

# HARDCAP A1+™ INDUSTRY LEADING BUMP CAP TECHNOLOGY, THE ONLY BUMPCAP TO EXCEED THE A1+ VARIANT OF EN812

The new HardCap A1+® is another major innovation from JSP in head protection design. Designed to exceed the most recent standards, years of thought and design iterations have been undertaken to develop a product that is unrivalled in both performance and style. Sleek and low profile, it's almost impossible to distinguish from a standard 'high street' baseball cap.

The unique angled adjuster designed to fit under the occipital bone at the rear of the skull means that one size really does fit all, particularly when combined with the castellated protective liner. The liner is removable, therefore the cap part is machine-washable for hygiene purposes. It has a terry-towelling sweatband for added comfort and all colour-ways have subtle reflective piping for added visibility safety.



**3 PEAK SIZES AVAILABLE**



Micro Peak

Short Peak

Standard Peak



Offering high levels of protection and comfort for Police and Security services



**REFLECTIVE PIPING**

Reflective piping on all models adds extra visibility and therefore safety in all working environments.

**VENTILATION**

Extra holes in the liner plus the two mesh panels on the outer mean added ventilation for coolness and comfort.

**UNIQUE ADJUSTER**

Unique one-handed angled adjuster to quickly fit, giving true 'one size fits all' Sizing ranges from 53 to 64cm headsize.

**ALL ROUND PROTECTION**

The protective liner is removable, so the outer cap is fully washable for hygiene purposes and extended life cycle.

**SWEAT BAND**

Terry towelling sweatband adds comfort and absorption for the wearer.

**LOW PROFILE DESIGN**

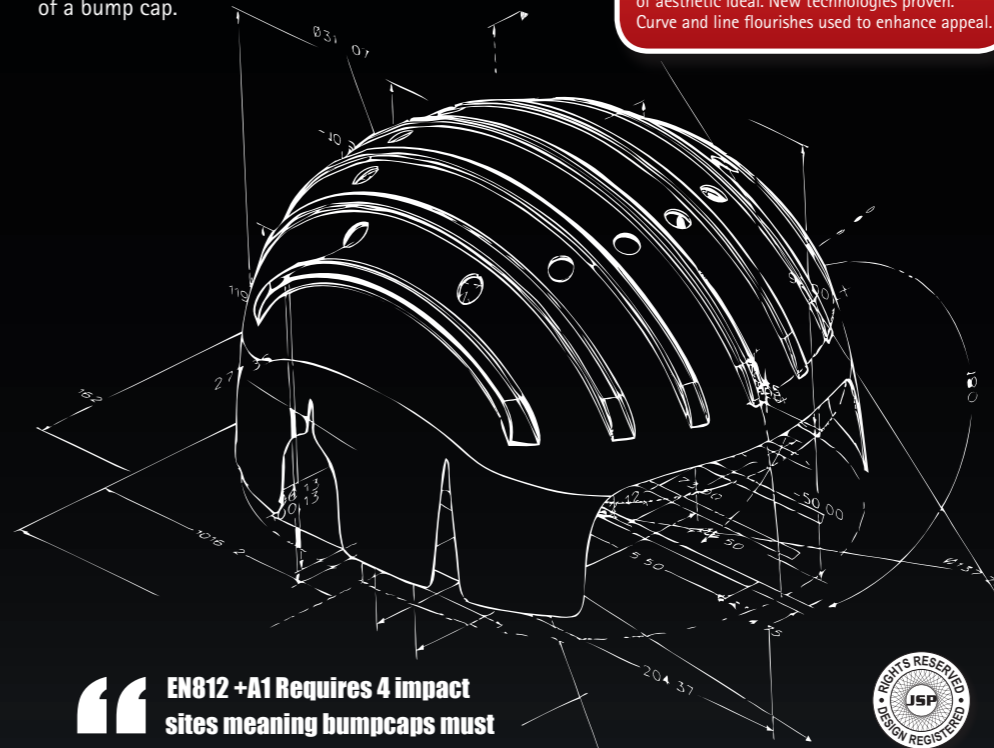
Ultra sleek low profile design means the HardCap A1+ is almost indistinguishable from a high street 'fashion' baseball cap.

**HI-VISIBILITY**

Available in Hi-visibility orange and yellow, great for low light environments

## HOW WE DESIGNED OUR HARDCAP A1+

EN standards require Bump Caps to conform to EN812:1997/A1:2001. This is to protect the wearer from impacts at 30° and 60° from vertical at the front and the back of the head. We needed a 'One-Size-Fits-All' liner to work together with a stylish new cap, to improve on the performance and aesthetic appearance of our 'Top-Cap'. Comfort was a high priority to increase customer / user acceptance. We call it the A1+ because, like much of our PPE, it exceeds the required standard. EN812:1997/A1:2001 is the most current standard, but we designed the new HardCap to go beyond this because we wanted to offer maximum protection possible within the parameters of a bump cap.



