TESTING BOOKLET

BALLISTIC TESTING REPORT SUMMARY

LEVEL IV CERAMIC ARMOR PLATE 10x12

Model B-AP-4-1012-ALU-SC

Stand-alone hard armor | Single curve | Customer-facing laboratory summary

CURRENT PRODUCT SPEC
6.9 lb
each plate

THICKNESS
0.90 in
single-curve

CONFIGURATION
Stand-Alone
no soft backing

CONSTRUCTION
Ceramic + PE
product-page spec



01 ONE PLATE - TWO PURCHASE OPTIONS

SINGLE PLATE
Level IV Ceramic Armor Plate 10x12 - Single-Curve
Same plate sold individually.

SET OF 2 / BOGO
Level IV Ceramic Armor Plate 10x12 - Set of 2
Two-plate front/back set using the same plate platform.

WHAT THIS BOOKLET COVERS

5 rifle threats | **18 recorded impacts**

M2 AP | B32 API | M80 | 7.62x39 BZ API | 5.56 SS109

Independent ETL V0 ballistic evaluations, test-report excerpts, and SKU-specific warranty summary.

PRODUCT PROFILE & TEST PROGRAM

One SKU, two commercial purchase configurations, five hard-armor threat evaluations.

01 CURRENT COMMERCIAL PROFILE

PRODUCT NAME	Level 4 Ceramic Armor Plate 10x12 - Single-Curve
MODEL	B-AP-4-1012-ALU-SC
SIZE	10 x 12 in
WEIGHT	6.9 lb (current product page)
THICKNESS	0.90 in (current product page)
BUILD	Ceramic + UHMWPE (current product page)
USE	Stand-alone; soft armor backing not required
PURCHASE	Single plate or 2-plate BOGO bundle

02 HAP TEST PROGRAM

Program intent supplied by Ace Link Armor: stand-alone, ambient/as-is, 0 deg. obliquity, no complete penetration allowed.

ID	Threat	Instruction target	ETL shots	ETL setpoint	Report
HAP-1	7.62 x 63 mm M2 AP	878 m/s (instruction)	3	2880 +/- 30 ft/s	26-236-0101
HAP-2	7.62 x 54R B32 API	860 m/s (instruction)	3	2821 +/- 30 ft/s	26-236-0103
HAP-3	7.62 x 51 mm M80	847 m/s (instruction)	6	2780 +/- 30 ft/s	26-237-0117

01 / BALLISTIC TESTING REPORT SUMMARY

BALLISTIC PERFORMANCE SUMMARY

As recorded on the five Energetic Test Labs ballistic evaluation sheets.

RECORDED IMPACTS	COMPLETE PENETRATIONS	MAX RECORDED BFD	OBLIQUITY
18	**0**	**41.89 mm**	**0 deg.**
across 5 test articles	all shots marked PP	HAP-3 / M80	all recorded impacts

01 | SHOT-BY-SHOT LABORATORY DATA

HAP	Threat	Shot	Ave. velocity	Result	BFD	Location
HAP-1	M2 AP	1	2,867.34 ft/s	PP	29.85	TL
		2	2,893.81 ft/s	PP	36.10	BR
		3	2,887.96 ft/s	PP	31.06	CENTER
HAP-2	B32 API	1	2,843.81 ft/s	PP	32.26	TL
		2	2,799.17 ft/s	PP	26.80	BR
		3	2,793.36 ft/s	PP	23.75	CENTER
HAP-3	M80	1	2,789.71 ft/s	PP	41.89	TL
		2	2,782.48 ft/s	PP	40.90	BR
		3	2,789.71 ft/s	PP	N/A	ML
		4	2,794.60 ft/s	PP	N/A	MR
		5	2,803.36 ft/s	PP	N/A	BL
		6	2,815.84 ft/s	PP	N/A	TR
HAP-4	BZ API	1	2,412.56 ft/s	PP	28.39	TL
		2	2,424.55 ft/s	PP	25.62	MR
		3	2,414.87 ft/s	PP	N/A	BL
HAP-5	SS109	1	3,105.70 ft/s	PP	15.40	TL
		2	3,115.83 ft/s	PP	18.69	MR
		3	3,140.40 ft/s	PP	N/A	BL

