

## Understanding Covert Bullet Resistant Vests

By Robert Kaiser, CEO of PPSS Body Armour



**Wearing a covert bullet resistant vest is not just something that is common practice within executive or diplomatic security. Many other professionals, such as sky marshals, under cover law enforcement officers, private security professionals and in some instances dignitaries or VIP's themselves are known to take regular advantage of such piece of personal protective equipment.**

**Covert bullet resistant vests** allow executive protection specialists to look after the personal security of their clients and become a significant and effective 'low profile part' of their day to day life. This is very often a key objective when looking after the personal security of high profile individuals and their families. Within executive protection is it often of great importance to 'blend in' and not act as a noticeable security professional.

But what makes a covert bullet resistant vest to a good or even great example? How light and thin should or can a covert bullet resistant vest be in today's day in age? Let us make sure your choice is based on up-to-date information and reflect a good understanding of this subject.

The personal safety of business executives, politicians and other high profile individuals is often compromised by criminals and other potentially hostile members of the public. However, convincing high profile professionals to wear body armour is almost an impossible task. They do not want to alternate their life style or look, and this is why covert or concealable bullet resistant vests have become of such interest for the rich and famous, as well as political and religious leaders.

### Standards

Personally I very much wish and hope that one day there will only be one global standard, for two simple reasons:

- 1. This would make it much easier for the purchasing part as it would allow them to directly compare body armour between different manufacturers and it would help them better to understand the entire subject of standards and certification**
- 2. It would help all manufacturers to design and develop body armour much more cost effectively. This is a simple matter of fact, and would mean massive savings could be past on to the customer, making body armour a more affordable option.**

**Covert bullet resistant vests** are always designed as soft body armour. They do not feature hard trauma plates, which usually are made out of polyethylene, ceramic or steel.

Depending on their protection levels covert body armour can offer excellent protection from all sorts of handguns and ammunition between 22mm, .38, 9mm, 357Mag, 44Mag, 45 Mag and many others. However, we at PPSS Body Armour felt it was of great importance to test and certify our bullet resistant vests also against Eastern European ammunition, such as Tokarev Ball 7.62x25mm and Makarov 9x18mm. Your job might well take you to regions where such protection is required... and you certainly want to know that your body armour is going to do the trick I guess.

For any further information on bullet resistant vests, stab resistant vests or slash resistant clothing please contact PPSS Group:

Email: [info@ppss-group.com](mailto:info@ppss-group.com)

Call: **+44 (0) 845 5193 953**

Visit: [ppss-group.com](http://ppss-group.com)

or contact our licensed international distributors

## Understanding Covert Bullet Resistant Vests

By Robert Kaiser, CEO of PPSS Body Armour

Many countries around the world have their own ballistic protection standard. However, the best known of them all is the National Institute of Justice (NIJ) Standard. The NIJ standard is recognised and respected all over the world, in comparison to the British, German and other nation's standards, which are more dominant within homeland security services in their country or region.

Looking at this highly respected standard, what would be the best possible protection level you should be looking for? Well, there are a number of NIJ ballistic protection levels available. Please view the following chart:

