

IS 15809:2017 High Visibility Warning Clothes — Specification

High visibility warning clothes, often called "hi-vis" or "hi-viz" clothing, are designed to make the wearer highly visible in low-light or high-risk environments, improving safety by helping them stand out. This standards specifies photometric and physical performance requirements for retroreflective and combined performance materials.

Commonly used in industries like construction, road work, warehousing, and emergency services, these garments often feature bright colors and reflective strips that enhance visibility during the day and night. The reflective materials are key for nighttime use, as they reflect light from headlights and other sources.

High visibility warning clothes are of two types depending on colour of the back ground and combined performance materials:

Type 1 – Fluorescent Yellow Green and

Type 2 – Fluorescent Orange – Red

This standard specifies requirement for three classes of High visibility warning clothes based on level of conspicuity (easy to see).

Key Features

1. **Bright, Fluorescent Colors:** Fluorescent colors make the clothing stand out in daylight, twilight, and even in shadowed areas.
2. **Reflective Strips:** These strips are often positioned around the torso, arms, and legs for maximum visibility when illuminated by headlights or other light sources.
3. **Comfort and Durability:** Hi-vis clothing is usually made from materials that are breathable, flexible, and durable for outdoor work.

These standards ensure that the clothes provide a minimum level of safety for workers in hazardous areas. Retroreflective and background material shall conform to major performance requirements like dimensions, coefficient of retroreflection, luminance factor, , strength of the back ground fabric, colour fastness to perspiration, laundering, light etc. This standard also specifies performance requirements of retroreflective and combined performance material before and after test exposure under simulated conditions