**EN812 +A1 Requires 4 impact sites meaning bumpcaps must now be able to with stand twice the impact energy of EN812**

Matthew Judson B.Eng(Hons), ACQI, Director of Respiratory & Technical Support

**1 Design**

Cap design, renderings sketches drawn by hand of aesthetic ideal. New technologies proven. Curve and line flourishes used to enhance appeal.

**2 Sample**

Sample evaluation phase. Competitor's samples assessed and tested. What are the features and benefits being offered? How can they be improved upon?

**3 CAD Model**

Bump cap liner CAD model, dimensioning initial rapid prototype produced from CAD data to validate both form and function. Problems resolved and CAD data finalised.

**4 Material**

Material selection, swatches of material from supplier, preferred material chosen, communication with supplier.

## EN812 + A1 TESTING

The significant difference between the helmet standard and the bump cap standard is the shock absorption test. As the product is designed to stop the wearer banging their head the impact test is at a much lower energy, the 5kg flat mass only dropping 250mm. However, with an industrial helmet which the wearer would replace after an impact, it is expected that the wearer would bump their head several times, so the standard requires the impact test to be carried out 4 times! Each impact is carried out with the head at a different angle, so much more of the head is subject to testing. As with the industrial safety helmets, the testing is again done at different conditions, +50°C, -10°C and following water immersion.

**5 Testing**

Impact test angles, standards, checks

**6 Certification**

Gain patents and certification approvals.

0.5KG at 50cm  
2.5 JOULES

5KG at 25cm  
12 JOULES



## STANDARD 7cm PEAK HARDCAP A1+®

CODE	DESCRIPTION	CARTON QTY
ABR000-000-500	Standard 7cm Peak HardCap Navy/Navy	20
ABR000-001-100	Standard 7cm Peak HardCap Black/Black	20
ABR000-005-000	Standard 7cm Peak HardCap Black/Grey	20
ABR000-00L-500	Standard 7cm Peak HardCap Grey/Red	20
ABR000-00N-400	Standard 7cm Peak HardCap Royal Blue/Yellow	20
ABR000-00N-500	Standard 7cm Peak HardCap Black/Hi-Viz Orange	20



## SHORT 5cm PEAK HARDCAP A1+®

CODE	DESCRIPTION	CARTON QTY
ABS000-002-100	Short 5cm Peak HardCap Navy/Navy	20
ABS000-001-100	Short 5cm Peak HardCap Black/Black	20
ABS000-005-000	Short 5cm Peak HardCap Black/Grey	20
ABS000-00L-500	Short 5cm Peak HardCap Grey/Red	20
ABS000-00N-400	Short 5cm Peak HardCap Royal Blue/Yellow	20
ABS000-00N-500	Short 5cm Peak HardCap Black/Hi-Viz Orange	20



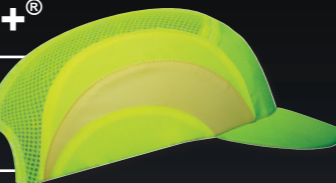
## MICRO 3cm PEAK HARDCAP A1+®

CODE	DESCRIPTION	CARTON QTY
ABT000-001-100	Micro 3cm Peak HardCap Black	20
ABT000-002-100	Micro 3cm Peak HardCap Navy	20



## HI-VIZ SHORT 5cm PEAK HARDCAP A1+®

CODE	DESCRIPTION	CARTON QTY
ABS000-001-500	Hi-Viz Short 5cm Peak HardCap Yellow	20
ABS000-001-600	Hi-Viz Short 5cm Peak HardCap Orange	20



## MICRO 3cm PEAK (W/REFLECTIVE PEAK)

CODE	DESCRIPTION	CARTON QTY
ABT000-30L-500	Micro 3cm Peak (w/Reflective Peak) HardCap Grey/Red	20



