



Top Car Armoring Ltd.
TOPACK Mobile Protection System
Official Technical Specification

1. General Information

Product Name: TOPACK – Portable Armored Kit (Vehicle Mobile Protection System)

Manufacturer: Top Car Armoring Ltd., 10 Amsterdam St., Sderot, Israel

Country of Manufacture: Israel

Product Type: Removable, portable ballistic protection kit for civilian and commercial vehicles.

Patent Status: Registered patent in Israel and the United States.

Intended Use: Ballistic protection for vehicle occupants against small arms fire, while preserving the original vehicle structure and without requiring permanent modification.

Target Users: Security personnel, government entities, private security companies, journalists, aid organizations, civilian fleets, and private drivers.

2. System Description

The TOPACK system is a portable, removable, easy-to-install ballistic protection system that provides effective protection for a civilian or commercial vehicle against gunfire. The system was developed by Top Car Armoring and registered as a global patent. It is a unique off-the-shelf solution that enables rapid installation, a one-time purchase cost, and simple transfer from vehicle to vehicle.

The system provides partial protection (rear and side coverage) for the driver and front passenger, with optional rear-seat kits available as needed. All components are engineered for comfort, safety, and an unobstructed field of view.

3. Kit Components

Component	Description
Right-Side Module	Right-side and seat-back protection, approx. 50 kg
Left-Side Module	Left-side and seat-back protection, approx. 50 kg
Rear-Seat Module (Optional)	Protection module for the rear seats, approx. 15 kg per unit
Rear Shield Door (Optional)	Locking rear armored plate that completes the enclosure
Lower Anchor Straps	Reinforced tension/anchoring straps that secure under the seat
Upper Retention Loops	Loops designed to route around the headrest posts and secure the module to the seat

Component	Description
Right-Side Module	Right-side and seat-back protection, approx. 50 kg
Adjustable Support Feet	Height-adjustable base feet for precise fit to the seat structure and floor height

4. Technical Data

Parameter – Specification

- **Protection Level:** STANAG 4569 Level I
- **Transparent Armor (Optional):** BR5–BR6 upon customer request
- **Additional Standards:** NIJ Standard 0108.01 (equivalent to Class IIIA)
- **Front Module Weight:** ~50 kg per side
- **Rear Module Weight:** ~15 kg
- **Installation Time:** Approximately 1 hour
- **Installation Method:** No drilling or permanent modification to the vehicle
- **Transfer Between Vehicles:** Fast transfer capability
- **Dimensions (Front Module):** Height ~110 cm, Width 55 cm, Depth 12 cm
- **Dimensions (Rear Module):** Height ~95 cm, Width 45 cm, Depth 10 cm

- **Operating Temperature Range:** -30°C to +70°C
 - **Weather / UV Resistance:** Full resistance
 - **Maintenance:** Clean with a damp cloth only; perform periodic inspection once per year
 - **Manufacturer Warranty:** 12 months (conditional on proper use)
-

5. Safety and Compliance

- **Testing and Approvals:**
Approved by the Standards Institute of Israel; approved by the Israeli Ministry of Transport; tested by the Israel Defense Forces (IDF) and additional security entities.
 - **Prototype Testing Report Includes:**
Side airbag deployment; seat airbag deployment; seat belt function; compliance with field of view requirements; user ergonomics and safety.
 - **International Standards:**
 - ISO 9001:2008 – Quality Management System
 - STANAG 4569 Level I – Ballistic protection standard
 - NIJ 0108.01 Class IIIA – Equivalent U.S. ballistic standard
 - **Authorization for Use on Public Roads:**
The system is approved for use in civilian vehicles by the Israeli Ministry of Transport.
-

6. Installation and Operation

1. Position the module against the seat back.
2. Pass the headrest posts through the upper loops.
3. Fasten the lower anchor straps around the seat frame/under-seat structure.
4. Adjust the support feet for height and stabilize the module.

5. (Optional) Install the rear shield door.
6. Perform a final safety check: stability, airbag clearance, and clear field of view.

Required Personnel: One installer (two recommended for convenience).

Removal / Transfer: The system can be removed and reinstalled in another vehicle within minutes.

7. Maintenance and Inspection

- A full inspection must be performed once per year or after any ballistic event.
 - Clean only with a damp cloth; do not use solvents or high-pressure water.
 - Any component that has sustained ballistic impact must be inspected at the Top Car Armoring facility before reuse.
 - Recommended storage: dry, ventilated conditions.
-

8. Safety Guidelines

- Do not drill or weld the vehicle for installation.
 - Do not alter the structure of the kit or interfere with the airbag system.
 - Ensure that visibility and normal seat function are not restricted.
 - Only use original parts manufactured by Top Car Armoring Ltd.
 - In the event of a collision, the system must be re-inspected at the manufacturer's facility before being returned to service.
-

9. Packaging and Transport

- Each unit is shipped in a reinforced industrial carton with internal cushioning.

- Every unit is labeled with a unique serial number, production date, and inspection certificate.
 - The kit is supplied with a printed installation manual and a digital version (PDF).
TOPACK_Technical_Specs_He (2)
-

10. Expansion Options

Additional Component – Description

- **Rear Shield Door:** Additional rear armored plate for full enclosure
 - **Window Protection:** BR5–BR6 ballistic glass, per client request
 - **Vehicle Model Adaptation:** Custom-fit interface per specific vehicle model and seat type
 - **Rapid Deployment Package:** Field mounting / quick-attachment hardware kit for fast setup in operational environments
-

11. Summary

The TOPACK system from Top Car Armoring Ltd. establishes a new standard in civilian vehicle protection: a portable, efficient, lightweight, certified, and proven ballistic solution that combines engineering innovation with high ease of use.

The system delivers a life-saving protective layer, can be transferred between vehicles, and can be installed without compromising the vehicle's safety systems or its original appearance.

12. Manufacturer Details

Top Car Armoring Ltd.

10 Amsterdam St., Sderot, Israel

Phone: +972-8-649-6192

Email: info@topcar-armoring.com

Website: www.topcar-armoring.com

Document Information

Document Title: Technical Specification – TOPACK Mobile Protection System

Version: V1.3 – October 2025

Approved By: Engineering Department, Top Car Armoring Ltd.

Classification: Proprietary and Confidential.

Copying, distribution, or modification is strictly prohibited without prior written authorization from the manufacturer.