READING THE RESULTS

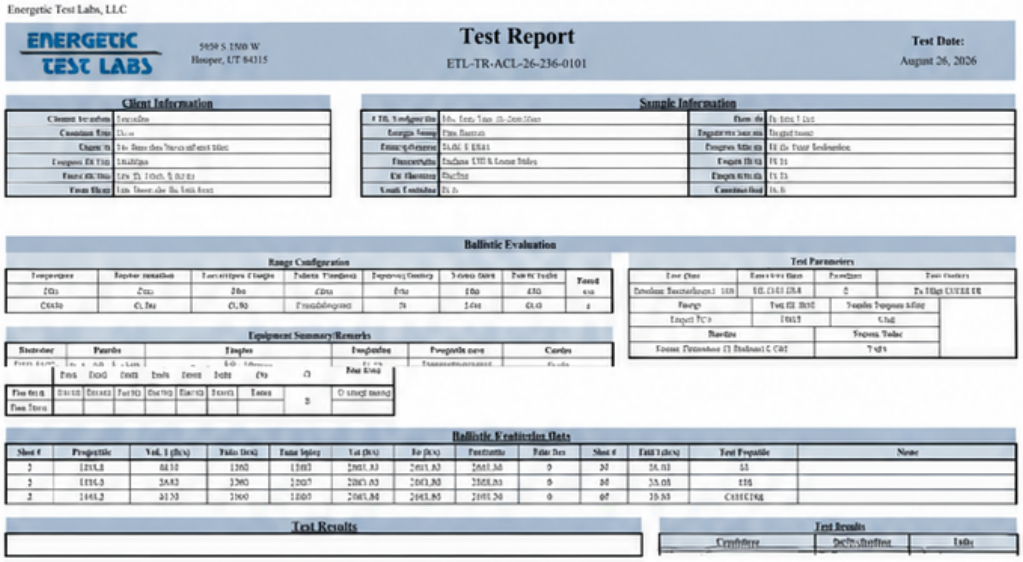
ETL uses PP = Partial Penetration and CP = Complete Penetration. Every recorded impact in these five reports is marked PP; no CP result is recorded. BFD was measured on all HAP-1/HAP-2 shots, HAP-3 shots 1-2, and HAP-4/HAP-5 shots 1-2.

LABORATORY TESTING

LABORATORY REPORT EXCERPTS

HAP-1 and HAP-2 - reproduced from the attached ETL test sheets.

