

NIJ
NATIONAL
INSTITUTE
of JUSTICE



ARMOR LEVEL AND THREAT COMPARISON

	0101.04	0101.06	0101.04	0101.06	0101.04	0101.06	0101.06 (Conditioned)
Armor Type	Test Bullet	Test Bullet	Bullet Weight (grains)	Bullet Weight (grains)	Reference Velocity (ft/s)	Reference Velocity (ft/s)	Reference Velocity (ft/s)
I	.22 caliber LR LRN	N/A	30	N/A	1080	N/A	N/A
	.380 ACP FMJ RN	N/A	90	N/A	1055	N/A	N/A
IIA	9 mm FMJ RN	9 mm FMJ RN	124	124	1120	1225	1165
	40 S&W FMJ	40 S&W FMJ	180	180	1055	1155	1065
II	9 mm FMJ RN	9 mm FMJ RN	124	124	1205	1305	1245
	.357 Mag JSP	.357 Mag JSP	158	158	1430	-	1340
IIIA	9 mm FMJ RN	.357 Mag FMJ FN	127	125	1430	1470	1410
	.44 Mag JHP	.44 Mag SJHP	240	240	1430	1430	1340
III	7.62 mm NATO FMJ (M80)	7.62 mm NATO FMJ (M80)	148	147	2780	-	2780
IV	.30 Caliber M2 AP	.30 Caliber M2 AP	166	166	2880	-	2880

Acronyms / Abbreviations			
AP	Armor Piercing	LR	Long Rifle
FMJ	Full Metal Jacket	LRN	Lead Round Nose
FN	Flat Nose	NATO	North Atlantic Treaty Organization
JHP	Jacketed Hollow Point	RN	Round Nose
JSP	Jacketed Soft Point	SIG	Sig Sauer



NIJ STAB RESISTANT PROTECTION LEVEL STRIKE ENERGIES

Protection Level	"E1" Strike Energy		"E2" Overtest Strike Energy	
	J	ft· lbf	J	ft· lbf
SPIKE 1	24 ± 0.50	17.7 ± 0.36	36 ± 0.60	26.6 ± 0.44
SPIKE 2	33 ± 0.60	24.3 ± 0.44	50 ± 0.70	36.9 ± 0.51
SPIKE 3	43 ± 0.60	31.7 ± 0.44	65 ± 0.80	47.9 ± 0.59



