



Ref 12/8/2019-01RM

Technical Specification

WEST ARMOR® Armored Toyota Rav4 LIMITED



West Armor® Vehicle Manufacturing

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HP White Laboratory Inc.
 An Intertek Company



Base Vehicle Description

WEST ARMOR® Armored Toyota Rav4 Limited

Chassis	Toyota Rav4 LIMITED
Type	Left Hand Drive, Special Purpose Vehicle
Engine	2.5L I4 16V DOHC, Aluminum Block
Transmission	8-Speed automatic transmission with overdrive
Horsepower	203hp @ 6,600 RPM
Torque	184 lb.-ft. @ 5,000 RPM
Drive Train	FWD
Brakes	Hydraulic Assisted 4 Pistons High Performance
Suspension	Four Wheel Independent Suspension System
Electrical	120-amp alternator
Steering	Rack and Pinion Hydraulic, Power-Assisted
Dimensions	(L) 180.9 in x (W) 73.0 in x (H) 67.0 in
Wheelbase	105.9 in
Doors	4 Doors, + 1 Rear Door
Seating Capacity	2 (Driver and Co-Pilot) + 3 Back Seat
Fuel Capacity	14.5 US Gal
Payload Capacity	800 lbs.



Exterior Features

Armor Protection

Custom designed, unibody-mounted body by WEST ARMOR® Armored Vehicle Manufacturing.

The vehicle's body incorporates heat and noise insulation materials providing superior comfort level to its occupants.

Armoring of passenger compartment to provide protection in accordance with **EN 1063: BR4+**. **see table below**

Vehicle body is fully encapsulated to provide armor protection to occupants at all points.

Armor consists of all welded ballistic grade steel construction.

The interior frame, constructed of ballistic grade steel, provides overlap and backup protection for the large-surface principal impact areas such as the doors and windows.

Structural reinforcement of the support pillars and other areas that are crucial to maintaining vehicle safety in any circumstance, including rollover and ramming situations.

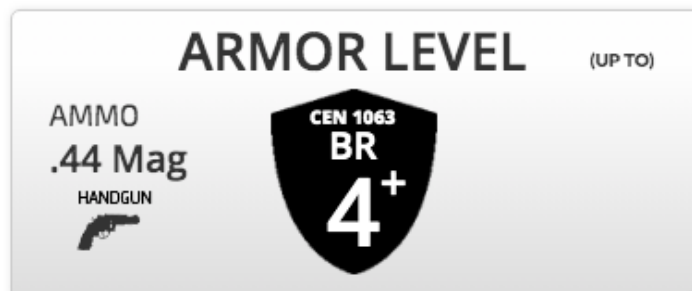
Vehicle armoring has been constructed in such a way as to ensure that a projectile following a linear or angled path shall not enter the vehicle's interior without contacting the armor material.

Passenger compartment, vertical surfaces (such as doors, firewall, roof pillars, Ballistic overlaps) to provide protection against the following ammunition in accordance with:

EN1063 Level BR4+



Magnum .44 Ammo



Opaque Armoring Details

4mm Full Perimeter armoring offering 360 ° coverage within passenger compartment using certified ballistic steel plating. Added weight of only 700lbs to the vehicle

All opaque armoring materials used in the vehicle are of the highest quality and certified to exceed ballistic levels. Overlapped apertures with bullet catchers in door/window are to prevent penetration from bullets.

Additional opaque armoring can be installed to protect mechanical components of the vehicle:

Electrical Battery

Electronic Control Module (Engine ECU)

Radiator

Fuel Tank x 1 unit(s)

An Independent Ballistic Protection Laboratory certifies all the ballistic materials used.