HAP-1 ETL-TR-ACL-26-236-0101



Energetic Test Labs, LLC

ENERGETIC TEST LABS — 5959 S 1500 W, Hooper, UT 84315

Test Report
ETL-TR-ACL-26-236-0101

Test Date: August 26, 2026

Client Information | Sample Information

Ballistic Evaluation

Range Configuration | Test Parameters

Equipment Summary/Remarks

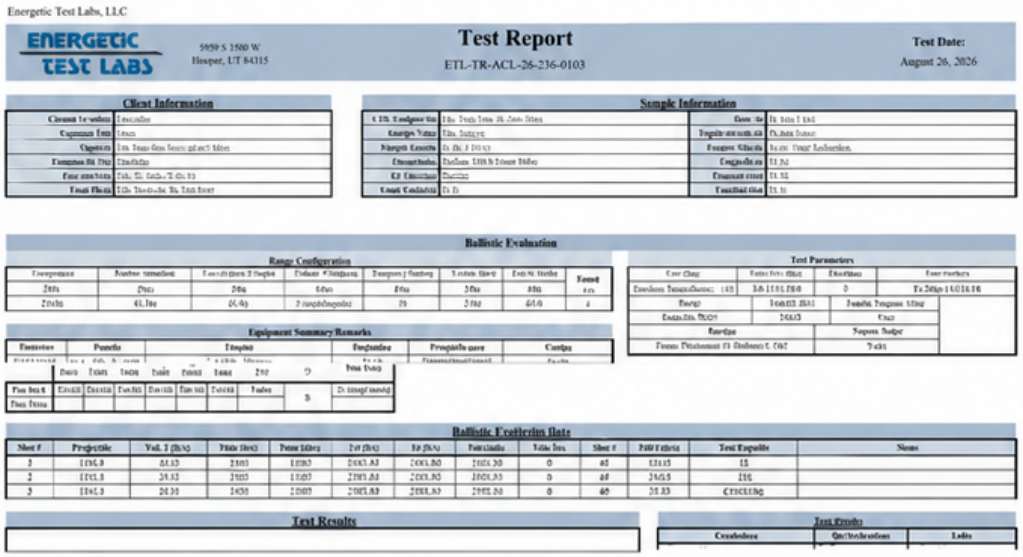
Ballistic Evaluation Data

Test Results | Test Results

3/3 impacts: PP; no CP recorded. Max BFD: 36.10 mm.

M2 AP | Avg. velocities 2867.34-2893.81 ft/s | Report model field: B-AP-4-1012

HAP-2 ETL-TR-ACL-26-236-0103



Energetic Test Labs, LLC

ENERGETIC TEST LABS — 5959 S 1500 W, Hooper, UT 84315

Test Report
ETL-TR-ACL-26-236-0103

Test Date: August 26, 2026

Client Information | Sample Information

Ballistic Evaluation

Range Configuration | Test Parameters

Equipment Summary/Remarks

Ballistic Evaluation Data

Test Results | Test Results

3/3 impacts: PP; no CP recorded. Max BFD: 32.26 mm.

7.62x54R B32 | Avg. velocities 2793.36-2843.81 ft/s | Report model field: B-AP-4-1012

Source note: the laboratory sheets record three shots in each series; this is the executed test data used throughout the booklet.

HARD ARMOR TESTING RESULTS

HAP-3 - 7.62 x 51 mm M80

Six-shot stand-alone hard armor series | ETL-TR-ACL-26-237-0117

Energetic Test Labs, LLC

ENERGETIC TEST LABS
8955 S 3340 St
Phoenix, AZ 85037

Test Report
ETL-TR-ACL-26-237-0117

Test Date:
August 31, 2026

Order Information

Customer Name	Ace Link
Customer PO	TBD
Contract Number	ETL-CL-25-3008
Customer Part	HAP-3
Test Order	ETL-TO-ACL-26-237
Test Plan	ETL-TP-ACL-26-316-17

Sample Information

ETL Sample ID	ETL-TSI-ACL-26-237-0117	Size	10x12
Sample Type	Hard Armor	Shape	Shooter Cut
Model Number	N/A	Fabric/Exterior	N/A
Description	N/A	Fabric/Backer	N/A
Lot Number	N/A	Thickness (in)	0.90
Serial Number	N/A	Construction	N/A

Ballistic Evaluation

Range Configuration

Temperature (°F)	Relative Humidity (%)	Barrel to target (ft)	Target to Witness (ft)	Vel. 1 to 2 (ft/s) (in)	Vel. 1 to 2 (ft/s)	S1 to 6 (ft/s) (ft/s)	Range
67	41-74	49.3	7.500-16.667	6	53.3	43.9	n/a

Test Parameters

Test Type	Six Shot	Pattern	Shot Pattern
Ballistic Resistance - V0	NIJ 0101.06	N/A	7.62x51 mm M80 Ball, TR
Rifle	Velocity (ft/s)	Test from muzzle	Ammo
N/A	N/A	10 ft from muzzle	N/A
Range		Weather/Light	
Extra Plates/AB to Ballistic Clay		N/A	

Equipment Correction Data

Receiver	Barrel	Trigger		Pendulum	Propellant Lot	Casing
-	N/A	N/A	N/A	N/A	N/A	N/A

Pre-Test	394.8	196.4	193.5	18.0	20.19	19.32	95.0	-	6:33:00 AM
Post-Test	-	-	-	-	-	-	-	-	-