NIJ Protection Standard (0101.04)	Protects Against
<b>Level IIA 9 mm &amp; 40 S&amp;W</b>	This body armour protects against 9 mm Full Metal Jacket Round Nose (FMJ RN) bullets, with nominal masses of 8.0 g (124 gr) at a reference velocity of 341 m/s (1120 ft/s ± 30 ft/s) and .40 S&W calibre Full Metal Jacket (FMJ) bullets, with nominal masses of 11.7 g (180 gr) at a reference velocity of 322 m/s (1055 ft/s ± 30 ft/s). It also provides protection against all of the threats mentioned in Level 1.
<b>Level II 9 mm &amp; .357 Mag</b>	This body armour protects against 9 mm Full Metal Jacket Round Nose (FMJ RN) bullets, with nominal masses of 8.0 g (124 gr) at a reference velocity of 367 m/s (1205 ft/s ± 30 ft/s) and 357 Magnum Jacket Soft Point (JSP) bullets, with nominal masses of 10.2 g (158 gr) at a reference velocity of 436 m/s (1430 ft/s ± 30 ft/s). It also provides protection against all of the threats mentioned in Level I and IIA.
<b>Level IIIA 9 mm High Velocity &amp; 44 Mag</b>	This body armour protects against 9 mm Full Metal Jacket Round Nose (FMJ RN) bullets, with nominal masses of 8.0 g (124 gr) at a reference velocity of 436 m/s (1430 ft/s ± 30 ft/s) and .44 Magnum Semi Jacket Hollow Point (SJHP) bullets, with nominal masses of 15.6 g (240 gr) at a reference velocity of 436 m/s (1430 ft/s ± 30 ft/s). It also provides protection against the entire handgun threats mentioned in Level I, IIA and II. Please note Level IIIA is the highest ballistic protection levels for soft body armour.

Due to major advancements within ballistic protection materials and the subsequent weight reduction I strongly recommend NIJ Level IIIA, which offers you the highest possible level of ballistic protection within soft body armour.

Prior to the above highlighted advancements, weight and thickness used to be a real issue, leading to a number of frontline professionals settling for NIJ Level II in the past simply because they felt taking the step from Level II to Level IIIA meant sacrificing their level of comfort and concealability they desired. But as I have just mentioned, this all has changed drastically over the past few years.

NIJ Level IIIA will offer you protection from the majority of handguns and ammunition which include high velocity 9mm FMJ (Full Metal Jacket) and 44 Magnum. This will subsequently guarantee protection from any less powerful handgun. However, as mentioned previously, only a very few covert bullet resistant vests manufacturers have taken protection even to another level and offer additional protection from Tokarev Ball 7.62 x 25mm and Makarov 9 x 18mm, which is of great benefits when being operational in Eastern European countries.

UK based PPSS Body Armour have very recently developed their CV1 ultra light, extremely thin and truly outstanding covert bullet resistant vests which offer ballistic protection from the above mentioned Eastern European handguns and ammunition.

PPSS bullet resistant vests in fact have also been tested for the protection of hypodermic needles and edged weapon, and all widely available test result conclude a previously unmatched protection from this very real threat of today's society.

### Weight

Body armour technology, manufacturing capabilities and body armour design have evolved a lot over the past years. Body armour worn by the police and other enforcement agencies in most countries weigh in excess of 5kg or even 6kg and are often thicker than 20 or even 25mm.

Please let me assure you that this is totally unnecessary, and it is a well documented fact that such weight will lead to stress, fatigue and subsequently to potentially fatal human errors. Innocent members of the public could get severely injured or lose their lives if an executive security professional overreacts during a threat situation, due to physical and mental fatigue, often associated to excessive weight of body armour.

Many body armour manufacturers are now capable of manufacturing and supplying body armour less than half of the above weight, leading to a noticeable reduction and stress, fatigue and any other negative side effects.

For any further information on bullet resistant vests, stab resistant vests or slash resistant clothing please contact PPSS Group:

Email: [info@ppss-group.com](mailto:info@ppss-group.com)

Call: **+44 (0) 845 5193 953**

Visit: [ppss-group.com](http://ppss-group.com)

or contact our licensed international distributors

---

## Understanding Covert Bullet Resistant Vests

By Robert Kaiser, CEO  
of PPSS Body Armour

---

**So what can we class as a 'good weight' or what could be classed as a lightweight body armour?**

“ *I strongly feel that a covert bullet resistant vest certified to NIJ Level IIIA standard should not weigh any more than 1.8kg in today's day in age.* ”

Manufacturers have been competing hard in order to develop the lightest body armour in the world. They have pushed each other to completely new levels, hence soft body armour tested and certified to NIJ IIIA weighing around 1.6kg are now on the market, offering extraordinary ballistic protection, which based on the recent CV1 model of PPSS Body Armour go far beyond the normal NIJ Level IIIA standard requirements.

