

HEAD  
PROTECTION

**TorShell**®

# Head Protection

## Essential for Workplace Safety

In the dynamic realm of industrial safety, there's no compromise when it comes to protecting the most vital asset: the head. In the fast-paced, high-risk settings of industrial workplaces, the human head is vulnerable to a myriad of hazards. TorShell® range of Safety Helmets protects from falling debris to unexpected collisions, the risks are omnipresent. Bison Life® rises to the challenge, offering a comprehensive solution designed to fortify against these threats and ensure safety from the top down.

### Why Head Protection Matter?

Protecting your head is crucial for staying safe at work. Whether you're in construction, manufacturing, or any other industry, wearing the right headgear can prevent serious injuries and even save lives.

### Understanding the Importance

Head injuries can be severe and sometimes life-threatening. Wearing a helmet or other head protection can reduce the risk of head injuries from falling objects, bumps, or impacts. It's not just about avoiding cuts or bruises; head protection can prevent traumatic brain injuries that can have long-term effects on your health and well-being.

### Choosing the Right Gear

Selecting the right head protection is essential. Helmets should fit properly and meet safety standards to ensure they provide adequate protection. Different workplaces may require different types of headgear, so it's essential to understand the specific hazards you face and choose gear accordingly.

### Making Safety a Priority

Prioritizing head protection means taking proactive steps to keep yourself safe. It's not just a matter of following rules or regulations—it's about looking out for your own well-being and the well-being of your colleagues. By wearing proper headgear, you're not only protecting yourself but also setting an example for others to follow.

**EN 397** is a European standard specifying the requirements for industrial safety helmets. The standard covers a range of performance requirements to ensure adequate protection for the wearer under typical conditions encountered in industry.

### key aspects of EN 397 standard:

- **Impact Protection:**

Helmets must be able to withstand the force of an object falling from a height. This is tested by dropping a specified weight onto the helmet from a specified height.

- **Penetration Resistance:**

Helmets must resist penetration from sharp objects, tested by dropping a pointed object onto the helmet.

- **Chin Strap Anchorage:**

If the helmet includes a chin strap, it must not detach when subjected to forces typical of industrial use.

- **Flammability:**

Helmets must be made from materials that do not easily ignite and burn.

- **Shock Absorption:**

Helmets must absorb a significant amount of the impact force, reducing the amount transmitted to the wearer's head.

## Optional Requirements (Additional Protections)

### ● Resistance to Extreme Temperatures:

Helmets can be tested for performance in extreme cold or heat, ensuring they protect a range of environmental conditions.

### ● Electrical Insulation:

Some helmets are tested for their ability to protect against electrical shocks.

### ● Molten Metal Splash Resistance:

Helmets can be tested for resistance to molten metal splashes, making them suitable for use in foundries and similar environments.

### ● Lateral Deformation:

Helmets may be tested for their ability to withstand side compression, providing additional protection in environments where lateral impacts are a risk.

## Marking and Information:

Helmets that meet the EN 397 standard must be marked with:

- The manufacturer's name or logo.
- The model or type of helmet.
- The year and quarter of manufacture.
- The standard number (EN 397).
- Any additional optional requirements met.

## Use and Maintenance:

**Inspection:** Helmets should be regularly inspected for damage or wear and replaced if necessary.

**Cleaning:** Helmets should be cleaned with mild soap and water, avoiding the use of solvents or harsh chemicals that could degrade the material.

**Storage:** Helmets should be stored away from direct sunlight and chemicals when not in use to prolong their life.

**EN 397** safety helmets are crucial in providing head protection in industrial settings, ensuring worker safety by mitigating the risks associated with head injuries.

**IS 2925** is an Indian Standard specification for industrial safety helmets, similar to the EN 397 standard in Europe. It specifies the requirements and testing methods for helmets used to protect the heads of industrial workers from various hazards, including impact and penetration.

## key aspects of IS 2925 standard

### ● Material Requirements:

The helmet's shell and harness must be made from materials that provide adequate protection and durability.

### ● Design and Construction:

Helmets must be designed to offer maximum coverage and comfort while ensuring stability and protection. They must have a smooth, rounded outer surface without any sharp projections.

### ● Performance Requirements:

**Impact Resistance:** Helmets must absorb a specified amount of energy to protect the wearer's head from impacts.

**Penetration Resistance:** Helmets must resist penetration by sharp objects to prevent punctures and other injuries.

**Flame Resistance:** The materials used in the helmet must resist ignition and quickly self-extinguish to provide protection in fire situations.

**Electrical Insulation:** Helmets must offer protection against accidental contact with live electrical conductors up to specified voltage levels.

