

The Protection Levels Available in Bullet Proof Vests

Improvements in materials technologies, as well as the accessibility of design technologies like 3D printing and augmented reality, have made the development of body armour far easier for manufacturers. Easy access to this research and development has allowed manufacturers to create more protective and far more comfortable [bullet proof vests](#) than ever before.

These developments means that vests can be made thinner, lighter, and more flexible without compromising protection. Indeed, even high levels of ballistic protection can now be worn in a covert vest, and bullet proof vests increasingly offer stab and spike protection as standard with little to no increase in weight or size.

However, with the ever-increasing range of protection available, it can be difficult to know what a bulletproof vest can offer you. The number of options available means that all manner of unique situations can be catered for and it is important that you find the right vest for the environment you will be working in. Fortunately, the testing and standardisation of protection remains the same, and vests must still meet the same standards. The levels of protection in a [bulletproof vest](#) outline exactly what it can protect against, and it is important that you understand these levels.

'Soft Armour'

Ballistic protection is standardised according to testing standards set by the National Institute of Justice, the world-leader in ballistics testing. This organisation then assigns levels (NIJ Levels), so you can easily see at a glance what ammunition each level of vest can protect against.

Body armour that uses Kevlar and similar materials to offer ballistic protection is known as 'Soft Armour', whereas vests that use rigid plates of ceramics and/or polyethylene are known as 'Hard Armour'. Hard Armour will also utilise the soft fabrics found in [Soft Armour](#) materials to help absorb the impacts of attacks. Soft Armour is available upto and including NIJ Level IIIa, which not only provides the protection offered by lower levels, but can also protect against high velocity 9mm full metal jacketed round nose bullets, as well as .44 Magnum jacketed hollow points.

Each level of protection can stop the ammunition listed at lower levels. Level IIa armour is considered the minimum recommend protection for all armour, and is capable of protecting against 9mm full metal jacketed round nose and .40 S&W full metal jacketed ammunition, which are commonly found in most handguns. Even this 'basic level' is capable of protecting against a wide variety of rounds, with 10mm Auto, .357 SIG, and even .45 ACP rounds all covered by this level of protection. The Level II armour, conversely, can protect against all this as .357 Magnum jacketed soft points and the 9mm Parabellum fired at higher speeds. As mentioned above, however, the 9mm fired from a semi-automatic will require Level IIIa armour.

'Hard Armour'

As mentioned above, Hard Armour uses rigid plates that are naturally much heavier than the soft fabric used in soft armour. This means that at higher levels of protection armour will be heavier and far less flexible. Most higher level vests will consist of a [Kevlar vest](#) and an additional rigid plate, usually made of ceramics and/or polyethylene, which provides much stronger protection at the cost of weight and flexibility.

Hard Armour is available at NIJ Level III and IV, which is the highest available level of ballistic protection. Level III hard armour protects against 7.62mmx51mm NATO full metal jacketed rifle rounds, as well as the 5.56x45mm NATO round. Most rifle and automatic rounds are covered by the Level III, including such staples as the .30-06 and the .308 Winchester. However, the highest level of protection, the Level IV, offers protection against all these bullets, as well as armour-piercing variants.

While Hard Armour is heavier and more inflexible compared to Soft Armour, they are still relatively lightweight and unobtrusive thanks to improvements to material technologies. This means that higher levels of protection, such as Level III and IV protection, can be achieved even in a covert vest. Many bullet resistant vests are now available in covert styles with the capability of housing additional Level III or IV plates, meaning you can have protection against more powerful weapons in a discreet package.

For more information on the ballistic protection of bullet proof vests, see [the NIJ's Official Documentation](#) regarding testing and grading.