



**BATLSKIN**

# COMPARISON TO NIJ RIOT SPECIFICATIONS



**REVISION**

## BATLSKIN HEAD PROTECTION SYSTEM

Up to 30% of all battlefield casualties have injuries to the head, face and neck. And these unprotected areas of the armored soldier are not only exposed but targeted by the enemy.<sup>1</sup> There is no question of the vital importance of protection for this region of the body. And Revision's Batlskin Head Protection is the only fully integrated and modular system of its kind. Introducing the ultimate protection from trauma – blunt force, blast and ballistic. In a scalable, lightweight package that's fully modular and fully integrated. So you can tailor the system to the mission for peak performance.

## BATLSKIN VIPER™ A3, P2 & P4 HEAD PROTECTION SYSTEMS

The NIJ Riot Helmet and Face Shield Specification (NIJ 0104.02) is one of the industry test protocols common to helmets in today's battlefields when measuring protection.

Mounting a Batlskin Visor and Mandible Guard to Revision's Batlskin Viper A3 (ACH-shaped aramid helmets), Viper P2 helmet (ACH-shaped polyethylene helmet) or Viper P4 (ACH-shaped hybridized Ultra-High-Molecular-Weight Polyethylene (UHMWPE) material) enables system compliance with the NIJ riot helmet face shield requirements.\*

All Batlskin Viper helmets stop NIJ IIIA ballistic threats.\*\*

\*Mandible required to meet indicated coverage requirement  
 \*\*NIJ 0101.06 IIIA threats tested to a modified NIJ 0106.02 procedure.

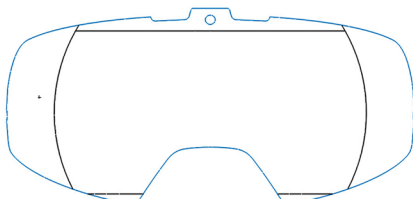
## BATLSKIN MODULAR PROTECTION ATTACHMENT SYSTEM

NIJ SPECIFICATIONS - RIOT/BALLISTIC	REVISION BATLSKIN VISOR - WITHOUT BATLSKIN MANDIBLE	REVISION BATLSKIN VISOR - WITH BATLSKIN MANDIBLE
<b>PROTECTION</b> 3.5: Impact attenuation (helmet portion):108J at 6.6 m/sec with less than 320g transmitted to headform.  4.2.6: Shield shall not make contact with the face after impact of 8J (1kg@ 0.8m)	<b>EXCEEDS REQUIREMENT</b> These impacts are to the helmet. The Batlskin Visor System mounts to the ACH system, and maintains compliance with ACH impact requirements.  The Revision Visor alone has resisted impacts well above 8J. Initial tests indicate minimal movement at 8J impact when the helmet system is assembled properly.  The Visor can stop 17 grain projectiles at over 800 ft/sec, as a relative gauge for strength.	<b>EXCEEDS REQUIREMENT</b> These impacts are to the helmet. The Batlskin Visor and Mandible System mounts to the ACH system, and maintains compliance with ACH impact requirements.  The performance of the system against impact is not adversely affected with the addition of the Mandible. The Mandible is much stiffer than the Visor and provides additional protection.  The Mandible can stop 17 grain projectiles at over 2300 ft/sec.
<b>OPTICS</b> 4.1.5: Shall have a peripheral vision of at least 105 deg per side 4.2.2: Light Transmission greater than 75% 4.2.3: Prismatic power: primary visual area shall be free of distortion. 4.2.4: Refractive power shall be less than +/- 0.125D 4.2.5: Resolving power shall be greater than NBS pattern 34	<b>EXCEEDS REQUIREMENT</b> Peripheral vision: 110-120 Light  Light Transmission: visor performance is greater than 85% Prismatic power varies by less than .208 horizontal, and 0.022 vertical Refractive power is less than 0.070D.  Resolving power is greater than NBS pattern 20	<b>EXCEEDS REQUIREMENT</b> Peripheral vision: 110-120, same as with visor  Light Transmission, prismatic power, refractive power, and resolving power: same as with visor
<b>COVERAGE</b> Indicated coverage  Primary Visual Area per Figure 1	<b>SEE IMAGE BELOW</b> Without the mandible installed, the visor alone covers the majority of the indicated coverage area.  Primary visual area is slightly smaller in the corners, and in the nose. See Figure 1.	<b>SEE IMAGE BELOW</b> With the mandible installed, the system covers the required vertical coverage and the conformal nature of the system matches the peripheral coverage.  Primary Visual area decreases at the corners due to 0.5cm overlap of mandible. The gaps in the nose are now covered by the ballistic mandible.
<b>WEIGHT</b> No requirement in NIJ Standard-0104.02	<b>NOT SPECIFIED IN NIJ</b> The Batlskin Visor & Front Mount weigh less than 1 lb (345 g)	<b>NOT SPECIFIED IN NIJ</b> The Batlskin Visor, Front Mount, and Ballistic Mandible weigh less than 2 lb (730g)
<b>ADDITIONAL INFORMATION</b> <b>ATTACHMENT SYSTEM</b>	The Batlskin Visor attaches to the ACH helmet system using hardware that interfaces with the standard ACH attachment system. Only a change of screw hardware is required.	The Batlskin Visor and Mandible System attaches to the ACH helmet system at the front and rear ACH attachment system interfaces. Only a change of screw hardware is required.

**FIGURE 1: NIJ STANDARD-0104.02 VISUAL AREA IN BLACK RELATIVE TO REVISION VISOR IN BLUE**

**\*\*Note: Cutout in nose area is covered by ballistic mandible**

**ACH LARGE**



**ACH MEDIUM**

