

# Head Protection



## Buying Guide

### Identifying Hazards

A safety helmet is required in almost every industry where there is a risk of being injured by falling objects. In areas of restricted head space where accidental bumping of the head could be involved (e.g. overhead piping) a scalp protector (bump cap) should be considered. Bump caps are not a substitute for safety helmets and must not be used to protect the head from falling objects.

### Identifying Materials

Shells are primarily made using UV stabilised high density polyethylene (HDPE) or ABS (Acrylonitrile Butadiene Styrene). Harnesses are made using low density polyethylene or textile webbing.

### Care and Maintenance

A helmet may be cleaned with soap and water, drying with a soft cloth. A helmet should not be cleaned with abrasive substances or solvents and must not be stored in direct sunlight or in contact with chemicals. The wearer should inspect their helmet regularly. Any helmet showing more than superficial abrasions or scuffing to the shell should be replaced.

### Shelf Life

To comply with European Standards, all helmets are marked with the quarter or month and year of manufacture. If helmets are stored in boxes in which they were supplied and do not experience environmental extremes, the shelf life of a helmet is not limited. However, it is not recommended that a helmet should be in use five years after date of manufacture.

### So What Are The Differences?

A helmet is not just a helmet. They have many different features providing specific user benefits, such as:

- **Weight:** Some helmets are lighter than others. A lightweight helmet may provide more comfort during prolonged periods of use
- **Cradle:** A helmet can have either a basic polyethylene cradle or a more comfortable textile webbing cradle

- **Sweatband:** A helmet can have either none, a standard or a high absorbent sweatband for improved comfort during use
- **Ventilation:** Some helmets are ventilated, providing cooling airflow during use
- **Badging:** Some helmet designs allow for a larger front badging area, for an enhanced corporate image
- **Peaks:** Peak lengths can vary – a reduced peak is available for improved upward visibility
- **Retro-Reflective Surfaces:** Reflective surfaces that provide greater visibility of the wearer in low light conditions

## European Standards

EN 397 specifies physical and performance requirements of industrial safety helmets. Certain tests are mandatory if the product is to receive EN 397 approval.

These cover:

- Shock absorption
- Resistance to penetration
- Flame resistance
- Chin strap anchorage

A manufacturer can choose to submit his products to additional optional tests. Such tests could lead to one or more of these markings appearing on a helmet.

**-20°/-30°C** The helmet will provide some protection when worn in an environment at or above this temperature. -40°C ultra low temperature (outside of EN 397)

**440V a.c.** The helmet will protect against short-term, accidental contact with live electrical conductors up to this voltage

**LD** The helmet will provide some resistance to lateral compressive (non-impact) loads

**MM** Molten Metal splash test

**EN 14052** Builds on EN 397 to include more onerous tests and requirements, but also to include requirements for additional impact protection to the front, rear and sides of the head. It also includes performance tests for the retention system (typically headband and chin strap), not typically included in EN 397.

**EN 50365** Electrically insulating helmets for use on low voltage installations

**EN 812** Is the standard for Industrial Bump Caps, which are intended to provide protection against bumps caused by walking into hazardous projections. A Bump Cap does not provide protection against falling or thrown objects and should not be used where a safety helmet is required

**EN 12492** Helmet for Mountaineers