SOFT ARMOR

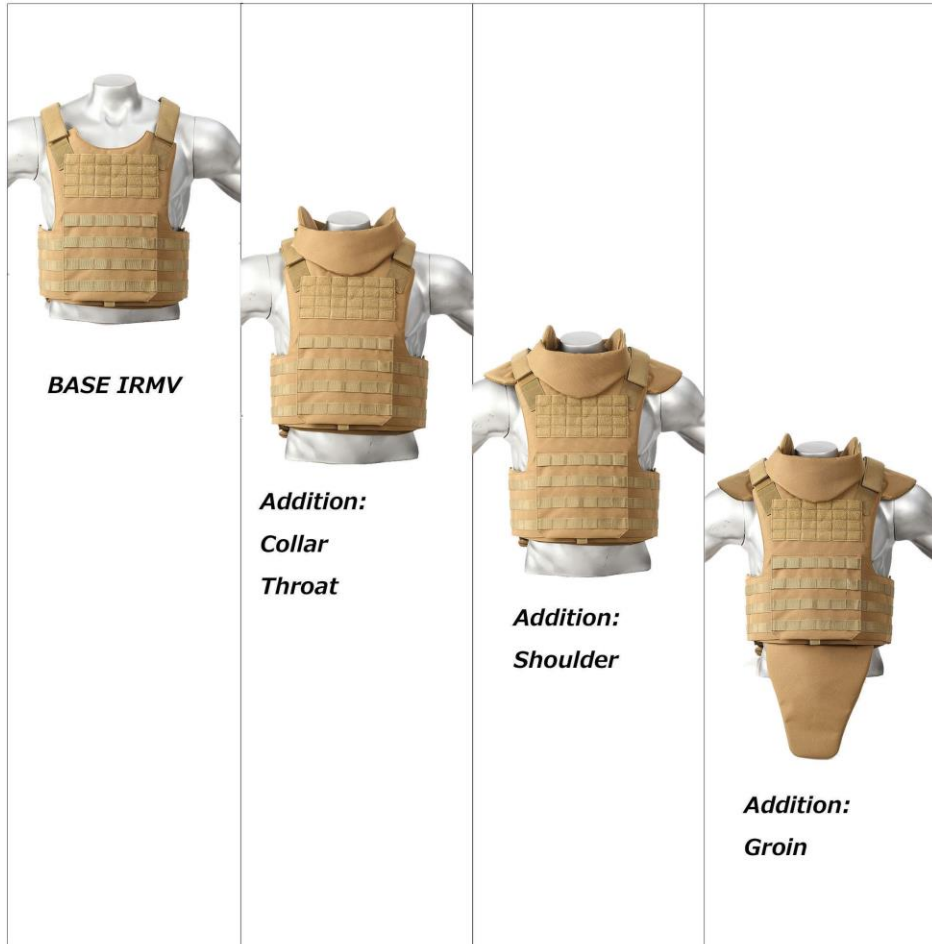


RIFLE ARMOR



OUTTER FABRIC

SOFT ARMOR	<p>Helps absorb the impact from firearm projectiles and fragmentations.</p> <p>Options: BulletProof ; Stab Resistant ; BulletProof & Stab Resistant ;</p> <p>Level: NIJ I; IIA; II; IIIA ;</p> <p>Spike1 ; Spike 2 ;</p>
RIFLE ARMOR	<p>Provides additional protection from rifle rounds.</p> <p>Level: NIJ IIIA ; NIJ III; NIJ IV;</p>
OUTTER FABRIC	<p>Increases ballistic capability of the nylon carrier, provides structure, increases abrasion resistance, improves fire resistance and increases Soldier survivability.</p> <p>Options: Fire resistance;</p> <p>Material: Nylon 6 construction; Durable Nylon 6.6 construction;</p> <p>500D Cordura; 1000D Cordura;</p> <p>500D Nylon; 900D Nylon; 1000D Nylon</p> <p>600D Polyester; 900D Polyester; 1000D Polyester;</p>



**Addition:
Front & Rear
Collar; Throat; Shoulder; Groin; Arm;**



IA-ARC

Iron Armadillo-Adaptive Response Carrier

Fully adaptive design.

Removable additional protection armor.

Design for both BALCS soft armor , SAPIs and variety of armor plates.

Front chest Velcro.

A variety of colors can be chosen.

Ergonomics.

Easy for installation

Color:

BLACK	Khaki	Coyote
Ranger	OD Green	CAMO



IA-LEMC (Iron Armadillo-Law Enforcement Molle Carrier)

Additional:

Tactical Molle Belt can be purchased separately.

Tactical Molle Belt can be purchased separately.

Chest badge/patches placeholder and radio reserved space.

Will fit both BALCS soft armor and SAPIs.

Shoulder wire linear

Tactical Molle Belt can be purchased separately.

Size : SM, MED, LG, XL

Color: Black.



IA-LETC (Iron Armadillo-Law Enforcement Tactical Carrier)

Additional:

Tactical Molle Belt can be purchased separately.

One Piece Design (LETC).

Combined with rifle magazine pouches, pistol magazine pouches, radio pouches, Baton/flashlight pouches, admin pouches (LETC).

Additional Rifle magazine pouches, pistol magazine pouches, radio pouches, Baton/flashlight pouches, admin pouches (LEMC).

Tactical Molle Belt can be purchased separately.

Chest badge/patches placeholder and radio reserved space.

Will fit both BALCS soft armor and SAPIs.

Shoulder wire linear

Tactical Molle Belt can be purchased separately.

Size : SM, MED, LG, XL

Color: Black.



IA-FRC (Iron Armadillo-Fast Response Carrier)

Simple folding design.

Can be transformed from bag to carrier in seconds.

Super light weight.

Design for SAPIs soft and rifle plates.

Concealable magazine pouch design (Can hold up to 6 AR style magazines).