BALLISTIC PROTECTION LEVEL DETAILS



EN 1063

Level	Weapon	Caliber	Ammunition	Mass (g+/-0.10)	Velocity 2.5(m/s)	Distance (m) +/-10	Number of Shots
B1		.22 LR	L/RN	2.6	300	10	3
B2		9mm X 19	(1) FJ/RN/SC	8	400	5	3
B3		.357 magnum	(1) FJ/CB/SC	10.2	430	5	3
B4		.44 magnum	(1) FJ/CB/SC	15.6	440	5	3
B5		5.56 x 45	(2) FJ PB/SCP1	4	920	10	3
B6		7.62 x 51	(2) FJ PB/SCP1 (1) FJ/PB/SC	9.5	830	10	3
B7		7.62 x 51	(2) FJ/PB/HC1	9.8	820	10	3

Armored Vehicle Certificate will be issued, containing VIN, production date, and the level of ballistic protection.

Ballistic test reports from an independent certified institution, and certification for the materials utilized in the construction of the vehicle will be provided.

Bullet Resistant Glass

Bullet Resistant Glass installed on the vehicle provides the same level of protection as in “Armoring Description” Section above.

Bullet resistant glass is the highest quality, meeting the latest industry standards:

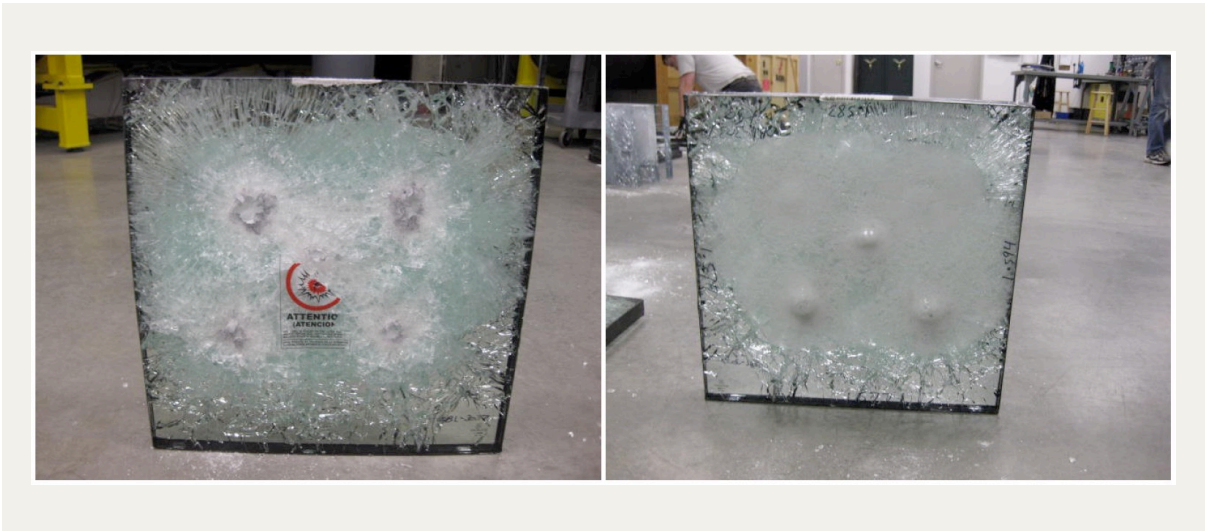
- Spall protection layer on all glass

- Free of optical distortion

- No discoloration from UV rays

- Two years delamination warranty

- Glass thickness 38mm B6 // 20mm B4

**External Paint Color**

Doors / Hatches

Doors are at rear and are specifically designed to allow quick vehicle access while minimizing the amount of vehicle interior exposure when in use.

Armor overlap at all doors to prevent penetration through doorposts and pillars.

Door pillars and hinges designed specifically for this vehicle, thereby ensuring maximum strength and usability.

All doors have weather stripping installed to prevent exterior climate from entering vehicle.



