



#### **ABOUT KF**

**Founded with a Clear Mission:** to build the most advanced, reliable, and visually uncompromising armored passenger vehicles in the world. Our vehicles are engineered not just for protection, but for performance and design that stands above the competition.

With global delivery experience and a presence on every continent, KF has earned a reputation for excellence in armored vehicle manufacturing. Each vehicle is crafted to match the specific threat level while preserving its original appearance and everyday functionality. We understand that these vehicles are more than just machines—they're personal safety solutions. That's why we approach every build with precision, care, and respect for the lives they protect.

Our clients include government officials, heads of state, executives, and individuals requiring advanced protection. From light to fully armored vehicles, we offer customizable armoring options to meet a wide range of security needs. KF is recognized worldwide for setting the standard in quality, innovation, and reliability.

#### MESSAGE FROM THE TEAM

Welcome to KF. As a global security leader, we serve clients across the world with advanced defense and protection solutions tailored for both government and private sectors. Our products are built to meet evolving threats in an unpredictable world—and they deliver.

We bring years of experience operating in high-risk environments and apply that knowledge to every solution we create. Our name has become synonymous with performance, reliability, and trust in the security industry.

As we look to the future, our focus remains on innovation, growth, and raising the standard for security products worldwide. Our commitment is not only to the quality of our solutions but also to the people who rely on them.

We invite you to explore our website, learn more about our technologies, and discover how KF can support your security mission. Whether you're protecting individuals, assets, or institutions, we're ready to deliver solutions that meet your most critical needs.





# TOYOTA COASTER SPECIFICATIONS

YEAR:	2025
MAKE:	TOYOTA
MODEL:	HIACE
BODY TYPE:	VAN
ARMOR LEVEL:	B4+
TRANSMISSION:	MANUAL TRANSMISSION
ENGINE:	Diesel
AVAILABILITY:	In Production
FUEL CAPACITY:	70 L
SEATING CAPACITY:	Optional
BODY STYLE:	CASH IN TRANSIT











# Armoring specifications for Level B4+

### Opaque Areas

The armored vehicles manufactured by KF for Armored Vehicles are fully compliant with the European Committee for Standardization (CEN) to BS EN 1063 level BR6/BS EN 1522 level FB4 which equates to the following threat:

- Caliber 7,62x39 Velocity (m/s) 700±10 Range (m)10 4.0, 3 shots into 120mm circle, velocity830 MP's +/- 10 MP's and all lesser threats (defined as ballistic B4 at both 45 & 90 degrees and various oblique angles.
- All opaque areas including the roof are protected with ballistic steel 4.25mm plating against soft core projectiles fired with the following and all lesser weapons at 9 0 d degrees and 4 5 d agrees (roof) impact angle.
- A minimum of 2 X DM51 hand grenades detonated simultaneously directly on top and underneath the vehicle.

The armoring process on the standard base vehicles is integrated after the base vehicle production without changing the exterior appearance and all gaps between the main body of the vehicle and the doors are overlapped and fitted with features to prevent foreign projectiles or splinters from entering the passenger compartment.

## Transparent Areas

- Caliber 7,62x39 Velocity (m/s) 700±10 Range (m)10 4.0, 3 shots into 120mm circle, velocity830 MP's +/- 10 MP's and all lesser threats (defined as ballistic B4 at both 45 & 90 degrees and various oblique angles.
- All opaque areas including the roof are protected with ballistic steel 4.25mm plating against soft-core projectiles fired with the following and all lesser weapons at 9 0 d degrees and 4 5 d degrees (roof) impact angle.

#### Floor

The floor is fitted out with an anti-blast steel sheet with a minimum thickness of 3.8 mm designed in such a way that it will defeat at least two DM51 hand-grenades detonated simultaneously per square meter and all lesser explosives in full compliance with the European Committee for Standardization (CEN) standards to B4 level, fitted using continuous weld.



#### **Engine compartment & Radiator Protection**

All batteries are protected within steel armored boxes within the engine compartment against projectiles and splinters; these armored boxes can be easily removed for maintenance or transportation. The vehicle management system, including the fuse boxes, which control the essential electrical vehicle functions, are protected with armored steel to level B4 against splinters and fragmentation. Full-length armored steel to the level of B4 ballistic certification is mounted on both sides of the engine compartment behind the vehicle wings protecting the engine compartment.

The dashboard, bulkhead, firewall, and openings for normal vehicle functions such as steering column, foot pedals, and other controls are protected by ballistic steel to level B4.