Can be used for personal ballistic shield (If SAPIs inserted)

Additional:

Tactical Molle Belt can be purchased separately.

Size : SM, MED, LG, XL



Concealable BALCS VEST

Can be worn in conjunction with hard body armor plates in both and plate carriers, and packs.

- Lower weight, greater comfort
- Compatible with nearly all Plate Carriers that accept rifle plates, and some packs
- Strategic stitching improves overall performance
- Enhanced performance when combined
- Laminated Rips top cover with sonic welded seams for added durability and strength
- UV Resistant, Water Resistant, Corrosion Resistant



COMPRESSION SHIRT

BALLISTIC THREAT LEVEL: NIJ IIIA(3A)

- 360-degree full stretch construction to help enhance muscle mobility
- The signature moisture transport system will wicks sweat and keep you cool and dry
- Anti-odor technology prevents the growth of odor-causing microbes to keep your shirt fresher and longer
- 40+ UPF protects your skin from the sun's harmful rays
- Smooth flat lock seams prevent chafing
- Armor holder is stitched into the shirt and made out of Active Mesh Material
- Active Mesh is breathable to allow for heat escape.
- Armor is removable as to allow for washing of shirt.



Comfort covert vest

- Removable poly-cotton and mesh liner outer cover for easy cleaning
- Lasted super thin non-abrasive Velcro
- Ultra-violet resistant and waterproof panel carrier
- Adjustable waist and shoulder straps for better fit
- A great alternative to the traditional concealable vest in hot, humid, or tropical environments
- Accessories attachable according to customer requirements

STANAG 2920 Protection Levels

Military standards for ballistic protection & armour, solutions for military applications are tested according to relevant NATO standards, normally STANAG 2920 (STANAG = NATO Standardization Agreement).

STANAG 2920 The adoption of standards for ballistic protection levels and testing

Fragmentation Test (V50 Test)

Frag level	F1	F2	F3	F4	F5	F6
Minimum Fragmentation Velocity V50* m/s	400	450	500	550	600	650
Minimum Fragmentation Velocity V50* ft/s	1310	1470	1640	1800	2000	2130

Standards:

- US Standard – Mill STD 662 E
- UK Standard – UK/SC/5449
- NATO Standard – STANAG 2920

STANAG 2920 (Ballistic test method for personal armour materials and combat clothing) is used to measure materials ability to stop fragments and shrapnel. The measuring technique was originally developed for body armour but now see general use in all situations where fragments are the primary concern. For instance, STANAG 2920 is used to measure Add-on-Armour systems for armoured vehicles.

Tests according to STANAG 2920 are conducted by shooting FSPs (Fragment Simulating Projectiles) onto the test specimen with different velocities while measuring the velocity of each FSP. By altering the velocities, after a number of shots an estimate of the ballistic limit can be obtained, which is the speed up to which the material defeats the fragment.

Combat troops rarely suffer injury or fatality from bullets but are at high risk from primary (direct) and secondary (environmental) fragmentation. To combat these threats Intelligent Armour Limited utilises a special range of Fragmentation F levels whose performance is measured by a V50 value.

International Ballistic Standards

The V50 test is the internationally recognised standard for assessing the fragmentation resistance of personal protection. The fragmentation test is conducted using Fragment Simulating Projectiles (FSPs) which are available in a range of weights approximately following the binomial progression. The test is conducted by firing FSPs at the armour at increasing velocities until an average velocity of penetrating and non-penetrating projectiles is obtained.

The higher the ballistic speed, measured in metres per second, the higher the rating of material, shown as V50 000m/s. The V50 (Velocity 50% or mean velocity) is the average of the velocities recorded for six fair impacts consisting of the three lowest velocities for complete penetration and the three highest velocities for partial penetration, provided the spread is not greater than 40 metres/second (STANAG 2920).



PASGT

The PASGT (US Personal Armor System Ground Troops) the helmet is designed to protect against fragments/shrapnel And other ballistic threats; with improved comfort. Used by Military, Special Forces, Police and SWAT teams.

