

NIJ Certified Level IIIA Ballistic Protection: Turtleskin Body Armor Vests By Warwick Mills

By Warwick Mills

Dated: Apr 15, 2008

Benchmark design margins for concealable ballistic and blunt trauma protection

The US National Institute of Justice has awarded Level IIIA certification to TurtleSkin SoftPlate™ Body Armor, <http://www.turtleskin.com/body-armor.aspx>. Developer Warwick Mills set higher internal testing standards and engineered breakthrough materials solutions for obtaining hard armor performance in a soft armor package. TurtleSkin Body Armor signifies a new benchmark of performance in personal protection.

NIJ Standard-0101.4 details the ballistics resistance requirements of police body armor. Level IIIA provides the highest level of concealable body armor protection from high-velocity 9 mm and .44 Magnum handgun ammunition. Warwick performed exhaustive ballistic tests on pre-aged and pre-flexed armor panels to ensure that the final product offers the highest levels of safety. NIJ compliance tests report that TurtleSkin Body Armor prevents penetration of 9 mm rounds at a ballistic firing limit velocity of over 1900 ft/s (where the NIJ ballistics compliance test limit requires penetration prevention of 9 mm rounds up to 1460 ft/s).

“The concept of TurtleSkin Body Armor is rooted in engineering research and design optimization, and in Warwick’s history of developing materials with the highest levels of protection,” says John Cronin, TurtleSkin Body Armor Product Manager. “We have met the need for a concealable ballistic vest with higher safety margins for ballistic and blunt trauma protection from handgun threats. TurtleSkin Body Armor is unmatched in Level IIIA performance.”

Even when a bullet is stopped, the blunt trauma of a high velocity hit can be devastating. Engineered to reduce backface signature (BFS)—the non-penetrating impact the vest makes on the body after being hit—TurtleSkin Body Armor increases the operational capabilities of the officer by absorbing and dissipating more energy. Where the Level IIIA NIJ maximum allowable BFS of a .44 Magnum round is 44 mm at a velocity range of 1400–1460 ft/s, TurtleSkin Body Armor ensures an average BFS of less than 31 mm.

Higher safety margins and less internal damage means more officers on their feet. From ballistic, blunt trauma, blast, and fragment hazards to knife, spike, and needle threats, Warwick researches, designs, and manufactures new body armor composite solutions for the most advanced ballistic protection and personal defense (<http://www.warwickmills.com>). Military, law enforcement, and corrections facilities have employed Warwick to create superior personnel body armor for the demands of life-threatening situations.

Category	Defense, Engineering, Textile
Email	Click to email author
Website	http://www.turtleskin.com/body-armor.aspx
Phone	603.291.1000
Address	PO Box 409 301 Turnpike Rd
City/Town	New Ipswich
State/Province	New Hampshire
Zip	03071
Country	United States