CLEAN

LINEN & WORKWEAR

Part of the ALSCO family



SAFETY

STANDARDS

FOR WORKWEAR



Understanding PPE
Regulations & workwear safety

All workwear and PPE used in the workplace need to adhere to strict regulations. When selecting garments, it is vital to understand what is required to keep your employees safe for the different environments they may be working in.

All of CLEAN's PPE workwear is fully compliant with the Regulation (EU) 2016/425 and European Directive 89/686/EEC. Our range of garments are tailored towards different environments and as such, include specific certifications and symbols for their intended use.

PPE Regulation (EU)2016/425

By UK law, any PPE that is made available in the GB market must meet certain essential health and safety requirements. Employers must perform a risk assessment in relation to Occupational Health and Safety legislation. This requires employers to create detailed risk assessments which layout the following (in accordance with hse.gov.uk):

- What are the hazards?
- Who might be harmed and how?
- What are you already doing to control the risks?
- What further action do you need to take to control the risks?
- Who needs to carry out the action?
- When is the action needed by?

This process helps determine what functions are required from the PPE and in turn, ensure the appropriate PPE is chosen.

PPE Categories

Three categories exist for PPE based on the relevant levels of risk for your employees.

- **Category 1 PPE:** Minor risk of injury and/or damage. PPE provides protection against superficial injuries whereby they are unlikely to cause irreversible damage (e.g. protection from sun, rain and non-hazardous chemicals)
- **Category 2 PPE:** Major risk of injury and/or damage. PPE provides protection against serious injuries and damage that may cause irreversible damage (e.g. heat/flame)
- **Category 3 PPE:** Life-threatening risk. PPE provides protection against risk of death (e.g. electric arc)

CLEAN's workwear range provides solutions across all three categories with specific garments tailored to different sectors.

GENERAL LOGOS

All of CLEAN's PPE workwear is fully compliant with the Regulation (EU) 2016/425 and European Directive 89/686/EEC. Our range of garments are tailored towards different environments and as such, include specific certifications and symbols for their intended use.

- UKCA
- Specific PPE Symbols for that garment as highlighted below

CE MARKING FOR PROTECTIVE GARMENTS

All CLEAN workwear includes the CE mark. The CE mark is a symbol that indicates that the garments have been examined according to the PPE Regulation (EU) 2016/425. This means that all CLEAN's workwear confirms to the European health, safety and environmental protection standards.

The CE symbol will be found on the inside of all CLEAN workwear alongside any specific regulation symbols that garment is approved for.

UKCA MARKING FOR PROTECTIVE GARMENTS

The CE marking is being phased out in the UK and by the 1st January 2025, all products sold to Great Britain will need to show the UKCA marking.
UKCA stands for United Kingdom Conformity Assessed.

Specific PPE Symbols

Heat & Flame protective	High Visibility		Arc Protect
EN ISO 11612	EN ISO 20471	RIS-3279-Tom	IEC 61482
Electrostatic properties		**Welding protective**	**Chemical Spill protective**
EN 1149-5 / BS EN 61340		EN ISO 11611	EN ISO 13034

Workwear garments will also include specific EN standard symbols. We have provided a guide below for each of the core symbols and what they protect against. Certain garments within our range will protect against several of the categories shown here.

Heat & Flame Workwear Standards

EN ISO 11612

PROTECTIVE CLOTHING AGAINST HEAT & FLAME

The ISO 11612 standard refers to clothing that protects against short contact time with flame, molten metal spatter and other sources of heat.

There are four performance levels for protection against heat and flame:

- **Level 1:** Indicates low risk
- **Level 2:** Indicates exposure to medium risk
- **Level 3:** Indicates exposure to high risk
- **Level 4:** Indicates extreme exposures to radiant heat

Minimum requirements are specified for different fabrics. It is, however, vital that all fabrics meet the requirement to limit flame spread. It is optional to meet one or several of the requirements relating to heat transmission as shown in the table under section B, C and F. As shown in the table below, certain codes are required of all materials and there are additional requirements for work with molten metal as shown in sections D and E.

CODE LETTER TABLE AND MEANING

Code	Requirements	Performance Level
A1	Limited flame spread – surface ignition	Compulsory
A1	Limited flame spread – edge ignition	A2
B	Protection against convective heat	B1-B3
C	Protection against radiant heat	C1-C4
D	Protection against molten aluminium	D1-D3
E	Protection against molten iron	E1-E3
F	Protection against contact heat	F1-F3

NB: soiling, sweat/water and other contaminants will reduce the level of protection.

EN ISO 11611

PROTECTIVE CLOTHING FOR WELDING & ALLIED PROCESSES

The ISO 11611 standard specifies minimum basic safety requirements and test methods for any workwear designed to be worn during welding.

