



Built-to-design: Tactical Vehicles

With the ever increasing threats like counterinsurgency and terrorism in border areas/ urban centers/ airports/industrial hubs etc., there is necessity for Light Armored Vehicles. But faced with high caliber bullets and the need to fight, it demands a vehicle which has been built-to-design for such purpose.

S M Carapace in JV with Armet Armored Vehicles, Canada offers many such tactical



Gurkha

- 155 Km/hr & payload of 2000 Kgs
- Seat crew of upto 8



Balkan

- 130 Km/hr & payload of 1100 Kgs
- Seat crew of upto 10



Sniper SOG

- 155 Km/hr & payload of 2000 Kgs
- Seat crew of upto 5

Features

- Armored to NATO STANAG 4569 level 3 (exceeds B7)
- Armor Piercing bullet protection
- Excellent blast protection with THIKA MINEPLATE™
- Protection against side load IEDs
- 360° revolving armored turret
- Snow/ Mud operability

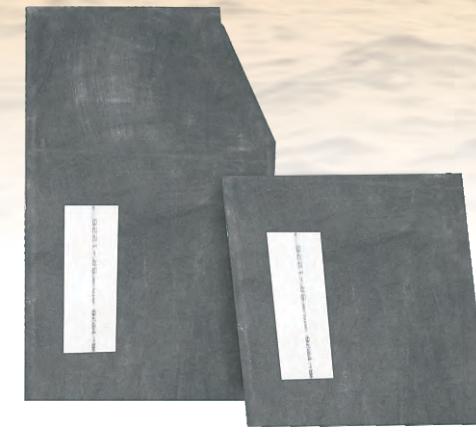


CaraPRO- Polyethylene Panels

The CaraPRO panels made from "top-of-the-line" materials like Ultra High Molecular Weight Polyethylene (UHMWPE) have been developed keeping different combat situations in mind. They are the ultimate choice when protection is required without compromising maneuverability.

Being light weight, these modular panels can be used as bolt-on armour allowing platforms to

- Size upto 1.5m x 3 m
- Light weight: <math><20 \text{ Kg/m}^2</math>
- Effective against AK47/ 7.62 ball
- Multi-hit NIJ III protection
- Inert to water, sunlight, temperature changes, etc.
- Resistant to acids, oils etc.
- UV resistant



Protecting the occupants without compromising maneuverability

Light Weight Armour Panels & Add-on Armour Kits

SM Carapace Armor works closely with OEMs to provide customized protection solutions keeping in view the limited weight carrying capacities of various platforms yet ensuring maximum survivability. Usage of improvised explosive devices (IEDs) and high lethality bullets is almost common now and makes the task further demanding. There has to be a specific solution for every kind of "platform-threat" combination. This is to ensure that the solutions are neither "over-done" (thus affecting performance) nor are "under-done" (inadequate protection).

We use an array of advanced materials to manufacture light weight armoring solutions which are specially designed to provide maximum safety along with minimum weight.

CaraFLEX- Flexible Armour

Flexibility can be just a process requirement or a key mission specific need. CaraFLEX is the best-fit solution to all such protection requirements. Being flexible and adaptive, it allows fast and effective upgradation of protection leading to enhanced survivability.

At reasonable light weight of around 4-5 Kg/m², they offer excellent multi-hit protection against low caliber bullets.

With an inherent property to engage fragments, they offer formidable protection against fragments, making them a preferred choice for spall liners and blast protection.

It is used to create vehicle armor panels with exceptional properties. When used in combination with the vehicle floor, they perform exceptionally against blast from grenades. Their inherent ability to adapt to the floor contours is an added advantage. As spall liners, they help in reducing the angle of the spall cone.

Successful applications include spall liners and armor panels for military vehicles, police vehicles, VIP vehicles, transporters, aircraft, ships, and helicopters. They are also used as



- Extremely light weight
- Easy to cut/install.
- UV and Chemical resistant
- Flame retardant
- Good acoustic absorption
- Performance over wide range of temperatures

Fast and effective upgradation for enhanced survival



Up-armouring: Personal and Logistic Vehicles

Security and safety is paramount to all, be it VIPs, political leaders, business men, or people working in hostile environments. With the ever increasing threats, there is necessity of affording reliable protection for vehicles.

S M Carapace Armour offers a vertically integrated facility covering all aspects of Vehicle Armoring:

- Armoring Solutions:
- Light Weight Armor Panels
 - Composite Armor Panels
 - Complete Armor Kits
 - Upgradation elements like Suspension, Brakes

Complete Armored Vehicles (upto B7 level):

- SUVs: Toyota Land Cruiser/ Fortuner, Ford Expedition/ Endeavour, Chevy Suburban, Mitsubishi Pajero, Mercedes G500/ G55
- Passenger Cars: Mercedes S500, Chrysler C300

The above are available in:

- Conventional Steel Armoring
- Light weight armoring using Aramids, Polyethylene, and Composites

Services offered:

- 3D White Body scan
- Structural designing and computer modeling



Ballistic Standards

NIJ 0108.01 - Ballistic Resistant Protective Materials

STANAG 4569 - Protection Levels for Occupants of Light Armored Vehicles