

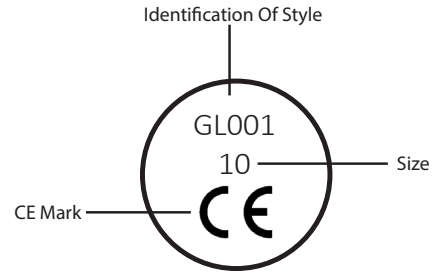
# STANDARDS EXPLAINED

**CE information**

The range of hand protection is manufactured to the highest standards, and is tested independently to meet or exceed the appropriate CE standard for which each product is designed.

**Categorisation**

Gloves fall into the following three categories:



**Cat 1 - simple design:**

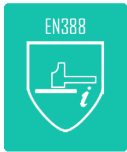
For minimal risks only. Suitable only for low risk applications where hazards can be identified by the wearer in time to deal with them.

**Cat 2 - intermediate design:**

Reversible risks. Products are type examined by an approved body where they examine the manufactures technical specifications and conduct tests for the relevant standards to ascertain their conformity and/or performance.

**Cat 3 - complex design:**

For protection against mortal danger or risks of irreversible harm. Products are type examined by an approved body as for category 2. In addition, the products and manufacturer are subject to EC quality control according to an approved quality system.



**BS EN 388 6.1 Resistance to abrasion**

The abrasion test, tests the abrasion resistance of material takBS EN from the palm of a glove. Abrasive paper rubs against the sample with a specified/constant pressure applied until a hole appears, the number of rubs determines the level given, which is shown in the first position under the shield symbol.

**BS EN 388\* – 6.2 Blade Cut Resistance**

This test is known as the ‘Coupe test’ and is based on the number of cycles required to cut through the sample at a constant speed and mass (equivalent to a force of 5 Newtons) when compared to the cut resistance of a standard material e.g. specified cotton canvas. The number of cycles of the rotating blade is used to determine the cut index (second position).

**BS EN 388 – 6.4 Tear Resistance**

The test assesses the tear resistance and is based on the amount of force, in Newtons required to tear the sample.

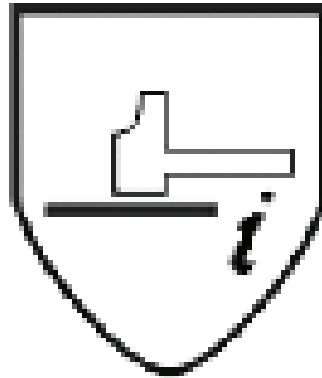
**BS EN 388 – 6.5 Puncture Resistance**

The test assesses the puncture resistance is based on the amount of force, in Newtons required to pierce the sample with a standard sized nail/stylus.

\* A new version of the glove standard BS EN388: Protection against mechanical risks has been published, superseding BS EN388:2003. This only affects new product certification and will not apply retrospectively. Gloves may continue to be sold under both versions of the standard until 2023.

Test	Performance Level				
	1	2	3	4	5
Abrasion Resistance (number of rubs)	100	500	2,000	8,000	
Blade Cut Resistance (index)	1.2	2.5	5	10	20
Tear Resistance (newton's)	10	25	50	75	
Puncture Resistance (newton's)	20	60	100	150	

EN388



	Hand (mm)		Glove
	Palm circumference	Length	Minimum Length
<b>6</b>	<b>152</b>	<b>160</b>	<b>220</b>
<b>7</b>	<b>178</b>	<b>170</b>	<b>230</b>
<b>8</b>	<b>203</b>	<b>182</b>	<b>240</b>
<b>9</b>	<b>229</b>	<b>192</b>	<b>250</b>
<b>10</b>	<b>254</b>	<b>204</b>	<b>260</b>
<b>11</b>	<b>279</b>	<b>215</b>	<b>270</b>



**Thermal hazards BS EN407**

- A Resistance to flammability 0-4
- B Contact heat resistance 0-4
- C Convective heat resistance 0-4
- D Radiant heat resistance 0-4



- E Resistance to small moltBS EN metal splash 0-4
- F Resistance to large moltBS EN metal splash 0-4

**Chemical & micro-organisms BS EN374**

- EN374-2 Resistance to penetration by micro-organisms Referred to as acceptable quality level (AQL) 1-3
- EN374-3 resistance to chemical hazards – permeation 1-6



**Protection from cold BS EN511**

- A Resistant to convective cold 0-4
- B Resistant to contact cold 0-4
- C Permeability of water 0-1