#### Protected Fuel Tanks

All fuel tanks are fully armored using blast steel to combat ballistic and fragmentation attacks.

## **Door Apertures**

Every door aperture has a ballistic steel overlap and splash return around the door aperture, through 180°/360° of the aperture, to prevent any ballistic leakage and also to keep the armored door in place in the event of a large side blast.

## Doors And Door Hinges

All standard door hinges on all doors are replaced with engineered – for purpose heavy-duty hinges capable of sustained functioning of the heavier armored doors.

All door pillars are armored and specially reinforced to prevent distortion caused by the additional weight of the doors.

All door hinges directly connect the armoring steel in the doors to the armoring steel in the pillars and no weight is carried by the standard sheet steel of the base vehicle, door check straps/ retainers are fitted to all doors to prevent reaching full articulation.









## Suspension System

The standard OEM Suspension system is replaced with a high-performance suspension system providing constant loading, upgraded steering dampers, front and rear shock absorbers from high-quality manufacturers of sufficient design, front and rear springs as well as front and rear anti-roll bars are installed.

Suspension turrets and anchoring points are strengthened and reinforced to enable the additional load.

#### Tires \_\_\_\_

All wheels including the spare tire are fitted with run-flat systems rated at 50 km at a speed of 80kmph run-flat capability.



#### **INSPECTION CERTIFICATE FOR ARMORED STEEL**

**VPAM** 

CHUSSAMT MELLRICHSTAL

## Prüfzeugnis

**Test Certificate** 20Z057A01

Inhaber des Dokumentes: Holder of the document

SSAB Europe Oy Rautaruukintie 155 92100 Raahe Finland

Prüfung der durchschusshemmenden Eigenschaften von nicht durchsichtigem Material nach: Test of the bullet resistance of opaque material according to

VPAM Durchschusshemmende plattenartige Materialien (PM) 2007, 31.01.2014

Hersteller:

SSAB Europe Oy

Auftraggeber: Applicant

SSAB Europe Oy

Prüfgegenstand:

Stahlblech (495mm x 495mm x 6,8mm)

steel plate

Probenbezeichnung:

Ramor 500, heat-No. 49256-041

Prüfdatum:

2. März 2020

Detailergebnisse siehe

Prüfbericht Nr.:

20M057A01

Detailed results see test report No.

Die vorgelegte Probe erfüllte die Anforderungen nach: The submitted sample met the requirements according to:

VPAM PM 2007 Fassung 2

PM 7

Die Prüfergebnisse beziehen sich ausschließlich auf die im zugehörigen Prüfbericht beschriebenen Prüfgegenstände. Dieses Dokument ist nur mit Unterschrift und Dienstsiegel gültig. Original nur mit Prägung im Staatswappen. The test results relate only to the tested samples described in the accompanying test report. This document is only valid with signature and official seat. Only the original document has an embossed coat of arms.

Beschussamt Mellrichstadt, 4. März 2020

Bötsch



Beschussamt Melirichstadt (Melirichstadt Ballistics Agency) - Lohstr. 5 - 97638 Melirichstadt Talefon +49-9776-7059-0 - Talefax +49-9778-5457 - ba-met.poststelle@img.bayern.de - Germany



#### H.P. WHITE LABORATORY, INC.

3114 Scarboro Road Street, Maryland 21154-1822 Tetephone: (410) 838-6550

Facsimile: (410) 838-2802 Email: info@hpwhite.com



22 February 2010 (HPWLI 11453-01C)

Glass Shield FZ, LLC P.O. Box 35410 Ras Alkhima UAE

Attention: Mohammed Almoghrabi

#### Gentlemen:

In accordance with your instructions, H.P. White Laboratory, Inc. conducted ballistic resistance testing of three proprietary armor samples received 17 February 2010 via VMW Express.

Testing was conducted in accordance with the provisions of EN-1063, Level BR6, using caliber 7.62x51mm, 149 grain, M80, Ball ammunition. The test samples were positioned on an indoor range 32.8 feet from the muzzle of a test barrel to produce zero degree obliquity impacts. Velocity screens were positioned at 23.5 feet and 26.5 feet which, in conjunction with elapsed time counters (chronographs), were used to compute projectile velocities 25.0 feet forward of the muzzle. Penetrations were determined by visual examination of 0.001 inch aluminum foil witness panel positioned 20.0 inches behind, and parallel to, the test samples. Table I presents a summary of the enclosed data records.

