

HI - TECH & HEAVY DUTY FABRICS

HIGH VISIBILITY



Understanding Hi-Visibility Standards:

CSA Z96-09 / ANSI 107-2010 High visibility safety apparel

Hi-Vis apparel is a function of two parts – retroreflective striping (most common is Silver tape), and Luminance of background material (generally yellow/green or orange).

What are the classes?

Class 1 Apparel is a basic harness or stripes/bands over the shoulder and encircling the waist (stripes/bands only meet CSA/ANSI standard). Can be Level 1, 2, and FR retroreflection.

Class 2 Apparel is full coverage of upper torso, back, sides and over the shoulder (stripes/bands & background fabric both meet CSA/ANSI standard). Can be Level 1, 2, and FR retroreflection.

Class 3 Apparel is Class 2 apparel PLUS bands encircling both arms and legs (all stripes/bands and background fabric meet CSA/ANSI standard). Must have Level 2 retroreflection.

What are the levels?

Level FR allows for Flame Resistant garments with striping/bands where the total retroreflective level is at 20% of the level 2 requirement (FR treated fabrics lose lustre after treatment).

Level 1 is a slightly lower performance level of the striping, but still requires the background material to meet CSA/ANSI Standards. Retroreflective level is at 70% of the Level 2 requirement.

Level 2 is the highest level of retroreflection and requires the background fabric to meet CSA/ANSI standards as well as the Striping/bands to meet the highest coefficient level (the brightest level).

What about the fabric?

Polyester fabrics will meet the CSA/ANSI requirements for Class 1, 2 and 3 garments, and are the most widely used.

Nylon fabrics will not pass due to the dye running from washing.

FR treated PVC and PU polymer film garments can achieve Class 1 (much higher grade Yellow/green PU fabrics "could" meet Class 2). With FR treated PU and PVC it is next to impossible to meet the "y" chromaticity coordinate

requirements (ask for a test report if you are unsure).

It can be very difficult to verify if a Hi-Vis garment actually meets both the background and striping retroreflection requirements. Both CSA and ANSI require minimum testing results in original state as well as after 5 washes – it is highly recommended that you ask your provider for the appropriate independent test reports of the fabric and the tape in both original state and after 5 washes.

Viking Technology



Vi-brance meets CSA-Z96-09 / ANSI 107-2010 standards.

Working with our innovative suppliers, Viking introduces it's own reflective material.

You can rely on Viking's Vi-brance reflective material to keep you safe and visible.

Vi-brance reflective material has been independently tested to meet CSA / ANSI requirements.

Difference between Canada & USA standards

CANADA & USA

Back configuration

All "X" Configuration Jackets meets

- CSA Z96-09 Class 2 Level2
- ANSI/ISEA 107-2010 Class 3 Level 2

All "X" Configuration Vest & Shirt meets

- CSA Z96-09 Class 2 Level2
- ANSI/ISEA 107-2010 Class 2 Level 2



USA ONLY

Back configuration

All USA Jackets meets

- ANSI/ISEA 107-2010 Class 3 Level 2

All USA Vest & Shirt meets

- ANSI/ISEA 107-2010 Class 2 Level 2

