

EXAMPLE HIGH-VISIBILITY SAFETY APPAREL (HVSA) SELECTION FORM

1) Complete risk and needs assessment and gather pertinent materials and records

- Completed
 Low Risk Condition and Environment
 High Risk Condition and Environment
 Medium (Moderate) Risk Condition and Environment
 Unique Hazards (entanglement, etc.)

2) Ensure compliance with the authority having jurisdiction (OHS regulations etc.)

- Comply
 Does not comply

Comment: _____

3) Select garment type

- Vest
 T-Shirt
 Shirt
 Jacket
 Shirt/Pant
 Bib Overall
 Coverall
 Other(s): _____

4) Select background material colour (Consider contrast to the environment)

- Fluorescent Yellow
 Fluorescent Orange
 Fluorescent Red
 Bright Yellow
 Bright Orange

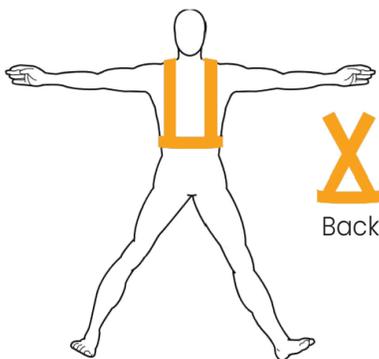
Wherever possible and without compromising other safety factors, fluorescent material should be used preferentially over bright-coloured material as fluorescent colours offer superior conspicuity during daylight and twilight conditions.

5) Ergonomic issues

- Access to essential equipment
 Breathability
 Comfort
 Hook/Loop
 Pocket(s)
 Snaps
 Tear-away
 Waterproof
 Zipper(s)
 Other(s): _____

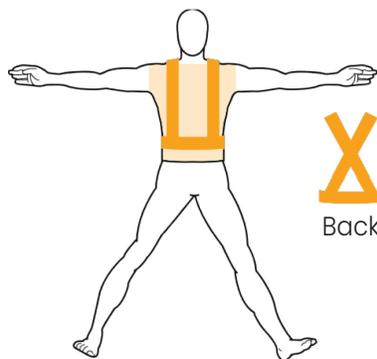
6) Select class

CLASS 1 LOW RISK



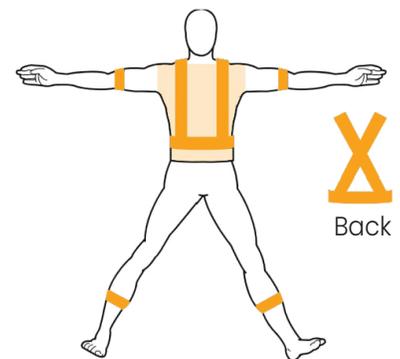
Harness pattern that is both retroreflective and fluorescent.

CLASS 2 MEDIUM RISK



Harness pattern that is retroreflective and upper torso coverage in fluorescent or bright background material.

CLASS 3 HIGH RISK



Harness pattern that is retroreflective and upper torso coverage in fluorescent or bright background material as well as retroreflective and bright-coloured arm and leg bands.

7) Environmental conditions

Dirt Oil Grease Abrasion Weather Other(s): _____

8) Laundry method desired

Dry Clean Home Industrial Wash Disposable Other(s): _____

Comment: _____

9) Select risk rating relative to garment type

Low Medium High

Comment: _____

10) Establish evaluation criteria and conduct a field trial to confirm suitability before final selection of HVSA

Pass Fail Field Trial Date: _____

11) Summarize the HVSA evaluation (based on field trial testing) and rationale for HVSA selection (application)

What is the difference between fluorescent and retroreflective materials?

Fluorescent material takes a portion of invisible ultraviolet light from sunlight, and through special pigments, sends it back to the viewer as more visible light. This material only functions where there is a source of natural sunlight. Fluorescent material will appear brighter than the same coloured non-fluorescent material, especially under low natural light (cloud cover, fog, dusk, dawn, etc.). This property offers daytime visibility enhancement that is not present with other colours. These materials enhance daytime visibility, especially at dawn and dusk. Fluorescent colours provide the greatest contrast against most backgrounds.

Retroreflective material is created to return light in the direction of the light’s source. This property will let a driver or equipment operator see the light being reflected from the retroreflective material on a person’s garment (as long as the person is standing in the light’s beam). Retroreflective materials are most effective under low-light level conditions. While retroreflective materials can still reflect in the daylight, there is little the light’s beam). Retroreflective materials are most effective under low-light level conditions. While retroreflective materials can still reflect in the daylight, there is little difference between the light reflected from the garment’s material and the surrounding environment. This lack of contrast makes retroreflective materials ineffective for enhanced visibility during (sunny) daytime conditions. There are two levels of retroreflective material.

In contrast, **reflective materials** bounce light off its surface. While the term “reflective” is not used in the CSA standard, it is typically defined as a material or object that has the ability to “throw back” light. Most surfaces are already light reflective.

Combined-performance retroreflective material is a retroreflective material that is also a fluorescent material. Not all retroreflective materials are fluorescent, and not all fluorescent materials are retroreflective.

Source: Example HVSA selection form, CSA Z96-15 (R2020), High-visibility safety apparel. © 2015 Canadian Standards Association. Please visit store.csagroup.org