FEATURES

- High ballistic performance with low weight, using high tenacity ballistic Aramid fiber
- Threat Level IIIA
- Available with four different suspension systems that have a four point chin cup
- Crown mesh with cross straps and plastic chin cup
- Shock Absorption harness with leather webbing and leather split chin strap
- Seven EVA foam pads with webbing cut chin strap



ABH

The ABH Level IIIA Helmet manufactured with unique processing techniques to provide enhanced shell protection at a lower weight with improved comfort and mobility.

FEATURES

- Four-point slide buckle, H-Nape adjustable chin strap with Mil-Spec Padded Liner
- Operator cut around the ears and brow for ease of use with various communication systems, NVGs and weapon optics
- Increased Nape Protection over Maritime cut
- Can be fitted with a variety of NVG mounts, side mount accessory rail systems, chin strap assemblies and padded shell liners



ACH

The ACH I helmet, like the PASGT, provides true threat level IIIA ballistic protection but eliminates the visor in the front which allows for better mounting options for NVG shrouds.

FEATURES

- High ballistic performance with low weight, using high tenacity ballistic Aramid fiber
- Threat Level IIIA
- Available with four different suspension systems that have a four point chin cup
- Crown mesh with cross straps and plastic chin cup
- Shock Absorption harness with leather webbing and leather split chin strap
- Seven EVA foam pads with webbing cut chin strap



ACH Tactical

The ACH Tactical , like the PASGT, provides true threat level IIIA ballistic protection but eliminates the visor in the front which allows for better mounting options for NVG shrouds.

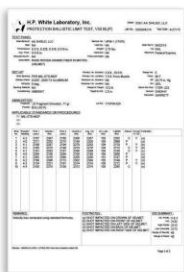
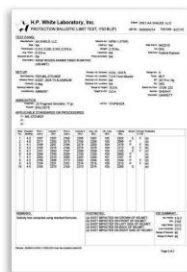
FEATURES

- Threat Level IIIA
- Can be fitted with Ops-Core ACH ARC Rails
- Available with a variety of suspension systems
- Can be fitted with NVG Shroud



Soft Armor

Protection level	Areal density (kg/m ²)	Thickness (mm)	According to level
Bullet resistant:NIJ level IIIA	6.4	10	NIJ 0101.06
Stab resistant:NIJ level I	7.0	12	NIJ0115.00
Stab resistant:NIJ level II	8.0	13	NIJ0115.00
Stab resistant:NIJ level I	7.2	12	NIJ0115.00
Bullet resistant:NIJ level IIIA	7.2	12	NIJ 0101.06
Stab resistant:NIJ level II	8.1	13	NIJ0115.00
Bullet resistant:NIJ level IIIA	8.1	13	NIJ 0101.06



Rifle Plate



Protection Level : NIJ III
Size: 10X12 inch / 30X25 cm
Weight: 2.99 lb / 1.35 kg
Ammunition:
 (1) 7.62mm Ball, M80, 149 gr
 (2) 5.56mm Ball, M193, 55 gr



Protection Level : NIJ III +
Size: 10X12 inch / 30X25 cm
Weight: 5.1 lb / 2.3 kg
Ammunition:
 (1) 7.62mm Ball, M80, 149 gr
 (2) 5.56mm Ball, M855, 62 gr
 (3) 7.62 X 39mm API,BZ,123 gr



Protection Level : NIJ IV
Size: 10X12 inch / 30X25 cm
Weight: 5.91 lb / 2.68 kg
Ammunition:
 (1) CAL..30 AP , M2, 166 gr





Model No.: WSFZ SM01 Wheeled type

Protection level: NIJ IV / EN B7 (.30 M2 AP)
Material: FRP/Alumina ceramic Composite
Surface treatment: Sleek
Size: 185x60cm
Profile: Flat
Weight: 130kg



Model No.: WSFZ SM03

Protection level: NIJ III- (M193&SS109 M16,AK47)
Material: Kevlar/Alumina ceramic
Surface treatment: Matte
Size: (185-195)x75cm
Profile: Curved
Weight: 95kg



Model No.: WSFZ SM02

Protection level: NIJIV / EN B7(.30 M2 AP)
Material: Kevlar/Alumina ceramic
Surface treatment: Matte
Size: 160x75cm
Profile: Curved
Weight: 75kg