## LED CAP LAMP FOR HARDCAP A1+®

CODE	DESCRIPTION	CARTON QTY
AHV310-000-000	LED Cap Lamp	10

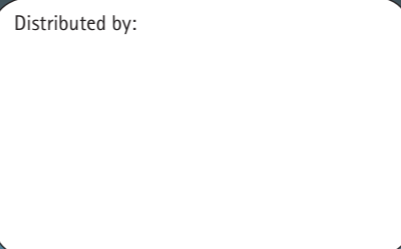


### HARDCAP A1+ EMBROIDERY

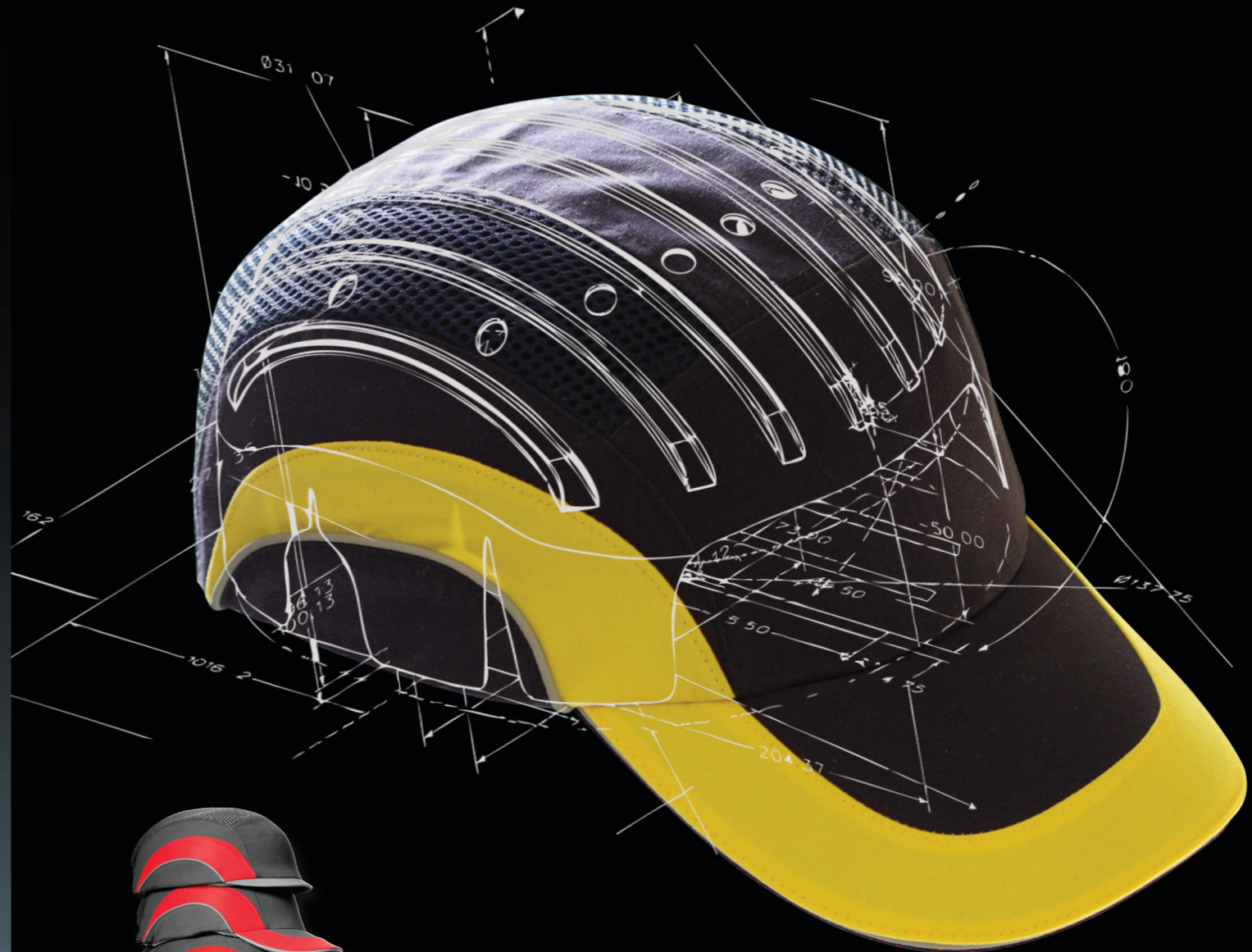
JSP offer ultra high quality embroidery service or screen printing service using stain fast inks (guaranteed for minimum 50 washes). Simply send through the logo or message you require and we will do the rest. Minimum order quantities and set up charges will apply. Please call sales office for details. Also available transfer printing.



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# EXCEED THE A1 VARIANT OF EN812



### QUALITY MANAGEMENT SYSTEM

JSP's products are manufactured under its worldwide QMS (Quality Management System). This ensures proper batch control including testing and recording of each manufactured batch to the relevant EN standard. When specifying JSP safety products, Health and Safety Officers can rest assured they are fit for purpose exceeding all relevant EN standards with batch test certification through the manufacturing process (ie not just at one point in time) and come with JSP's full technical backup and support. This is the JSP Comfort Factor.



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**MANUFACTURING FOR SAFETY**