TABLE I. SUMMARY OF RESULTS

	Test Sample		Ballistic Threat					Results
Number	Weight (lb)	Thickness (in) (a)	Obliquity (degrees)	Caliber	Shots (b)	Velocity (fps) Max. Min.		Penetrations
020213	46.40	1.560	0	7.62, M80	3	2730	2712	0
020214	46.60	1.561	.0	7.62, M80	3	2760	2715	0
020215	47.20	1.578	0	7.62, M80	3	2738	2717	0

(a) Average of four corner thicknesses.

(b) Three impacts on vertices of a 120mm equilateral triangle.

Based on the data presented in Table I, the test samples submitted for testing SATISFIED the ballistic resistance requirements of EN-1063, Level BR6. This conclusion is based on data obtained from having tested only the samples submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test samples are being discarded. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Very truly yours,

H.P. White Laboratory, Inc.

Craig B. Dunn

CBD/tc Enclosures

RESEARCH • DEVELOPMENT • ENGINEERING





# H.P. White Laboratory, Inc.

BALLISTIC RESISTANCE TEST

CHERT : GLASS SHIELD FZ LLC.

Job No.: 11453-01 Test Oate: 2/22/10

TEST PANEL

MANAGEMY: GLASS SHIELD FZ LLC.

Size 20 x 20 in.

Thicknesses: 1,564, 1,560, 1,560, 1,558 in.

Avg Thick 1,560 in.

Description PROPRIETARY

Sample No.: 020213

Weight: 46,40 lbs.

Hardness NA

Pastamana NA

Date Rec'd 02/17/10

VI VMW EXPRESS

Reamed N/A

SET-UP

ST-UP
Shal Specing | 120mm TRIANGLE
Witness Panel | 0.001" ALUMINUM FOIL

Obliquely () deg.

Backing Material: NA

Condeming AMBIENT

Primary Vel. Screens | 23.5 ft., 26.5 ft. Primary Vel. Location | 25.0 ft. From Muzzle Residual Vel. Screens | NA

Residual Vel. Location NA

Range to Target: 32.8 ft.
Target to Wit.: 20.0 in. Target to Wit.: 20.0 in.

Range No.: 4 Temp : 68 F

89 29,80 in. Hg RH 25%

Barrel No./Gun : R-4/ ,308

Gumer : PRATT Recorder : GORSCHE

**AMMUNITION** 

(1): 7.62mm Ball, M80, 149 gr.

(2)

(3)

(4)

La No UNKNOWN

Lot No. : Lot No.

Lot No.

APPLICABLE STANDARDS OR PROCEDURES

(1) EN 1063 BR6

(2) REQUIRED VELOCITY: 2690- 2756 fps.

Shot No.	Атто	Time 1 (usec)	Velocity 1 (It s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vet. (ft/s)	Penetration	Footnotes
1 2 3	1 1	1106 1097 1099	2712 2735 2730	1106 1101 1101	2712 2725 2725	2712 2730 2727	None None None	

REMARKS:

FOOTNOTES

Favore 11453-01 (020213) GLASS SHELD FZ LLC. Pen





# H.P. White Laboratory, Inc.

BALLISTIC RESISTANCE TEST

Client: GLASS SHIELD FZ LLC.

Job No.: 11453-01

Test Date: 2/22/10

TEST PANEL

Manufacturer: GLASS SHIELD FZ LLC.

Size: 20 x 20 in.

Thicknesses: 1.564, 1.560, 1.560, 1.561 in.

Avg. Thick : 1.561 in. Description : PROPRIETARY Sample No.: 020214

Weight: 46.60 lbs.

Hardness: NA

Via: VMW EXPRESS

Date Rec'd.: 02/17/10

Plies/Laminates : NA

Returned: N/A

SET-UP

Shot Spacing 120mm TRIANGLE

Witness Panel: 0.001" ALUMINUM FOIL

Obliquity: 0 deg. Backing Material : NA Conditioning : AMBIENT

Residual Vel. Screens : NA Residual Vel. Location : NA

Range to Target: 32.8 ft.

Primary Vel. Screens: 23.5 ft., 26.5 ft.

Primary Vel. Location: 25.0 ft. From Muzzle

Target to Wit.: 20.0 in.

Range No.: 4 Temp.: 68 F

BP: 29.80 in. Hg

RH: 25%

Barrel No./Gun : R-4/ .308

Gunner : PRATT

Recorder: GORSCHE

**AMMUNITION** 

(1): 7.62mm Ball, M80, 149 gr.

