Special Hazard Workwear

Health & Safety

High Visibility Garments

The requirements & the facts

Being struck by a moving vehicle is the **second** most common cause of death in the workplace. It is therefore essential that any **high visibility garments** issued to employees conform to all relevant performance standards (EN471:2003/ EN20471:2013, European Standard for High Visibility Clothing), and are worn and maintained correctly for **maximum protection.**

So what does this mean to you?

In order to comply with all **UK and European legislation**, you need to ensure that the high visibility garments you buy comply with the following: 'High visibility clothing conforming to **EN471:2003/EN20471:2013** which must be worn at all times.'

Highways Agency: Chapter 8 Traffic Signs Manual (Part 2) - Operations: Para 06.3.2

The workforce and supervisory staff should wear high visibility warning clothing at ALL TIMES when on site. Clothing shall comply with **EN471:2003/EN20471:2013 Class 2 or 3** (Class 3 on motorways and other high speed roads) and shall comply with the requirements of paragraph 4.2.3(b) of the Standard. The colour of the clothing shall normally be fluorescent yellow or fluorescent orange-red complying with Table 2 of the Standard.

The retroreflective material shall be to **Class 2** as defined in Table 5 of the Standard. In addition, on motorways and other high speed roads, high visibility jackets or coveralls shall have full length sleeves meeting the requirement of paragraph 4.2.4 of EN471:2003/ EN20471:2013. This requirement may be varied to three-quarter-length sleeves where a risk assessment shows full-length sleeves would present increased risk due to the activity being undertaken.

Staff should also wear high visibility trousers complying with **Class 1 of EN471:2003/EN20471:2013** where the carrying of large items of equipment or other activities may at any time obscure the visibility of the high visibility jacket or vest.

Highways Agency: Temporary Traffic Management On High Speed Roads: Good Working Practice (Section W7)

Operatives who are engaged in activities on live traffic lanes should wear High Visibility Garments to EN471:2003/EN20471:2013 Class 3

Buying Guide

Garment Classifications

Garment types are grouped into three classes based on the conspicuity provided, with the classes dictating the minimum quantities of background and retroreflective materials to be used.

CLASS 3: Highest Protection Level:

Bands of retroreflective material shall not be less than 50mm wide. Minimum background material 0.80M². Minimum retroreflective material 0.20M². A revised version of EN471 was published in March 2004. One of the major changes in this version is that horizontal reflective bands can now have an incline of ±20º.

CLASS 2: Intermediate Protection Level:

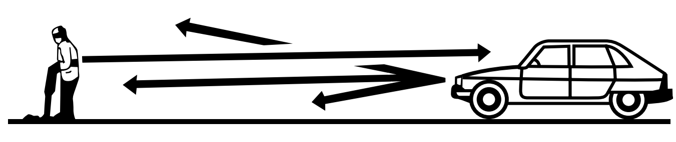
Bands of retroreflective material shall not be less than 50mm wide. Minimum background material 0.50M². Minimum retroreflective material 0.13M².

CLASS 1: Lowest Protection Level:

Where enhanced visibility is an advantage, but for minimal risk/off road purposes only. Bands of retroreflective material shall not be less than 50mm wide. Minimum background material 0.14M². Minimum retroreflective material 0.10M².

All Retroreflective Materials used in our High Visibility Clothing exceed the highest brightness category of EN 471:2003/EN20471:2013.

Retroreflective Materials greatly enhance your visibility in low light situations. This reflective material returns light to a light source – such as vehicle headlights – creating a bright image that motorists are more likely to see from a distance. As a result, motorists and pedestrians have more time to react.



Safety Standards Key

To aid selection, garments in this catalogue now carry **icons denoting the EN safety standards** to which they comply. ***From October 2013 all newly Certificated High Visibility Garments must comply with the NEW Standard, EN ISO 20471:2013**

EN 343:
EN343
Protection against Rain
3 classes of waterproofness and breathability

EN 471:
EN471:2003/EN20471:2013 – High Visibility Warning Clothing
3 classes of protection

EN 342:
EN342
Protection against cold
(Temperatures <5ºC)

GO/RT 3279
GO/RT 3279:2008
Approved Garments for Railway Workers

Flame Resistant & Retardant Clothing

Buying Guide

In partnership with specialist suppliers of flame resistant and retardant clothing, we offer a complete solution for customers requiring protection from heat, flame and dangerous substances: from identifying workplace hazards and the required protective clothing, to taking into account wearer comfort and value throughout the garment's life.

Types of fabric used in Flame Resistant and Retardant Clothing

Adequate protective clothing provides escape time, reduces burn injury, and increases the wearer's chances of survival.

Flame Resistant Fabrics

Inherently flame resistant fabrics are made of fibres with naturally flame resistant properties (i.e. not through chemical treatment). The fabric's effectiveness will not be reduced by repeated washing or wear, ensuring optimum protection throughout the garment's life.

Flame Retardant Fabrics

Flame retardant treated fabrics are produced by applying a finish to a fabric to reduce its flammability, or by incorporating a flame retardant chemical into the fibre prior to spinning. Flame retardant treatment chemicals are 'activated' by intense heat, producing char and gases that briefly inhibit combustion. As this chemical treatment is washed out over time, the fabrics will only conform to heat and flame standards for a limited number of washes.