Ballistic Evaluation Data

Shot #	Proj. Wt. (gr)	Proj. Wt (gr)	Time 1 (µs)	Time 2 (µs)	V2 (ft/s)	Avg (ft/s)	Avg (ft/s)	Obliq. (°)	Result	BFD (mm)	Shot Location	Notes
1	147.3	49.7	1921	1555	2783.52	2767.53	2775.53	0	PP	41.89		
2	147.3	49.7	1927	1556	2775.40	2758.14	2766.77	0	PP	N/A		
3	147.3	49.7	1962	1583	2778.52	2754.12	2766.32	0	PP	N/A		
4	147.3	49.7	1969	1544	2767.04	2791.26	2749.15	0	PP	N/A		
5	147.3	49.7	1982	1514	2819.61	2804.04	2811.84	0	PP	N/A		
6	147.3	49.7	1985	1536	2817.64	2819.07	2815.54	0	PP	N/A		

01 KEY LAB DATA

SHOTS
6

RESULT
6 x PP / 0 x CP

VELOCITY RANGE
2782.48-2815.84 ft/s

BFD MEASURED
Shots 1-2

MAXIMUM BFD
41.89 mm

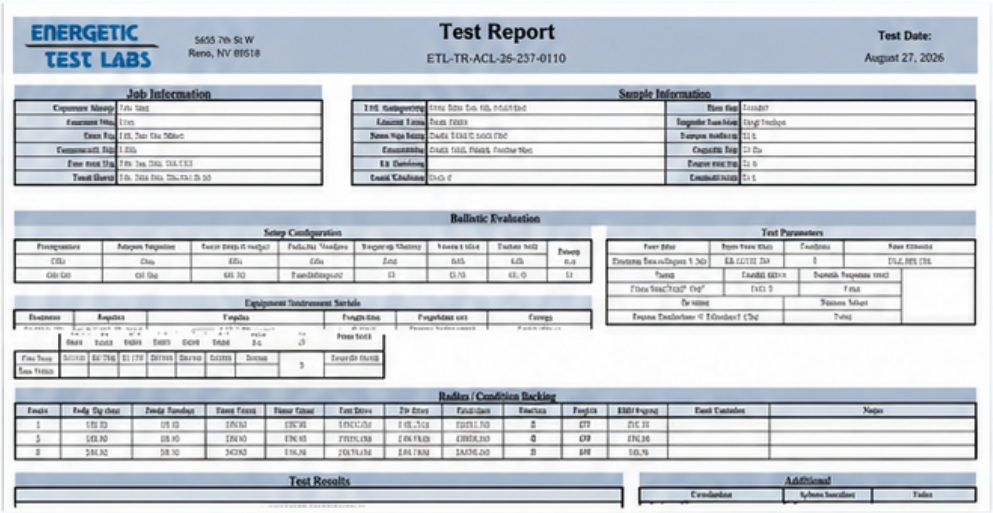
REPORT SAMPLE
10 x 12 in / 7.528 lb / 0.934 in

The supplied test program instructed BFS/BFD measurement on shots 1 and 2 only with a 44 mm maximum. ETL recorded 41.89 mm and 40.90 mm; shots 3-6 are reported as N/A for BFD.

LABORATORY REPORT EXCERPTS

HAP-4 and HAP-5 - additional rifle threats on the same SKU test program.