### Thickness & Blunt Trauma

In order to be concealable, a body armour needs to be of course as thin as possible. Now this is not as easy as we all would like it to be. The reason behind is the extremely dangerous risk of blunt force trauma injuries (primarily internal injuries following the impact/energy absorption of the bullet). All modern and well know ballistic materials being used to manufacture bullet resistant vests make it literally impossible for a bullet to penetrate. The much higher risk is the risk of blunt force trauma injuries. Within the body armour industry we talks about the 'backface signature' of a body armour when highlighting this so important issue. The thinner the body armour, the more attention must be paid to keep the 'backface signature' as low as possible, protecting the wearer from blunt forced trauma injuries. This is being done by building 'trauma layers' into the body armour. I am sure you don't want to see your body armour stop the bullet but then die later on from internal bleeding or other internal injuries.

So, how thick should covert body armour be? Modern covert body armour should be less than 10mm thick. In fact, some covert NIJ Level IIIA high performance body armour are as thin as 6 or 7mm and with the assistance and backing of the above mentioned specially designed trauma liner they still outperform all 'old fashion' body armour, which used to be heavy, bulky and thick. PPSS latest CV1 model is 6.5mm, scoring maximum points within this particular criterion.

### Materials

Apart from Kevlar® there are now many new ballistic materials available. Many real high performance materials have been developed over the past very few years. Twaron®, Goldflex®, Spectra Shield®, Dyneema® SB51 and SB71 have taken body armour into a different world. Weight, thickness, blunt trauma, flexibility and comfort are just a few of the important factors which have been improved in order to protect those who serve more effectively.

### Comfort

Comfort is about how you feel when you wear your covert body armour. Weight, thickness and flexibility are three of the many aspects, which everyone should carefully consider before purchasing covert body armour.

“ *Another rather important aspect is heat. Please let me assure you that wearing any body armour will always make you sweat more. However, the question is how much more?* ”

In many Middle Eastern countries, Australia, South America or Africa we have to accept the fact that temperatures can often exceed 40 degrees Celsius. For an executive/diplomatic security professional or an 'at risk dignitary' the wearing of a covert body armour must allow them to get on with the tasks on hand without excessive body heat implications or severe risks of dehydration.

PPSS Body Armour is using an absolutely groundbreaking high tech fabric named Outlast® in order to take care of this. Their 'base layer', the fabric which will be closest to the wearers skin has been partly developed by NASA and is without question the best material out there to help you cope with heat and humidity.

For any further information on bullet resistant vests, stab resistant vests or slash resistant clothing please contact PPSS Group:

Email: [info@ppss-group.com](mailto:info@ppss-group.com)

Call: **+44 (0) 845 5193 953**

Visit: [ppss-group.com](http://ppss-group.com)

or contact our licensed international distributors

## Understanding Covert Bullet Resistant Vests

By Robert Kaiser, CEO  
of PPSS Body Armour

A video, featuring myself demonstrating the exceptional high performance of our truly outstanding covert bullet resistant vests is available on YouTube. Please search for: "CEO of body armour firm gets shot in new bullet resistant vest". This video features me being shot from close range, wearing our recently developed CV1 model. We produced this video for two key reasons:

- 1. A mannequin based video will not tell the pain, sensation and effect a real human being would feel when being subject to such assault.**
- 2. A mannequin based test would not indicate how quickly a security professional could become fully operation again after such attack.**

It was of great importance to me to show our potential customers and my own employees that I truly and without limit trust that we do is right and good, and that our equipment does exactly what we claim it does.



For any further information on bullet resistant vests, stab resistant vests or slash resistant clothing please contact PPSS Group:

Email: [info@ppss-group.com](mailto:info@ppss-group.com)

Call: **+44 (0) 845 5193 953**

Visit: [ppss-group.com](http://ppss-group.com)

or contact our licensed international distributors