Garments with EN ISO 11611 are always linked to the previous standard EN ISO 11612. This standard ensures that welder's protective clothing is designed to prevent electrical conductivity.

As with clothing developed to confirm to EN ISO 116112, these garments are designed to protect employees in contact time with flame, molten metal spatter and other sources of heat.

Performance Requirements

1. Class 1: Protection against less hazardous welding techniques with low level spatter and radiant heat
2. Class 2: Protection against more hazardous welding techniques with higher levels of spatter and radiant heat

EN 1149

PROTECTIVE CLOTHING WITH ELECTROSTATIC PROPERTIES

The overall standard is EN 1149-5, with EN1149-1 being a subset of this.

EN 1149-3 refers to safety clothing where the surface material of the clothing is tested according to its electric discharge properties. This standard specifies workwear that is tested for its ability to dissipate electrostatic charge from the clothing material surface. The standard explains that the safety apparel has been tested for its ability to discharge electrostatic charges to the air and therefore won't conduct electrostatic charges to the person wearing the clothing.

EN 1149-5 refers to the material and design requirements required to provide protective clothing with antistatic characteristics. More specifically, this refers to protecting against sudden discharges of electrostatic energy. These garments are typically worn when there is a risk that static sparks may ignite inflammable substances such as gas and oil.

The EN 1149-1 refers to the test method for measurement of surface resistivity.

bsi ISO 9001 Quality Management Systems CERTIFIED
FS 736965

ISO-9001

THE QUALITY MANAGEMENT STANDARD

Unlike the other standards in this section, the ISO-9001 is a broader standard which is defined as the international standard set of requirements for a quality management system.

In brief, this standard highlights that an organisation provides products and/or services that meet customer and regulatory requirements. This standard ensures that customers receive consistent, good-quality products and/or services.

High Visibility Workwear Standards



EN ISO 20471

THE HIGH VISIBILITY CLOTHING STANDARD

The EN ISO 201471 standard specifies requirements to provide clothing capable of visually signalling a wearer's presence.

It is essential that all high visibility clothing can be made visible during daylight conditions and under illumination of headlights (or other lighting) in the dark.

High visibility clothing is grouped into three risk classes with Class 3 being the class that provides the highest level of protection. The table below indicates the area that each Class must meet for the background and reflective materials.

VISIBILITY CLASSES	Class 1	Class 2	Class 3
Background Material	0.14m²	0.50m²	0.80m²
Retroflective Material	0.10m²	0.13m²	0.20m²

Do note that you must not conceal the minimum high vis areas with logos, labels etc.



RIS-3279-Tom

APPROVED GARMENTS FOR RAILWAY WORKERS

The RIS-3279-Tom standard is a specific standard of high-visibility clothing for the UK Rail industry (excl Northern Ireland, High Speed 1 and the Channel Tunnel).

The aim of RIS-3279-Tom garments is to ensure that rail workers on or near the track-side are visible to trains approaching at speed or any other traffic.

Chemical Splash Workwear Standards



EN ISO 13034

PROVIDING PROTECTION AGAINST LIQUID CHEMICALS

The EN ISO 13034 standard specifies specific PPE clothing where there is a risk that the wearer is exposed to a light spattering of liquid chemicals where a complete liquid permeation barrier is not required (Type 6 and Type PB [6] equipment).

Workwear with this certification is suitable for use in areas where there is a risk of exposure to small splashes of chemicals but full body protection is not required. Clothing should be quickly removed if exposed to chemicals.

Arc Protect Workwear Standards



IEC 61482

PROTECTIVE CLOTHING AGAINST THERMAL HAZARDS OF AN ELECTRIC ARC

The IEC 61482 standard dictates that workwear must possess resistance properties against the thermal hazards of an electric arc.

Workwear produced according to this standard must delay the transfer of thermal energy by absorbing as much of it as possible.

For clothing to use this standard, the materials and garments must both be tested.

There are two classes for IEC 61482 protective clothing:

- Class 1: 4kA
- Class 2: 7kA

These classes refer to the measurement of energy that can be absorbed by the garment, with a probability of 50%, before the wearer experiences second degree burns.

This test is otherwise referred to as the "box test". Protective clothing with a single layer will typically be rated as Class 1.

Anti Static Workwear Standards



BS EN 61340

PROTECTIVE CLOTHING WITH ELECTROSTATIC PROPERTIES

BS EN 61340 refers to the material and design requirements for clothing with protective qualities against ESD (Electrostatic Discharge). ESD can cause unseen damage to electronic components during manufacture of electronic assemblies and equipment.





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