**Water Absorption:** Helmets must not absorb more than a certain amount of water to maintain their protective qualities even in wet conditions.

### ● Marking and Labeling:

Helmets complying with IS 2925 must be clearly marked with:

- The ISI mark (indicating compliance with the standard).
- The manufacturer's name or trademark.
- The year of manufacture.
- The model number or designation.
- Instructions for use and maintenance

### ● Testing Methods:

The standard specifies various tests to assess the helmet's performance, including:

**Impact Test:** Dropping a specified weight from a set height onto the helmet.

**Penetration Test:** Dropping a pointed object onto the helmet to test resistance.

**Flame Resistance Test:** Exposing the helmet to a flame and observing its reaction.

**Electrical Insulation Test:** Applying a specified voltage to the helmet and measuring the leakage current.

**Water Absorption Test:** Immersing the helmet in water for a specified duration and measuring the amount of water absorbed.



Industrial safety helmets complying with IS 2925 provide workers with essential protection against head injuries in various industrial environments, ensuring their safety and well-being. These helmets are mandatory in many industries and are subjected to rigorous testing and certification processes to meet the standard's requirements.

## key aspects of EN 812 standard:

EN 812 is the European standard that specifies the requirements for industrial bump caps, which are designed to protect the wearer from head injuries caused by striking the head against hard, stationary objects. Unlike traditional safety helmets, bump caps are intended for use in environments where there is no risk of falling objects but where there is a danger of accidental bumps.

### Key features include:

- **Impact Resistance:**

Bump caps must provide sufficient protection against impacts to the head, as specified by the standard.

- **Material Durability:**

Bump caps must be made from materials that can withstand impacts and wear during normal use.

- **Design Requirements:**

The caps should cover the top of the head and have an adjustable fit for comfort and security.

**EN 812** ensures that bump caps offer adequate protection in low-risk environments, complementing other personal protective equipment (PPE) used in the workplace.



# Know Your Safety Helmet

## Shell

Primary defence to the blow or impact and absorbs (70-80%) of the energy of the blow by self-destruction / weakening

## Harness

To provide an even seating on the head & to distribute impact energy.

## Anchoring Points

Mechanism that connects the helmet suspension / Harness with the shell

## Ratchet

Provides primary retention & easy circumference adjustment mechanism

## Peak

Limited protection against object and access sunshade. Also acts as a fluid diverter during spillage

## Sweat Band

To absorb the sweat thereby giving more comfort while wearing



## 8-point

nylon suspension for better protection



## Unique 3-point

height adjustment in suspension



### Shell

HDPE / ABS



### Harness

Nylon



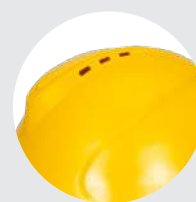
### Suspension

HDPE



### Ratchet

Rotating  
Push & Rotate



### Air Circulation

Vented



### Sweat Pad

Soft Foam

### HL3121

Non-Vented HDPE Helmet

CE 2233 EN 397: 2012 +A1: 2012

IS 2925:1984



CLASS E

CLASS G



#### Available Colours



#### Product Specification

Shell	HDPE
Harness	HDPE
Suspension	8 Point Nylon
Sweatband	Yes
Chin Strap	Yes
Adjustment Type	Ratchet
Shell weight	310 ± 15g
Shell with Harness weight	440 ± 15g

#### Packaging Information

1 Piece / Polybag
28 Pieces / Carton

Product SKU	Size	Colour	Inner pack UPC	Carton GTIN
BLSH-ES-HDPE-HHNV6Y	OSFM	Yellow	810090089430	10810090089437
BLSH-ES-HDPE-HHNV6W	OSFM	White	810090089447	10810090089444
BLSH-ES-HDPE-HHNV6BL	OSFM	Blue	810090089454	10810090089451
BLSH-ES-HDPE-HHNV6R	OSFM	Red	810090089461	10810090089468
BLSH-ES-HDPE-HHNV6GR	OSFM	Green	810090089478	10810090089475

### HL3221

Non-Vented ABS Helmet

CE 2233 EN 397: 2012 +A1: 2012



ISEA Z 89.1 - 2014

IS 2925:1984



CLASS E

CLASS G



#### Available Colours



#### Product Specification

Shell	ABS
Harness	HDPE
Suspension	8 Point Nylon
Sweatband	Yes
Chin Strap	Yes
Adjustment Type	Ratchet
Shell weight	310 ± 15g
Shell with Harness weight	440 ± 15g