Power And Convenience

Power

2.5L I4 Aluminum Block
 Continuously Variable Valve Timing Technology
 Direct fuel injection with Active Fuel Management
 Fuel type – Regular
 150 Amp alternator
 12-volt; 750CCA/78aH Battery
 203 HP@ 6600 rpm
 184 lb/ft Torque @ 5000 rpm
 Transmission – 8 speeds Automatic with Overdrive



Convenience

Apple Car Play
 Keyless Enter-N-Go, Push Start
 Low Speed Forward Automatic Braking
 Forward Collision Alert
 Rear Vision Camera
 Rear Cross Traffic Alert
 Rear Park Assist
 Lane Change Alert with Side Blind Zone Alert



Wheels, Tires & Brakes

Wheels

Material - Aluminum
 Size – 17x8 in

Tires

225/65 R17 BSW All Season Tires
 Black Sidewall

Brakes

Four wheel vented Brakes with four-disc antilock.
 12.0 in rotors with two pistons caliper front
 11.0 in rotors with two pistons caliper back



Interior Features

Seating

Seats – 2 x Front, heated and ventilated seat cushions with perforated leather appointments

Seats – Second Row bucket seats 70/30



Climate Control

Air Conditioning --

Front - Dual Zone Electronic Automatic Temperature Control (Toyota OEM)



Entertainment Systems

Premium 8in Touch Screen Premium Sound

HD Radio

Sirius XM Radio

Backup Camera

Bluetooth connectivity

Apple Car Play



Comfort and Convenience

Radar Controlled Cruise Control

Dash top Tray

Dome lamp – door- activated instrument panel switch operated with delay

Floor Covering – Color coordinated carpet

Grab handles – driver, front passenger and roof ride handles

Headliner – Color-coordinated cloth

Instrumentation with tachometer and message center including odometer, trip odometer, distance to empty, average fuel economy, engine hour meter and warning messages

Instrument Panel

Map Lights – dual (front and rear with crew cab)

LED Dome lights, individually controlled by switch

Power Equipment – Accessory Delay

Power Equipment – Power Door locks

Power point, 12V – Rear

Power point – Auxiliary 1in media bin

Steering wheel – Color coordinated

Storage – Secondary glove box

Visors with driver – and passenger – side illuminated, covered mirrors

Tilt/Telescoping steering wheel

Windshield wipers – interval control

Exterior backup camera



Acoustics & Signaling (Optional)

High efficiency, high output, long life, low heat LED headlights and tail lights.

150-Watt Siren with PA system

Strobe lights front and rear (grill mounted and rear bumper mounted) Red/Blue

Strobe lights side mounted – Red/Blue

Top Mounted High Output LED Bar – Red/Blue

Intercom

Central fuse panel



Armoring Warranty

WEST ARMOR® warrants any armor related items installed and conversion related custom workmanship, for two (2) years, or 40,000km, whichever comes first.

Any Warranty claim is subject to prior approval by WEST ARMOR®. Only upon assessment, acceptance, and written approval of the claim by WEST ARMOR®, the warranty work shall be performed at the nearest facility authorized by WEST ARMOR® Corporation to perform such an activity. WEST ARMOR®, at its own discretion may subcontract all or a part of the job to a third party, qualified to perform such an activity.

WEST ARMOR® assumes no responsibility for damages sustained through misuse, improper use, accidental damage, negligence, or any modifications made to the vehicle following delivery of the vehicle to the customer.

WEST ARMOR® shall not cover the OEM equipment such as (but not limited to) engine, transmission, driveline, original electronic equipment of the vehicle, fuel system, wheels and tires.

Under the terms in this warranty, WEST ARMOR® shall in no way be held liable for any incidental or consequential damaged arising from loss of use or time, inconvenience, or commercial loss resulting from need for warranty work.

This warranty covers the repair and/or replacement of warranty related items only. All other non-warranty related additional costs sustained remain the responsibility of the customer.

WEST ARMOR® limits the delivery of the warranty items to the country of vehicle production only, and shall not be responsible for any other costs, such as freight, handling, customs clearance, duties and taxes.

OEM parts, electrical and other accessories not related to the process of armoring shall be covered by the warranties of their respective manufactures, and are not included in the warranty coverage provided by this agreement.

