



Special Hazard Clothing



Protective Clothing- basic guide

Protective clothing should only be used for the purpose intended. It should be maintained in good condition and checked regularly; being repaired or discarded if damaged. Any clothing which protects against a specific risk to health and safety is subject to EN Standards.

FLAME PROTECTION FABRIC

The reason for wearing flame retardant (FR) clothing is to ensure garments do not catch fire and/or to limit flame spread. What is often not realised is that in some situations the wrong clothing can do more harm than good when exposed to heat and flame. Fibres can melt onto the skin causing significant and severe burn injuries. It is always best to layer FR clothing and always have an FR layer next to the skin.

Inherent flame protection uses inherent fabric which itself is woven with FR fibres so that the flame protection is built into the fabric and does not wash or rub out.

Chemical treated fabric is where the FR fabric has undergone a chemical treatment to make it FR (such as Proban or Pyrovatex). The concern however with these fabrics is that the protection will gradually diminish as the chemical treatment is washed or rubbed out.

EN STANDARDS

The new EN ISO standards are similar to the previous EN standards in terms of protection but they also require more 'complete garment' tests. All existing certificates of the EN Standards remain valid. At present all new products being introduced are tested and certified to the new EN ISO standards.

EN470:1:1995 is replaced with EN ISO 11611:2007
 EN531:1995 is replaced with EN ISO 11612:2008
 EN533:1997 is replaced with EN ISO 14116:2008



EN533:1997 - Harmonised European Standard

For protective clothing spread materials and material assemblies (Superseded by EN ISO 11416:2008)



EN 531:1995 - Harmonised European Standard

For protective clothing for industrial workers exposed to heat (excluding fire-fighters and welders clothing) (Superseded by EN ISO 11612:2008)



EN 470-1:1995 - Harmonised European Standard

for protective clothing for use in welding and allied processes (Superseded by EN ISO 11611:2007)

**COLD STORE CLOTHING**

All Cold Store styles are certified to **EN 342** standard for Cold Store Clothing and are CE marked accordingly. Garments are available to cover chill (2°C to -5°C) through to cold store (-25°C) to deep freeze (-40°C).

CHEMICAL RESISTANT CLOTHING

The boilersuits we can supply have been manufactured to meet the requirements of **BS EN465: 1995** providing Type 4—Spray Tight protection and also (depending on style) **BS EN466: 1995**, providing Type 3—Liquid Tight protection.

Garments which offer incomplete rather than full body protection have been manufactured to meet the requirements of **BS EN 467: 1995** providing chemical protection to parts of the body. e.g. minimum length (see previous sheet)

SYMBOL GUIDE FOR FLAME RETARDANT CLOTHING

EN ISO 11612

EN ISO 11612:2008

The performance requirements set out in this standard are applicable to garments which could be worn for a wide range of end uses, where there is a need for clothing with limited flame spread properties and where the user can be exposed to radiant or convective or contact heat or molten metal splashes.

- Code A:** Limited flame spread
- Code B:** Protection against Convective Heat - 3 levels
- Code C:** Against Radiant Heat - 4 levels
- Code D:** Protection against Molten Aluminium Splash - 3 levels
- Code E:** Protection against Molten Iron Splash - 3 levels
- Code F:** Protection against Contact Heat - 3 levels



EN ISO 14116

EN ISO 14116:2008

This standard specifies the performance requirements for the limited flame spread properties of materials, material assemblies and protective clothing in order to reduce the possibility of the clothing burning and thereby itself constituting a hazard. Additional requirements for clothing are also specified.



EN ISO 11611

EN ISO 11611:2007

This International Standard specifies minimum basic safety requirements and test methods for protective clothing for use in welding and allied processes (excluding hand protection).

Class 1 is protection against less hazardous welding techniques causing lower levels of spatter and radiant heat.

Class 2 is protection against more hazardous welding techniques and situations, causing higher levels of spatter and radiant heat.

**IEC 61482-2:2009**

This European test method measures fabrics and garment systems abilities to protect against the thermal effects of an electric arc event.

- Two protection classes: **Class 1 4kA**
Class 2 7kA



EN 1149

EN 1149:2008

Harmonised European Standard for protective clothing - protection against the danger caused by static electricity. This standard is not applicable for protection against mains voltages.

- EN1149-1:1996:** Test method for surface conducting fabrics
- EN1149-3:2004:** Charge decay test method for all fabrics
- EN1149-5:2008:** Performance requirements