(2):

(3): (4):

Lot No : UNKNOWN

Lot No. : Lot No

Lot No.:

APPLICABLE STANDARDS OR PROCEDURES

(1): EN 1063 BR6

(2): REQUIRED VELOCITY: 2690-2756 fps.

(3):

Shot No.	Ammo.	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Footnotes
2 3	1 1 1	1104 1086 1092	2717 2762 2747	1106 1088 1094	2712 2757 2742	2715 2760 2745	None None None	
REM	ARKS :					FOOTNOTE	S:	

Filename: 11453-01 (020214) GLASS SHIELD FZ LLC..Pen





# H.P. White Laboratory, Inc.

BALLISTIC RESISTANCE TEST

Client : GLASS SHIELD FZ LLC.

Job No.: 11453-01 Test Date: 2/22/1

TEST PANEL

Manufacturer: GLASS SHIELD FZ LLC.

Sue: 20 x 20 in.

State : 20 x 20 in. Thicknessee : 1.578, 1.577, 1.580, 1.578 in.

Avg Trick: 1.578 in.

Description : PROPRIETARY

Sample No.: 020215

Weight: 47.20 lbs.

HAGES: NA

Plies/Laminates : NA

Date Rec'd 02/17/10

Ve VMW EXPRESS

Returned N/A

SET-UP

Shot Spacing: 120mm TRIANGLE

Wilness Panel: 0.001" ALUMINUM FOIL

Othquity: 0 deg.

Secting Material : NA Conditioning AMBIENT

Primary Vel. Screene : 23.5 ft., 26.5 ft. Range No.: 4
Primary Vel. Location : 25.0 ft. From Muzzle Temp.: 68

Residual Vel. Screene: NA Residual Vel. Location: NA

Range to Target: 32.8 ft.

Target to Wit. 20.0 in.

Temp 68 F

BP 28.80 in. Hg RH 25%

Barrel No./Gun : R-4/ ,308 Gunner PRATT

Recorder : GORSCHE

**AMMUNITION** 

(1): 7.62mm Ball, M80, 149 gr.

(3) :

(4)

Lei No : UNKNOWN

Let No.

Lot No. : Lot No. :

APPLICABLE STANDARDS OR PROCEDURES

(1): EN 1063 BR6

(2): REQUIRED VELOCITY: 2690- 2756 (ps.

Shot No.	Ammo.	Time 1 (usec)	Veloaty 1 (R/s)	Time 2 (us/eq)	Velocity 2 (ft/s)	Avg. Vel. (fbt)	Penetration	Footnotes
1 2 3	1 1 1	1102 1101 1094	2722 2725 2742	1106 1102 1097	2712 2722 2735	2717 2724 2738	None None None	
	nve.							

REMARKS:

FOOTNOTES:

Filename: 11453-01 (020215) GLASS SHIELD FZ LLC. Pen



# Prüfbericht

Nr. 203.008.01.15



TÜV NORD Mobilität GmbH & Co. KG

IFM - Institut für Fahrzeugsechnik und Mobilität

Adjointrable 7

Tel.: 9261 825-4120 Fax: 9201 825-4150 www.tuev-nord.de

# Kurzzusammenfassung der Begutachtung eines Reifennotlaufsystems

Abstract of testing of a runflat system

Auftraggeber: Europlast - Nycast GmbH

Orderer: Industriestr. 47

42551 Velbert - Röbbeck

#### Untersuchungsgegenstand: test object:

Großreifen – Notlaufsystem, Feige 20", dreiteilig gefertigt aus elastomer-modifiziertem Gußpolyamid, Flanken mit Einstichen zur elastischen Gestaltung der Anlageflächen zu den Reifen, mit Stahtzwischenringen an den Anlageflächen zu den Reifen

Large tires – run-flat system, nm 20", three-piece
Manufactured of elastomer modified cast polyamid. Flanks with grooves for elastic design of the contact
curfaces to the tires, with sleel spacer rings to the contact surfaces of the tires.



TÜV NORD Mobilität GmbH & Co. KG, IFM – Institut für Fahrzeugtechnik und Mobilität, Adlerstr. 7, D-45307 Essen Akkreditiert von der Akkreditierungsstelle des Kraftfahrt-Bundesamtes Bundesrepublik Deutschland DAR-Registrier-Nr. - KBA-P 00004-96



