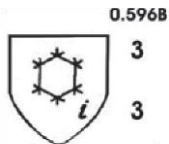


STANDARDS EXPLAINED



EN 342: 1998 Clothing tested to standard EN 342: 1998 Protection against Cold Environments

Environmental factors:

- **Air temperature** - the temperature of the air surrounding the body
- **Radiant temperature** - Thermal radiation is the heat that radiates from a warm object. Radiant heat may be present if there are heat sources in an environment.
- **Air velocity** - The speed of air moving across the employee and may help cool them if the air is cooler than the environment.
- **Humidity** - High humidity environments have a lot of vapours in the air, which prevents the evaporation of sweat from the skin. When non-breathable vapours-impermeable personal protective equipment (PPE) is worn, the humidity inside the garment increases as the wearer sweats because the sweat cannot evaporate.

Personal factors:

- **Clothing Insulation** - Thermal comfort is very much dependent on the insulating effect of clothing on the wearer. Wearing too much clothing or PPE may be a primary cause of heat stress even if the environment is not considered warm or hot. If clothing does not provide enough insulation, the wearer may be at risk from cold injuries such as frostbite or hypothermia in cold conditions.
- **Metabolic heat** - The more physical work employees do; the more heat they produce. The more heat is produced; the more heat needs to be lost so workers don't overheat. The impact of metabolic rate on thermal comfort is critical.

Layering

Wearing multiple layers traps air near your skin which keeps heat close to your body. Wearing multiple layers is more effective than one thick layer, as air is trapped between the layers thus helping to retain warmth. Layers must be selected based on the level of activity you will be doing.

This comprehensive range of cold store clothing is designed to protect the wearer – along with our thermal range available in the work wear section; you will be able to create a perfect layering system to ensure you are fully protected from any risks.



Aqua House, Buttress Way,
Smethwick, Birmingham, B66 3DL



Mon - Fri
8:30 am - 5:30pm



+44(0)1215557167