Clothing Standard will retain visibility for a specified time period.



The new American National Standard for High Visibility Safety Apparel (ANSI/ISEA 107-1999) is the first North American standard that provides authoritative guidance for the design, performance specifications and use of high-visibility safety apparel. In addition, the standard outlines placement of the materials needed for enhanced visibility.

near roadways where traffic speeds exceed 40km/hr. Workers who would wear this class of garment include railway workers, school crossing guards, parking and toll gate personnel, airport grounds crews and law enforcement personnel directing traffic.

Retroreflectivity is usually added in the form of reflective trim. The new ANSI standard, mentioned above, has three classes of clothing that have been used with much success. They are:

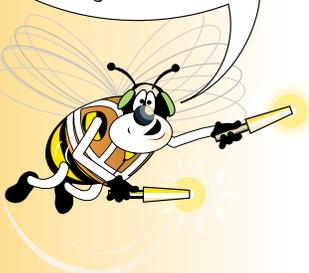
Class 1: Class 1 garments are for users who have ample separation from vehicular traffic that does not exceed 40km/hr and where the background is not complex. Parking service attendants, workers in warehouse with equipment traffic, shopping cart retrievers, sidewalk maintenance workers, and delivery vehicle drivers would wear this class of garments.

Class 2: Class 2 garments are intended for users who need greater visibility in inclement weather conditions and whose activities occur

Class 3: Class 3 garments provide the highest level of conspicuity to workers with the high task loads in a wide range of weather conditions where traffic exceeds 80km/hr. The standard recommends these garments for all roadway construction personnel and vehicle operators, utility workers, survey crews, emergency responders, railway workers and accident site investigators

Now that you know why enhancing daytime and nighttime visibility is so important, it's time to make your move. Add the enhanced visibility and durability of Scotchlite™ Reflective Material products to your safety vests and other all-season apparel. Your workers will notice. But, more importantly, your workers will be noticed, too.

Have you heard the latest industry buzz? The Canadian Standards Association (CSA) is now in the process of developing a high-visibility standard for Canada. CSA Z96 will be established by looking towards the ANSI 107-1999 standard for guidance.



SPECIFICATION:

Ensuring the Highest Degree of Worker Safety



In order to choose what product the worker should wear, the specifier must identify several things: work-place hazards, work-place conditions and items in the work-place background that may reduce worker visibility. After identifying these items, the specifier may then want to specify a product that will most effectively aid in worker conspicuity.

Using an inadequate product can make a worker feel over-confident about his or her safety, and may result in the worker exposing him or herself to risks that he or she would not normally take. High visibility trims should be chosen conscientiously in order to improve the worker's conspicuity. Furthermore, it is important to regularly review the product specifications. As your work-place environment changes, so should your worker visibility needs!

Organizations that are interested in worker visibility may consider specifying brightness levels and trim placement of retroreflective trim when developing high visibility garments. This is accomplished by writing a specification. A specification is a document that explicitly details what products must be used or what performance level must be demonstrated by a safety product.

When developing a specification, the writer will often ask 'how much material is enough? Or 'how bright is bright enough?' Safety officials may consider using a pre-existing high visibility garment standard as a guideline to establish their specification. A standard is a document that lists performance requirements. Examples of stan-

dards include the EN471-1994 and ANSI 107-1999 standards. Standards do not call out specific products. Instead, they offer general performance guidelines. Standards may be fully or partially adopted when writing a specification.

Specifications are much more specific, in that they detail exactly which product and in what format the product should be used and for what exact purpose(s). "All organizations should write a specification so they get the performance properties that are required in order to ensure optimum

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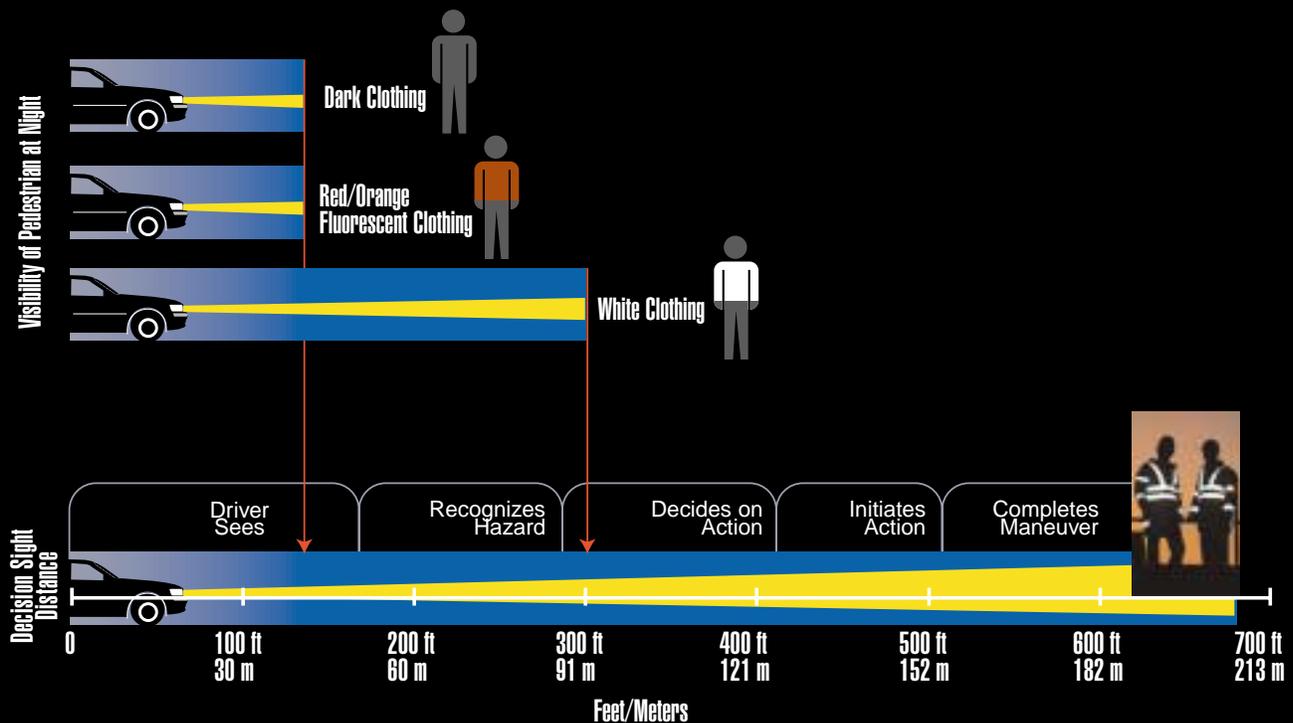
worker safety," says Viola Hoo, technical service representative, 3M Personal Safety Products Division. While use of a high visibility trim may improve worker visibility, the required amount and type of trim will vary between applications.

Need help
in writing a specification?
Call us at
1-800-268-0118 ext 6236
and we'll walk you through
the process.



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Scotchlite™ Reflective Material makes pedestrians more visible,
giving drivers more time to respond.

Don't go to work without us

3M™ Scotchlite™ Reflective Material products offer a wealth of benefits including:

- High brightness in low-light and nighttime viewing situations.
- Excellent wash performance and durability.
- A wide range of visibility-enhancing products for use on safety vests and all-season apparel.
- Innovative products backed by the technical strength and services of 3M.
- Meets the current ANSI/ISEA 107-99 standard.

Our products meet, or exceed current specification requirements for visibility and durability. Not all reflective trims do.

Call 3M for more details on how to meet the current specification requirements.

3M

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