HAP-4 ETL-TR-ACL-26-237-0110



ENERGETIC TEST LABS
5655 7th St W
Reno, NV 89518

Test Report
ETL-TR-ACL-26-237-0110

Test Date:
August 27, 2026

Job Information

Sample Information

Ballistic Evaluation

Setup Configuration

Test Parameters

Equipment Instrument Serials

Radius / Condition Backing

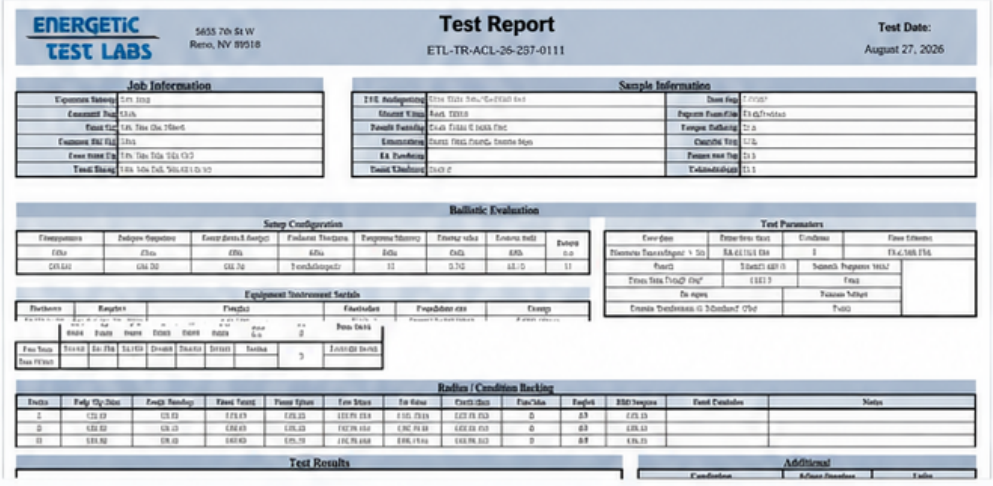
Test Results

Additional

3/3 impacts: PP; no CP recorded. Max measured BFD: 28.39 mm.

7.62x39 BZ API | Avg. velocities 2412.56-2424.55 ft/s | Model: B-AP-4-1012-ALU-SC

HAP-5 ETL-TR-ACL-26-237-0111



ENERGETIC TEST LABS
5655 7th St W
Reno, NV 89518

Test Report
ETL-TR-ACL-26-237-0111

Test Date:
August 27, 2026

Job Information

Sample Information

Ballistic Evaluation

Setup Configuration

Test Parameters

Equipment Instrument Serials

Radius / Condition Backing

Test Results

Additional

3/3 impacts: PP; no CP recorded. Max measured BFD: 18.69 mm.

5.56x45 SS109 | Avg. velocities 3105.70-3140.40 ft/s | Model: B-AP-4-1012-ALU-SC

Both reports identify a stand-alone hard armor plate, single-curve geometry, 10 x 12 in size, and the B-AP-4-1012-ALU-SC model number.

WARRANTY & POST-SALE SUPPORT

SKU-specific duration from the current product page; coverage framework from the attached Ace Link Armor warranty document.

5-YEAR LIMITED WARRANTY

Current product pages list a 5-year warranty for this Level IV ceramic plate.

The corporate plate warranty document provides the coverage, exclusions, remedies, and support framework below.

01 COVERAGE

- Ballistic integrity under normal, intended use
- Material and manufacturing defects
- Delamination or structural failure not caused by misuse
- Workmanship, edge finishing, labeling, and serial assignment

02 EXCLUSIONS

- Misuse, improper handling, chemicals, or extreme heat beyond recommended conditions
- Drops, impacts, or ballistic hits received during operational use
- Unauthorized modification or repair
- Normal external-coating wear that does not affect ballistic performance

03 APPROVED CLAIM REMEDIES + SUPPORT

REMEDIES

Replacement of approved defective plate(s) at no cost.

Technical evaluation / root-cause report if requested by contracting authority.

Priority processing for government clients.

POST-SALE SUPPORT

Use, care, handling and storage guidance.

Ballistic performance documentation and audit support.

Inspection support and end-user training materials.

IMPORTANT SOURCE NOTE

This booklet is a customer-friendly summary of selected independent laboratory results and the manufacturer-supplied HAP-to-SKU mapping. It does not replace the original ETL reports or establish product certification beyond what is explicitly stated in applicable source documents.

Reports: 0101 / 0103 / 0117 / 0110 / 0111 | Warranty: BODY ARMOR PLATE WARRANTY COVERAGE | Product: acelinkarmor.com