



Personal Protection Products

Innovative Personal Protection Solutions

Plasan utilizes its vast experience and expertise in lightweight composite materials to design and supply innovative ergonomic survivability solutions of personal protection systems world-wide.

Our Personal Armor Systems Division addresses the challenges of Future Soldier Systems and conventional forces, by combining advanced ergonomic design technologies with unique innovative materials.

For 25 years, Plasan has played a key role as leader, developer and supplier of personal protection systems for the Israeli Ministry of Defense (IMOD).

We participate in Future Soldier Systems programs around the globe as a provider-designer of ballistic solutions integrated into ergonomic load carrier systems.

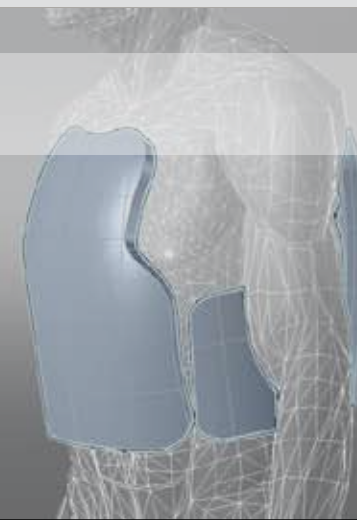
Plasan's combat proven personal protection products range from cost-effective, mass-produced merchandise to custom-designed Special Forces systems.

Plasan offers unique, optimization between protection levels, weight and cost for military, civilian and law enforcement personnel.

Innovate: user-centric, state-of-the-art ballistic and ergonomic solutions

Deliver: wide range of certified solutions – from tailored Special Forces capabilities to cost-effective, mass-produced equipment

Protect: fielded combat proven products - responsive to end-users' requirements; global team player.



Plasan saves lives around the world!

Hard Armor - Personal Ballistic Solutions

Around the world, Plasan sets the standards for state-of-the-art personal protection solutions.

Based on over 25 years of innovative technologies and advanced materials experience, Plasan uses extensive ballistic test experience, battlefield lessons and in-depth material science and engineering knowledge to develop, design and manufacture Personal Armor Systems tailored to our customers' needs.

Our solutions meet various threats, weights, and/or geometrical designs based on our customers requests.

We look forward to fulfilling your requirements and needs too!



Hard Armors and Plate Inserts



Customer	Various	Design Technology	<ul style="list-style-type: none"> ■ Monolithic plates ■ Single curve plates ■ Multi-curve plates ■ Side plates ■ Groin plates ■ Female plates ■ Special geometry and custom order plates
End User	Various		
Period of Manufacture	1985 - present		
Supplied Units	Hundreds of thousands	Protection Levels	<ul style="list-style-type: none"> ■ NIJ III, IV, IV+ ■ E-SAPI (US only) ■ X-SAPI (US only) ■ HOSDB RF1, RF2 ■ EOD and blast protection ■ Others
Armor Technology	<ul style="list-style-type: none"> ■ Aramid fibers ■ High Density Polyethylene (UHMWPE) ■ Ceramic plates and tiles: <ul style="list-style-type: none"> - Alumina - Glass ceramics - Silicon carbide - Boron carbide 		

Personal Load Carriage Systems

In today's battlefield, warfighters are at the center of a "system of systems" combat apparatus concept. Soldiers' interface with systems is multifaceted with a heavy and cumbersome Personal Load Carriage System.

Our tailored solutions undergo a comprehensive design process based on: Advanced Material Sciences, Human Factor Engineering, Biomechanical Applications, Anatomical Studies and Anthropometry to adjust size, measurements, fit and comfort.

Plasan is a leader in several research studies developing qualitative and quantitative methods to evaluate performance and effectiveness of personal protection systems.

By combining ergonomic solutions with detailed ballistic analysis, Plasan can tailor make optimized ballistic personal protection solutions to meet our customers' most challenging expectations.



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Personal Protection Systems

ATLAS: Advanced Tactical Load-carriage Armor System



Design

- Unique ergonomic load distribution system
- Minimal motion restriction
- Ergonomic hip belt and load distribution mechanism
- Tight body fit
- Modular system with upgradeable capabilities
- Covers lower spine when seated
- Degrees of Freedom enables independent motion of shoulder and pelvis
- User adjustable belt height according to individual sacral anatomical positions
- Load laterally shifted to the body's centre of gravity

Coverage Area Size Large = 0.56 m²

Weight Size Large = 2.65 kg

Options

- Groin protection
- Shoulder protection
- Throat and Neck protection
- Detachable rifle bolsters
- At least 6 X M-16/ M-4 magazines
- At least 2 X 9mm double column magazines
- Improved First Aid Kit (IFAK)
- Specially designed tactical backpack

Personal Protection Systems

MPAC: Modular Protection Armor Carrier



Materials

- Lightweight fabric
- Aluminum frame

Design

- Unique ergonomic design
- Modular system
- Ergonomic weight management transfer mechanism from shoulders to hips
- Suitable for all combat conditions
- Fully MOLLE adaptable
- Quick Assembly and Disassembly
- Full coverage of vital organs

