



# The Importance of Garment Design and Super-B Style

Protective clothing is used in a wide variety of environments, situations and applications throughout a range of industries. Each one is different and each places garments under a unique set of stresses, strains and physical demands.

Yet most chemical protective clothing is made from polymers and non-woven materials which whilst having the benefit of being inexpensive, feature strength properties that are generally lower than their woven counterparts. So good design is vital in ensuring garments are built to cope with the various physical demands that might be placed on them.

Similarly, whilst comfort is primarily defined by the air permeability of the fabric, even a garment that is breathable will be uncomfortable if it is too tight, restricts movement or is poorly designed.

**So effective ergonomic design is important in both maintaining the comfort of the wearer and in ensuring a garment lasts as long as required by the job.**



## 1 Three-piece hood with shaped centre-piece

Some cheaper garments feature a simple 2-piece hood. Such hoods do not fit the head properly, restrict head movement and generally have a poor fit to respirator masks.

Lakeland garments not only feature a 3-piece hood which creates a more 3-D fit and resolves these problems, in addition the centre piece is a 'pointed oval' shape resulting in an even better fitting hood.

## 2 Two-piece crotch gusset

The crotch is invariably the point where garments split first, partly because this is where most stress is apparent, and partly because on cheaper garments it is the point where four seams – two body and two leg - meet at one point.

Lakeland garments feature an inserted crotch gusset of two dart-shaped fabric pieces. This creates a more shaped body which spreads the stress and allows greater freedom of movement.

## 3 Inset Sleeves

Most garments use the traditional 'bat-wing' style sleeve, in which the body forms a diagonal between the elbow and the waist. This is cheaper to produce as it uses less fabric, but it also restricts movement when a user reaches up. It also explains why some garments need thumb loops – because it results in pulling back of the sleeve and cuff.

Lakeland garments use the more expensive inset sleeve in which the body and arm follows the shape of the body. This allows greater freedom when reaching up and results in much less pulling back of the sleeve – so no thumb loops are required.

\*Many Lakeland garments are available in versions with thumb-loops where they are required for other reasons.



## Lakeland 'Super-B' Style

Lakeland CE garments use a specific ergonomically styled pattern that features a unique combination of three key factors, along with other helpful design elements.

## 4 Cushioned Knee-Pads

ChemMax<sup>®</sup> garments and some Cool Suits<sup>®</sup> feature double-layer cushioned knee-pads which add comfort and durability in applications where crawling or kneeling is required.

## 5 Double zip and storm flap

ChemMax<sup>®</sup> garments feature a double zip with handy ring-pulls and double storm flap front fastening for superior protection.

## 6 Higher neck line

For improved neck protection and better respirator mask fit.

## 7 CE Chest Label

Lakeland CE coveralls feature a chest label containing all the legally required marking for CE certification, so users and supervisors can easily identify the correct garment is being worn.

## 8 Push-Lock<sup>®</sup> glove connection system

All Lakeland chemical suits feature cuffs designed to work with the Push-Lock<sup>®</sup> glove connection system which provides a fully sealed, Type 3 tested connection with most chemical gloves.