#### Packaging Information

1 Piece / Polybag
28 Pieces / Carton

Product SKU	Size	Colour	Inner pack UPC	Carton GTIN
BLSH-ES-ABS-HHNV7Y	OSFM	Yellow	810090089485	10810090089482
BLSH-ES-ABS-HHNV7BL	OSFM	Blue	810148535834	00810148535865
BLSH-ES-ABS-HHNV7W	OSFM	White	810090089492	10810090089499

### HL3321

Vented HDPE Helmet

CE 2233 EN 397: 2012 +A1: 2012

IS 2925:1984



#### Available Colours



#### Product Specification

Shell	HDPE
Vented	Yes
Harness	HDPE
Suspension	8 Point Nylon
Sweatband	Yes
Chin Strap	Yes
Adjustment Type	Ratchet
Shell weight	310 ± 15g
Shell with Harness weight	440 ± 15g

#### Packaging Information

1 Piece / Polybag
28 Pieces / Carton

Product SKU	Size	Colour	Inner pack UPC	Carton GTIN
BLSH-ES-HDPE-HHV8Y	OSFM	Yellow	810090089508	10810090089505
BLSH-ES-HDPE-HHV8W	OSFM	White	810090089515	10810090089512
BLSH-ES-HDPE-HHV8BL	OSFM	Blue	810090089522	10810090089529
BLSH-ES-HDPE-HHV8R	OSFM	Red	810090089539	10810090089536
BLSH-ES-HDPE-HHV8GR	OSFM	Green	810090089546	10810090089543

### HL3421

Vented ABS Helmet

CE EN 397: 2012 +A1: 2012

IS 2925:1984



#### Available Colours



#### Product Specification

Shell	ABS
Vented	Yes
Harness	HDPE
Suspension	8 Point Nylon
Sweatband	Yes
Chin Strap	Yes
Adjustment Type	Ratchet
Shell weight	310 ± 15g
Shell with Harness weight	440 ± 15g

#### Packaging Information

1 Piece / Polybag
28 Pieces / Carton

Product SKU	Size	Colour	Inner pack UPC	Carton GTIN
BLSH-ES-ABS-HHV8Y	OSFM	Yellow	810090089553	10810090089550
BLSH-ES-ABS-HHV8BL	OSFM	Blue	810148535858	00810148535841
BLSH-ES-ABS-HHV8W	OSFM	White	810090089560	10810090089567



# Safety Bump Cap

TorShell® Series

**BC3232**

Breathable Bump Cap with Rechargeable LED Light (3 Modes)



Press Once Glare Light  
Press Twice Low Light  
Press Thrice SOS Warning Light

## Available Colours



## Product Specification

Outer Material	Polyester
Inner Shell	ABS
Size	Universal
Style	Baseball Style
Reflective Stripes	Yes
Closure Type	Elastic Strap with clip
LED	3 Modes

## Packaging Information

1 Piece / Polybag  
20 Pieces / Carton

Product SKU	Size	Colour	Inner pack UPC	Carton GTIN
BLSH-BC-M3-LED	OSFM	Green	810148533656	00810148533663

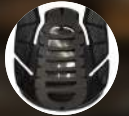
CE EN 812:2012



Breathable Mesh



Impact Resistant ABS Shell



Foam Padding for Comfort



3 Mode LED Light



USB Rechargeable Light

**BC3131**

Breathable Bump Cap with HDPE Shell & Anti-Shock Foam Cushioning

CE EN 812:2012



## Available Colours



## Product Specification

Outer Material	Polyester
Inner Shell	HDPE
Size	Universal
Style	Baseball Style
Reflective Stripes	Yes
Closure Type	Elastic strap with clip

## Packaging Information

1 Piece / Polybag  
40 Pieces / Carton

Product SKU	Size	Colour	Inner pack UPC	Carton GTIN
BLSH-MS-PFBC-BK-1	OSFM	Black	810148533670	00810148533687
BLSH-MS-PFBC-BL-1	OSFM	Navy Blue	810148533694	00810148533700
BLSH-MS-PFBC-O-1	OSFM	Orange	810148533717	00810148533724
BLSH-MS-PFBC-GR-1	OSFM	Green	810148533731	00810148533748

**BC3241**

CE EN 812:2012



## Available Colours



## Product Specification

Material	Polycotton
Shell	ABS
Size	Universal
Style	Baseball Style
Closure Type	Velcro

## Packaging Information

1 Piece / Polybag  
40 Pieces / Carton

Product SKU	Size	Colour	Inner pack UPC	Carton GTIN
BLSH-MS-FBC-BL-1	OSFM	Blue	810090087399	00810090087405
BLSH-MS-FBC-BK-1	OSFM	Black	810090087412	00810090087429





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## For all your product availability & distribution related queries

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