OREGON BALLISTIC LABORATORIES

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ISO/IEC 17025:2017 Accredited Laboratory
NVLAP Code: 200826-0
A2LA Certificate No.: 7169.01

March 28, 2025

Applied Systems
128 Shanti Industrial Estate
S N Raod, Mulund West, Mumbai 80
ATTN: Sidharth Modi

Dear Mr. Modi:

In accordance with your instructions, Oregon Ballistic Laboratories conducted Ballistic Resistance (V_0) testing on two samples.
The samples were tested in accordance with Customer Provided Test Plan in an indoor range with the muzzle of the test barrel mounted 32 feet from the target and positioned to produce 0-degree obliquity impacts. Four Oehler model 57 infrared velocity light screens, in conjunction with two HP 5315A time-based frequency counters, were placed such that projectile velocity was measured 8.25 feet from the target. Penetrations were determined by examination of a piece of 0.020-inch 2024-T3 aluminum mounted 6 inches behind and parallel to the test sample. Results for all testing performed for this purpose are summarized in the following table.

Test Sample				Ballistic Threat			Results	
OBL No.:	Sample No.:	Weight (lbs.)	Average Thickness (in.)	Projectile	Shots	Velocity (fps)	Penetrations	Pass/Fail
39045	N/A	2.77	N/A	12GA 1 1/8oz 4 Shot Steel	1	Box Muzzle Velocity 1500 fps	0	***PASS***
39046	N/A	3.66	N/A	12GA 1 1/8oz 4 Shot Steel	1	Box Muzzle Velocity 1500 fps	0	***PASS***

*Data shown in the table represents fair impacts only.

This report pertains only to the samples tested and may not be modified or edited in any way. This report may not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any federal government agency. Samples will be maintained at Oregon Ballistic Laboratories for 30 days and discarded unless other instructions are received. If you have any further questions or concerns, don't hesitate to contact us.

Reviewed by,

Digitally signed by Darius Nuttbrock
Date: 2025.03.31 11:20:40-07'00'

Darius Nuttbrock
Ballistic Test Director
Oregon Ballistic Laboratories
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Prepared by,

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Contributors to measurement of uncertainty:
Velocity- tape measure used for screen spacing, Measurement of uncertainty of frequency counters.

OREGON BALLISTIC LABORATORIES

BALLISTIC RESISTANCE TEST - V_0

Customer:	Applied Systems
OBL ID#:	39045
Date Rcv'd:	3/26/2025
Test Date:	3/27/2025
Purchase Order:	

TEST SAMPLE:

Sample No.:	N/A	**Size:**	Medium
Model No.:	N/A	**Weight (lb.):**	2.77
Lot No.:	N/A	**Thickness:**	
Plies:	N/A	**Avg. Thk. (in):**	
Description:	ANJALI Body Protector Front		

RANGE SET-UP:

Range to Target:	32 ft	**Range #:**	2	**Pre Test:**	
Screen Dist. Vel. 1 (ft.):	5	**Temperature:**	70.6 °F	**Clay Drops (mm):**	
Screen Dist. Vel. 2 (ft.):	4	**Bar. Pressure:**	25.38 in. Hg	**Drop Avg (mm):**	
Screen 4 to target (ft):	N/A	**Rel. Humidity:**	44.0 %	**Clay Temp °F:**	
Primary Vel. Location:	8.25 ft. from target	**Sample Temp.**	Amb. °F	**Clay Box #:**	
Striking Velocity:	No	**Recorder:**	Chris Moe	**Post Test:**	
Target to Witness:	6 in.	**Gunner:**	Jonathan Valladares	**Clay Drops (mm):**	
Witness Panel:	0.020" 2024-T3 Alum.			**Drop Avg (mm):**	
Backing Material:	N/A			**Clay Temp °F:**	
Obliquity:	0 Degrees				**CLAY CALIBRATION NOT REQUIRED**
Barrel:	12GA 32"				

AMMUNITION:

Projectile:	Federal 12GA 1 1/8oz 4 Shot Steel	**Powder:**	

STANDARDS / PROCEDURES:

Customer Provided Test Plan	**Required Velocity:**		**fps ±**	**fps**

SHOT NO.	PROJECTILE WT. (gr.)	POWDER WT. (gr.)	TIME 1 µs (10^{-6})	TIME 2 µs (10^{-6})	VELOCITY 1 ft/s	VELOCITY 2 ft/s	AVERAGE VELOCITY	PENET. P/C	OBLIQUITY	CALIPER BFD	NOTES
1								P	0°		

REMARKS:

P=Partial Penetration
C=Complete Penetration
UH=Unfair Hit
Projectile Yaw Check: <5° for all velocity shots
Box Muzzle Velocity 1500 fps

TEST RESULTS:

Test sample satisfied the ballistic requirements given.

FOOTNOTES:

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OREGON BALLISTIC LABORATORIES

BALLISTIC RESISTANCE TEST - V_0

Customer:	Applied Systems
OBL ID#:	39046
Date Rcv'd:	3/26/2025
Test Date:	3/27/2025
Purchase Order:	

TEST SAMPLE:

Sample No.:	N/A	**Size:**	Medium
Model No.:	N/A	**Weight (lb.):**	3.66
Lot No.:	N/A	**Thickness:**	
Plies:	N/A	**Avg. Thk. (in):**	
Description:	ANJALI Body Protector Back		

RANGE SET-UP:

Range to Target:	32 ft	**Range #:**	2	**Pre Test:**	
Screen Dist. Vel. 1 (ft.):	5	**Temperature:**	70.6 °F	**Clay Drops (mm):**	
Screen Dist. Vel. 2 (ft.):	4	**Bar. Pressure:**	25.38 in. Hg	**Drop Avg (mm):**	
Screen 4 to target (ft):	N/A	**Rel. Humidity:**	44.0 %	**Clay Temp °F:**	
Primary Vel. Location:	8.25 ft. from target	**Sample Temp.**	Amb. °F	**Clay Box #:**	
Striking Velocity:	No	**Recorder:**	Chris Moe	**Post Test:**	
Target to Witness:	6 in.	**Gunner:**	Jonathan Valladares	**Clay Drops (mm):**	
Witness Panel:	0.020" 2024-T3 Alum.			**Drop Avg (mm):**	
Backing Material:	N/A			**Clay Temp °F:**	
Obliquity:	0 Degrees				**CLAY CALIBRATION NOT REQUIRED**
Barrel:	12GA 32"				

AMMUNITION:

Projectile:	Federal 12GA 1 1/8oz 4 Shot Steel	**Powder:**	

STANDARDS / PROCEDURES:

Customer Provided Test Plan		**Required Velocity:**	fps ± fps

SHOT NO.	PROJECTILE WT. (gr.)	POWDER WT. (gr.)	TIME 1 µs (10^{-6})	TIME 2 µs (10^{-6})	VELOCITY 1 ft/s	VELOCITY 2 ft/s	AVERAGE VELOCITY	PENET. P/C	OBLIQUITY	CALIPER BFD	NOTES
1								P	0°		

REMARKS:

P=Partial Penetration
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Box Muzzle Velocity 1500 fps

TEST RESULTS:

Test sample satisfied the ballistic requirements given.

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OBL #39045 – Pre Test



OBL #39045 – Post Test



OBL #39046 – Pre Test



OBL #39046 - Post Test