Model No.: WSFZ SM04

Protection level: NIJIV / EN B7(.30 M2 AP)
Material: UHMWPE/Silicon carbide ceramic
Surface treatment: Matte
Size: 100x60cm
Profile: Curved
Weight: 31-36kg (Different shape)





Model No.: WSFZ SM05

Protection level: NIJIV / EN B7(.30 M2 AP)

Material: Kevlar/Alumina ceramic

Surface treatment: Matte

Size: 170x70cm

Profile: Curved

Weight: 82kg



Model No.: WSFZ SH03

Protection level: NIJ IIIa

Material: Kevlar

Surface treatment: Sleek / Matt

Size: 50x90cm

Profile: Curved

Weight: 10kg



Model No.: WSFZ SM06

Protection level: NIJ III(7.62x51,5.56x45,7.62x39)

Material: Kevlar/Alumina ceramic

Surface treatment: Matte

Size: 175x70cm

Profile: Flat

Weight: 95kg



Model No.: WSFZ SH04

Protection level: NIJ IV / EN B7

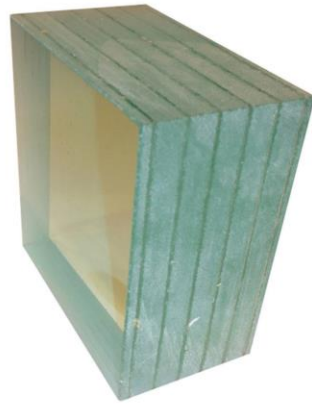
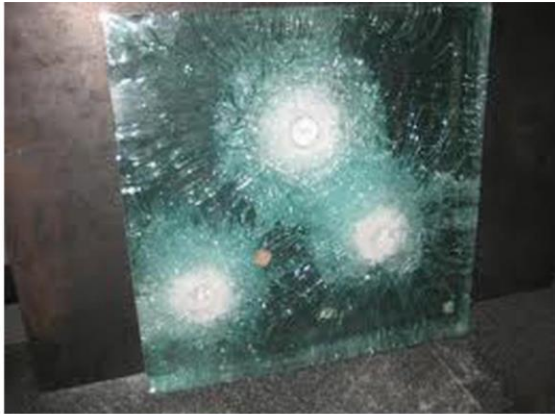
Material: Kevlar&SiC composite

Surface treatment: Sleek / Matt

Size: 60x55cm

Profile: Curved

Weight: 18kg



Protection Level	Areal Density (kg/m ²)	Thickness (mm)	Ammunition
Nij 0101.08	40	17	9 mm and .44mag
Nij 0101.08	45	19	9 mm and .44 mag
---	90	36	AK47 7.62 X 39
Nij 0101.08	140	56	M80 7.62 X 51



Bullet Proof Glass Shield NIJ IIIA



Bullet Proof Visor For Helmet NIJ IIIA

Less Lethal Anti-Riot Equipment



Anti-Riot Shield

Material: High Strength Aluminum Alloy

Demission: 900mm x 500mm x 2mm

Weight: 3.3kg (7.3lbs)

Anti-Riot Helmet

Material: High Strength PC/ABS

Demission: 2.5mm PC face shield, 3.4mm ABS helmet

Weight: 1.56kg (3.4lbs)



GREEN

CAMO

WHITE

BLACK

NET SHIELD

Enforced Anti-Riot Suit with Bullet Proof Function

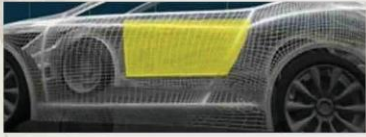




Vehicle Bulletproof Glass



Run Flat System



Bulletproof Car Door



Exhaust Ballistics Protection



Battery Ballistic Protection



Anti-mine Chassis



Reinforced Suspension Brakes



Vehicle Communication System



Ballistic Fuel Tanks



LE Light System



We provide fully customized bullet-proof vehicle upgrade as requirements. High-quality materials will be used to the minimum the weight increasing less than 50% compared to the traditional steel plate. The maximum threat level can be reached to EU B6 level with our newest High-strength fiber composite material, and additional weight will be control in 300 Kgs. All parts and level can be customized! Please contact for details!