

STANDARDS EXPLAINED

BS EN standards - safety helmets

The traditional safety helmet is generally covered by BS EN397:2012 which outlines the properties of the helmet and also how it is marked. This should include such details as the manufacturer, date of manufacture, size range and the shell material. A new helmet will also contain additional information on correct usage, adjustments etc. In the form of a User Information Sheet. More specialised helmets may also carry additional markings and a summary is included below.

EN 397:2012	Industrial Safety Helmets should be marked on the shell.
EN 397:1995	Standard number, maker and model identification.
	Size or size range (cm) (on both shell and harness).
	Year and quarter (or month) of manufacture.
	Informative label with specified wording.
	Shell material, eg ABS, PC, HDPE etc.
Optional Markings	-20 C or -30 C - tested at very low temperature.
	+ 150 C - tested at high temperature
	440 V a.c. - tested for electrical insulation
	LD - tested for lateral deformation
	MM - resists molten metal splash

EN 812:2012	Industrial Bump Caps should be marked.
EN 812:1998	Standard number, maker and model identification.
	Size or size range (cm) (on both shell and if fitted, harness).
	Year and quarter (or month) of manufacture.
	Informative label with specified wording.
	-20 C or -30 C - tested at very low temperature.
Optional Markings	F - resistant to flame
	440 V a.c. - tested for electrical insulation

BS EN standards - industrial bump caps

While sometimes incorrectly described as safety helmets this type of protection is very different and conforms to BS EN2012. While some designs can look similar to safety helmets, the most popular styles resemble a baseball cap. The caps can be embroidered with company names and logos and are more comfortable to wear than safety helmets. Please note bump offer virtually NO Protection against falling objects and should not be used where there is any risk of being hit by falling items. They can be useful however, if a worker is likely to bump their head on static objects and to promote company identity.

Helmet maintenance

While the relatively low costs involved in purchasing safety helmets have almost made them a disposable product many safety helmets are used for long periods with no basic checks or maintenance. This can result in potentially unsafe products being used on a daily basis with the obvious risk of injury in the event of an accident. Some useful information on storage and maintenance is outlined below. We would recommend a documented system of checks at regular intervals and users should carry out a basic visual check on a daily basis.

- Safety helmets must be maintained in good condition.
- Be stored in a safe place, eg on a peg or in a cupboard on site;
- Not be stored in direct sunlight or in excessively hot, humid conditions because long-term exposure can weakens the shell;
- Be checked regularly for signs of damage or deterioration; This includes the shell, harness and accessories.
- Have defective parts replaced (if the model allows this). Parts from one model cannot normally be interchanged with those from another.
- Have the sweatband cleaned regularly or replaced.
- Before the safety helmet is issued to another person, it should be inspected to ensure it is serviceable and thoroughly cleaned in accordance with the manufacturer’s instructions, eg using soap and water. The sweatband should always be cleaned or replaced.

Helmet accessories

There are a range of accessories available for safety helmets, the most popular being ear muffs, visors or chin straps. It is extremely important to ensure the relevant accessory is designed for the helmet being used even if the accessory will fit there is no guarantee the level of protection will be adequate as accessories are generally ONLY tested when fitted to that particular make of helmet.

Hearing Protection Standards:

BS EN 352 distinguishes between different types of hearing protectors and each type has to comply with the respective requirements that have been drawn up. The different types can be identified using the extension following BS EN 352, for example BS EN 352-2. Six different types are identified in total:

- BS EN 352-1 applies to ear muffs
- BS EN 352-2 applies to earplugs and otoplastics
- BS EN 352-3 is intended for variants, for example ear muffs that are attached to a helmet
- BS EN 352-4 lists the requirements for level dependent ear muffs
- BS EN 352-5 relates to active noise reduction ear muffs
- BS EN 352-6 is restricted to hearing protectors with an electrical audio input
- BS EN352-2:2002 supersedes the previous BS EN352-2:1993
- BS EN352-2:2002 tells us exactly what to do and what to test for when performing both physical and acoustic testing on hearing protectors.