Weight

< 1.2 kg (w/o Armor)

Ballistic Shields and Shelters and Secure Area Protection

Highly effective when used in urban or open environments for anti-terrorist, combat and law enforcement situations. Plasan developed these unique products for versatile use, enabling the user to operate against Kinetic Energy (KE), Improvised Explosive Device (IED) and fragmentation threats. The Portable Ballistic Shield is made of rigid, lightweight High Pressured Ballistic Polyethylene (UHMWPE) incorporated with transparent armor, to fit the tactical end-user's needs. UHMWPE provides high resistance to moisture, temperature, and multiple impacts during intensive battlefield use. The Israel Defense Forces (IDF) has successfully used the Portable Ballistic Shelter in numerous combat actions, proving it to be the optimal protective

shelter in the urban combat environment. The Shelter combines 2 ballistic panels and can be used horizontally or vertically.

Plasan offers a variety of products to protect VIP's, civilian, law enforcement, security and military personnel serving in static situations – public appearances, guard and sentry posts, roadblocks, inspection points, etc. Our ballistic Rollup, Protection Walls and Protected Podiums are easily transportable solutions for quick, on-the-spot needs or for temporary stationing of "cleared" areas.



Portable Ballistic Shelter



Materials	High Density Polyethylene (UHMWPE)
Design	<ul style="list-style-type: none">■ Two hinged panels■ Observation/firing cutaways■ Moisture and heat resistant
Protection levels	<ul style="list-style-type: none">■ NIJ 0108.01 Level III■ Multi-hit
Dimensions	1000 (H) x 500 (W) mm (each)
Weight	34.5 kg (total)
Options	<ul style="list-style-type: none">■ Ergonomically designed tactical carrying pack weighing 4.0 kg■ Detachable wheels

Portable Ballistic Shield



Materials

- Lightweight, High Density Polyethylene (UHMWPE)
- Ballistic Glass

Design

- Curved panel
- Moisture and heat resistant

Protection level

- NIJ 0108.01 Level III
- Multi-hit

Dimensions

950(H) x 550(W) mm

Weight

18.5 kg

Options

- Wheeled trolley
- Removable light fixture

Ballistic Podium



Materials

Composite Materials

Design

- Modular
- Portable
- Reading lights
- Adjustable height

Protection levels

Classified

Dimensions

650 (L) x 900 (W) x 1200-1350 (H) mm

Weight

120 kg

Options

Lifting jack and carrying case {800 (L) x 1100 (W) x 1400 (H)mm, weight - 100 kg}

Ballistic Wall



Materials

Ceramic composite

Design

- Modular
- Portable
- Easy to assemble
- Can be linked to a corridor of walls
- Ballistic overlap
- Can be folded

Protection levels

- STANAG level I-II
- High multi-hit capability

Dimensions

- Folded & pack 1100 (L) x 1500 (W) x 1200 (H) mm
- Open 1100 (L) x 1500 (W) x 2000 (H) mm

Weight

205 kg (+ 9 kg packing)

Ballistic Rollup

Modular Wall



Materials

Composite

Design

- Modular
- Portable
- Easy to assemble
- Assemble as a marketing rollup
- Adjustable height

Protection levels

NIJ Level IIIA

Dimensions

600 (L) x 920 (W) x
680/780/1200 (H) mm

Weight

19 kg (+ 2 kg packing)



Materials

Ceramic composite

Design

- Modular
- Portable
- Easy to assemble
- Can be linked to a corridor of walls
- Can be used horizontal or vertical
- Ballistic overlap

Protection levels

STANAG level I+II

Dimensions

680 (H) x 1200 (W) mm
200 (H) x 680 (W) mm

Weight

90 kg

Past Experience



Over 25 years of experience in the survivability business provides Plasan with a wealth of knowledge and experience. As a global company with locations in Israel, North America, and Europe, Plasan is a worldwide market leader. Through a combination of ingenuity, know-how, commitment and a full range of in-house capabilities, Plasan has brought projects to realization quickly and cost-effectively. We have delivered in a matter of weeks what usually takes in months or years for our competitors. Plasan's research, development, design, and production capabilities are complemented by its comprehensive global supply chain management system. Plasan's supply chain encompasses

dozens of material, equipment and solution suppliers worldwide. Plasan's survivability solutions place soldier performance and well-being at the center of its design philosophy. We integrate material sciences, human factor engineering, biomechanics, anatomy and anthropometry, as well as user feedback through comprehensive planning and design processes, creating the optimal personal protection line to meet all end-user requirements. Plasan's Personal Protection Products are developed for many scenarios and users: urban warfare, law enforcement, terrorist confrontation, military, Secret Service, National Guard, Border Patrol, Police and Homeland Security personnel.





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