

Hard Body Armor Insert Plates

With the increasing array and severity of ballistic threats on the battlefield, many countries are turning to advanced body armor inserts to provide greater ballistic protection to the vital organs than can be provided by a stand-alone vest. BAE Systems offers a wide range of inserts that provide enhanced ballistic protection. These upgrade inserts vary in weight, performance, and cost, depending on the specific needs of the customer.

We pioneered the Small Arms Protective Insert (SAPI) to meet the demanding requirements of the United States armed services Interceptor program. Since mid-1999, BAE Systems has had a qualified SAPI armor plate in production for the U.S. Marine Corps and the U.S. Army. Today we offer a wide range of armor plates that provide the highest levels of enhanced ballistic protection.

KEY FEATURES

- Lightweight
- Durable
- Variety of sizes available
- Optimized for fit and comfort
- Over 400,000 plates delivered



SAPI

Small Arms Protective Insert



Since 1999, BAE Systems has had a qualified SAPI armor plate in production for the U.S. Marine Corps and the U.S. Army.

Features

The SAPI has many unique features, including the following:

- **Lightweight** - Lightest weight plates currently available
- **Highly Protective** - Provides multi-hit protection against multiple rounds, while minimizing blunt trauma
- **Durable** - Durability cover that allows the plate to be dropped on the strike face without ballistic degradation
- **Reliable** - Provides ballistic protection after exposure to:
 - Hot or cold temperatures
 - Diesel fuel, water, and oil
 - Severe vibration
 - Direct flame exposure
- **Convenient** - Available in five different sizes, covering the range of the 5th-percentile female to the 95th-percentile male
- **Easy to Use** - Interchangeable from front to back
- **Comfortable** - Multi-curved geometry that is designed to optimize the fit and comfort of the soldier

Performance

SAPI has been fully qualified by the U.S. Government through rigorous independent physical, environmental, and ballistic first article testing. Our ballistic experts continue to enhance SAPI to maintain leading edge performance and weight. All lots are verified via lot conformance tests to ensure the largest possible margin of safety.

Specific product performance is as follows:

- Designed to U.S. military requirements and specifications
- Full containment of spall, debris, and residual penetrator ejecta after ballistic impact
- Weatherometer resistance
- Temperature and temperature shock resistance in accordance with military specifications
- Fluid resistance when exposed to diesel fuel, oil, and salt water
- High altitude pressure resistance
- Fungus growth resistance

WEIGHTS & DIMENSIONS

Extra-Small:	1.27 kg (2.8 lb) .184 x .292 m (7.25 x 11.5 in)
Small:	1.59 kg (3.5 lb) .222 x .298 m (8.75 x 11.75 in)
Medium:	1.82 kg (4.0 lb) .241 x .318 m (9.5 x 12.5 in)
Large:	2.09 kg (4.6 lb) .260 x .337 m (10.12 x 13.25 in)
Extra-Large:	2.40 kg (5.3 lb) .280 x .356 m (11 x 14 in)



SAPI AP

Small Arms Protective Insert–Armor Piercing



Minimal weight has become increasingly important, as personnel today are required to carry more essential equipment into the battlefield. BAE Systems designed and developed the Small Arms Protective Insert (SAPI) to meet the demanding requirements of the United States armed services Interceptor program and is continuing to move forward by increasing the performance levels of the SAPI AP.

Features

- The SAPI AP has many unique features, including the following:
- **Comfortable** - Multi-curved geometry that is designed to optimize the fit and comfort of the soldier
 - **Easy to Use** - Interchangeable from front to back
 - **Convenient** - Available in five different sizes, covering the range of the 5th-percentile female to the 95th-percentile male
 - **Highly Protective** - Provides multi-hit protection against multiple rounds, while minimizing blunt trauma
 - **Durable** - Optional durability cover that allows the plate to be dropped on the strike face without ballistic degradation to the plate
 - **Reliable** - Provides ballistic protection after exposure to:
 - Hot or cold temperatures
 - Diesel fuel, water, and oil
 - Severe vibration
 - Direct flame exposure

Performance

The SAPI AP plate performance has been verified through physical, environmental, and ballistic testing. Ballistic performance of the SAPI AP plate is verified through lot conformance testing during production.

Specific product performance is as follows:

- Designed to U.S. military requirements and specifications
- Full containment of spall, debris, and residual penetrator ejecta after ballistic impact
- Weatherometer resistance
- Temperature and temperature shock resistance in accordance with military specifications
- Fluid resistance when exposed to diesel fuel, oil, and salt water
- High altitude pressure resistance
- Fungus growth resistance

WEIGHTS & DIMENSIONS

Extra-Small:	1.70 kg (3.75 lb) .184 x .292 m (7.25 x 11.5 in)
Small:	2.08 kg (4.60 lb) .222 x .298 m (8.75 x 11.75 in)
Medium:	2.50 kg (5.50 lb) .241 x .305 m (9.5 x 12.0 in)
Large:	2.85 kg (6.30 lb) .260 x .337 m (10.25 x 13.25 in)
Extra-Large:	3.25 kg (7.20 lb) .280 x .356 m (11 x 14 in)

Side SAPI

Side Small Arms Protective Insert

BAE Systems offers a robust, thoroughly-tested Side SAPI Plate, as well as a carrier that offers the same proven soft armor solution that we have used in thousands of our OTVs.



Features

The Side SAPI Plate has many unique features, including the following:

- **Lightweight** - Plate is approximately 1 kg (2.3 lb) depending on the specific design
- **Highly Protective** - Provides multi-hit protection against multiple rounds
- **Durable** - Durability cover allows the plate to be dropped on the strike face without ballistic degradation

– **Reliable** - Provides ballistic protection after exposure to:

- Hot or cold temperatures
- Diesel fuel, water, and oil
- Severe vibration
- Direct flame exposure

– **Easy to Use** - Interchangeable from side to side

– **Comfortable** - Multi-curved geometry that is designed to optimize the fit and comfort of the soldier

Performance

Side SAPI has been fully qualified by the U.S. Government through rigorous independent physical, environmental, and ballistic first article testing. All lots are verified via lot conformance tests to ensure the largest possible margin of safety.

Specific product performance is as follows:

- Designed to U.S. military requirements and specifications
- Weatherometer resistance
- Temperature and temperature

shock resistance in accordance with military specifications

- Fluid resistance when exposed to diesel fuel, oil, and salt water
- High altitude pressure resistance



Side SAPI Carrier

- Design based on the DSCP-approved OTV soft armor solution
- Carrier includes a removable soft armor insert for additional protection
- Accommodates either a 15 cm x 20 cm (6 in x 8 in) Side SAPI Plate or an Extra-Small SAPI Plate
- Easily attaches to the side of the OTV

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