Arc

Essentially an electric arc is the spark that jumps between any gap created in an electrical system, such as the tiny spark that can occur when a light switch is flicked on or off (which is why you should not use any switches if you suspect a gas leak).

Flame Retardant Standards

EN 11611

Tensile strength
Tear strength
Burst strength
Seam strength
Dimensional change
Requirements of leather
Limited flame spread
Molten droplets
Heat transfer (radiation)
Electrical resistance

EN 11611:

EN 11612 As above plus:

Heat resistance
Limited flame spread (A)
Convective heat (B)
Radiant heat (C)
Molten aluminium splash (D)
Molten iron splash (E)
Contact heat (F)

EN ISO 11612: 2008

EN 14116

Flame spread
Tensile strength
Tear strength
Seam strength

EN ISO 14116: 2008

Anti-Static Standards

EN 1149

Protective clothing –
Electrostatic properties
Anti-static clothing suppresses static charge, thereby preventing sparks, which might cause a fire or explosion.

EN 1149-5:

EN 1149-5 is a part of a larger system

EN 1149 consists of the following parts:

EN 1149-1: Test methods for the measurement of surface resistance

EN 1149-2: Test methods for the measurement of the electrical resistance through a material (vertical resistance)

EN 1149-3: Test methods for the measurement of charge decay

EN 1149-4: Garment test method (under development)

EN 1149-5: Performance requirements

Water Penetration and Breathability

EN 343

Protection against weather elements

EN 343: 2003 +A1:2007

Hi-Visibility

EN 471

Reflective materials used in Hi-Visibility clothing

EN 471: 2003 +A1:2007

Arc Standard

EN 61482-2:2009

Reflective materials used in Hi-Visibility clothing

EN 61482-2: 2009

Cold Weather

EN 14058

Protection against extreme weather

EN 14058: 2004

Short Life Chemical Protective Clothing

Buying Guide

The EEC PPE Directive has identified six levels of protection (Types) to facilitate the choice of chemical protective clothing. To carry the CE marking, chemical protective equipment (category III) must pass one or more of the garment "Type" tests, meet or exceed the minimum requirements for the materials' physical and chemical properties, and be correctly identified and labelled. In addition, the products must be manufactured to a consistent quality, and the manufacturer must either hold a quality certificate such as ISO 9000, or be subject to regular inspections by the notified laboratory.

Along with our Nebosh trained staff, and our preferred supply partners, we can provide site surveys to customers in order to evaluate their requirements and identify the most suitable solutions for their needs, taking into consideration the following:

- Chemicals and Processes in the Workplace
- The Working Environment
- Exposure Conditions
- Comfort and Value

Please contact your local branch for further details.

Protective clothing type definition

Chemical Protective Clothing – Category III

Type	Description	Norm
Type 3	Protection against pressurised liquid chemicals	EN 14605
Type 4	Protection against aerosols	EN 14605
Type 5	Protection against airborne solid particulate chemicals	EN ISO 13982-1
Type 6	Limited protection against liquid mist	EN 13034

Other types of protection

Type	Description	Norm
EN 1073-2: 2002 Class 1	Protection against particulate radioactive contamination	EN 1073-2*
EN 14126: 2003	Biological protection (Infective Agents)	EN 14126
EN 1149-5: 2008*	Electrostatic discharge if properly grounded (Anti-Static)	EN 1149-1: 1995**

* Gives no protection against radioactive radiation.
** The antistatic treatment is only effective when relative humidity is > 25%.

Food Industry Clothing

Your guide to kitchen hygiene

The Food Safety (General Food Hygiene) Regulations 1995 requires that all employers identify potential hygiene risks and take appropriate action to reduce to a safe level.

*Source: Food Standards Agency – "Catering Workers Hygiene Survey 2002"

HACCP

The Hazard Analysis and Critical Control Point (HACCP) system is internationally accepted as the system of choice for food safety management. It is a preventative approach to food safety based on the following 7 principles:

- Identify any hazards that must be prevented, eliminated or reduced;
- Identify the critical control points (CCPs) at the steps at which control is essential;
- Establish critical limits at CCPs;
- Establish procedures to monitor the CCPs;
- Establish corrective actions to be taken if a CCP is not under control;
- Establish procedures to verify whether the above procedures are working effectively;
- Establish documents and records to demonstrate the effective application of the above measures.

The HACCP approach provides a systematic way of identifying food safety hazards and making sure that they are being controlled day-in, day-out. In short this involves the following steps:

- Plan what needs to be done to maintain food safety and write it down;
- Minimise the likelihood of food poisoning bacteria contaminating meat and associated products;
- Avoid physical and chemical contamination of meat;
- Reduce the potential for growth of food poisoning bacteria on meat and associated products;
- Minimise the potential for cross-contamination of ready-to-eat foods by food poisoning bacteria on meat during further processing or in the kitchen.

Also available is a range of complementary personal protection which includes Cold Store Clothing to EN342, Thermal & Insulated Gloves to EN388 & EN511, Insulated Safety Footwear & Safety Wellingtons to EN20345 & Thermal Under- & Outerwear to mix & match for all environmental conditions.

A comprehensive range of Colour Coded Catersafe Disposable Workwear is available, ideally suited to the food processing and catering industries, which includes hats, caps, coats, beard masks, aprons, sleeves, overshoes and gloves.