High-end Defense Solutions

Ficha técnica de HEDS IMPACT FLEX Y LITE
Aramida Uni-Direccional (UD)

NOMBRE DEL PRODUCTO E IDENTIFICACION DE LA EMPRESA

NOMBRE DEL PRODUCTO: HEDS IMPACT FLEX AND LITE

USO DEL PRODUCTO: COMPUESTO PARA USO EN ESTRUCTURAS DEFENSIVAS

VENDEDOR:HIGH END DEFENSE SOLUTION
(HEDS)
8080 W 26th COURT
Hialeah, FL 33016
Tel. 305-591-7795

CARACTERISTICAS FISICAS DEL PRODUCTO

Lamina entretejida de nylon de aramida pegada con resina.

MODO DE ELABORACION

Tejido de nylon de aramidas laminadas con resina en prensa hidráulica.

FUNCIONAMIENTO

Se utiliza para protección personal arquitectónica o automovilística.

COMPOSICION

Polimetros sintéticos que se unen en una sola lamina para mayor fuerza
Son resistentes al calor hasta 65 grados.

COLOR

Amarillento

Certificamos esta ficha técnica hoy, 15 de diciembre 2021.

HEDS

Bernd von Reitzenstein

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Doral, Fl 33172
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Phone: 305-647-2597
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2.5mm

OREGON BALLISTIC LABORATORIES

May 22, 2020

Kambio Corporation
8080 West 26th Court
Hialeah, FL 33016

In accordance with your instructions, Oregon Ballistic Laboratories conducted Ballistic Resistance (V_0) testing on two samples.
The samples were tested in accordance with NIJ-STD-0108.01 Level IIIA in an indoor range with the muzzle of the test barrel mounted 15 feet away from the target and positioned to produce 0-degree obliquity impacts. Four infrared light screens, in conjunction with time-based frequency counters, were placed such that bullet velocity was measured 8.25 feet from the target. Penetrations were determined by examination of a 0.020-inch 2024-T3 aluminum witness 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.:	S/N.:	Weight (lbs.)	Projectile	Shots	Velocity (fps)		Penetrations	Pass/Fail
					Min.	Max.		
24862	N/A	3.90	9mm FMJ	5	1388	1421	0	***PASS***
24864	N/A	3.91	.44 Mag SWCGC	6	1270	1446	0	***PASS***

Samples will be maintained at Oregon Ballistic Laboratories for 30 days and then discarded unless other instructions are received. If you have any further questions or concerns, please contact us.

Sincerely,

Darius Nuttbrock
Oregon Ballistic Laboratories

2.5mm

OREGON BALLISTIC LABORATORIES

BALLISTIC RESISTANCE TEST - V_0

Customer:	Kambio Corporation
OBL ID#:	24862
Date Rcv'd:	5/5/2020
Test Date:	5/20/2020
Purchase Order:	2004-3016

TEST SAMPLE

Sample No.:	N/A	Size (in.):	12 x 12			
Model No.:	N/A	Weight (lb.):	3.90			
Lot No.:	N/A	Thickness:	0.091	0.091	0.092	0.093
Piles:	N/A	Avg. Thk. (in):	0.092			
Description:	Steel Coupon					

RANGE SET-UP — CLAY CALIBRATION NOT REQUIRED

Range to Target:	15 ft.	Range #:	3	Pre Test:	
Screen Dist. Vel. 1 (ft.):	5	Temperature:	69.8 °F	Clay Drops (mm):	
Screen Dist. Vel. 2 (ft.):	5	Bar. Pressure:	30.14 in. Hg	Drop Avg (mm):	
Screen 4 to target (ft):	N/A	Rel. Humidity:	50.2 %	Clay Temp °F:	
Primary Vel. Location:	8.25 ft. from target	Sample Temp.	Amb. °F	Clay Box #:	
Striking Velocity:	No	Recorder:	Jesse Crisanti	Post Test:	
Target to Witness:	6 in.	Gunner:	Josh Humphreys	Clay Drops (mm):	
Witness Panel:	0.020" 2024-T3 Alum.			Drop Avg (mm):	
Backing Material:	N/A			Clay Temp °F:	
Obliquity:	0 Degrees				
Barrel:	9mm Luger/1:10/4.5"				

AMMUNITION

Projectile: 9mm 124gr. FMJ Lot #23558 — Powder: D032-03

STANDARDS / PROCEDURES

NIJ-STD-0108.01 Level IIIA — Required Velocity: 1400 fps ± 50 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	125.3	7.0	3520	3517	1420	1422	1421	P	0°		
2	125.2	7.0	3540	3538	1412	1413	1413	P	0°		
3	124.7	7.0	3560	3557	1404	1406	1405	P	0°		
4	126.0	7.0	3572	3569	1400	1401	1401	P	0°		
5	125.2	7.0	3605	3603	1387	1388	1388	P	0°		

REMARKS:

P=Partial Penetration
C=Complete Penetration
UH=Unfair Hit

TEST RESULTS:

Test sample satisfied the ballistic requirements given.

FOOTNOTES:

7.5 mm

OREGON BALLISTIC LABORATORIES

BALLISTIC RESISTANCE TEST - V_0

Customer:	Kambio Corporation
OBL ID#:	24864
Date Rcv'd:	5/5/2020
Test Date:	5/20/2020
Purchase Order:	2004-3016

TEST SAMPLE

Sample No.:	N/A	Size (in.):	12 x 12			
Model No.:	N/A	Weight (lb.):	3.91			
Lot No.:	N/A	Thickness:	0.093	0.091	0.091	0.092
Plies:	N/A	Avg. Thk. (in):	0.092			
Description:	Steel Coupon					

RANGE SET-UP — CLAY CALIBRATION NOT REQUIRED

Range to Target:	15 ft.	Range #:	3	Pre Test:	
Screen Dist. Vel. 1 (ft.):	5	Temperature:	70.4 °F	Clay Drops (mm):	
Screen Dist. Vel. 2 (ft.):	5	Bar. Pressure:	30.14 in. Hg	Drop Avg (mm):	
Screen 4 to target (ft):	N/A	Rel. Humidity:	48.5 %	Clay Temp °F:	
Primary Vel. Location:	8.25 ft. from target	Sample Temp.	Amb. °F	Clay Box #:	
Striking Velocity:	No	Recorder:	Jesse Crisanti	Post Test:	
Target to Witness:	6 in.	Gunner:	Josh Humphreys	Clay Drops (mm):	
Witness Panel:	0.020" 2024-T3 Alum.			Drop Avg (mm):	
Backing Material:	N/A			Clay Temp °F:	
Obliquity:	0 Degrees				
Barrel:	.44 Mag/1:20/15"				

AMMUNITION

Projectile: .44 Mag 240gr. SWCGC — Powder: D032-03

STANDARDS / PROCEDURES

NIJ-STD-0108.01 Level IIIA — Required Velocity: 1400 fps ± 50 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	238.0	11.3	3506	3506	1426	1426	1426	P	0°		
2	238.2	11.3	3538	3539	1413	1413	1413	P	0°		
3	237.4	11.3	3453	3464	1448	1443	1446	P	0°		
4	238.0	11.3	3461	3459	1445	1446	1446	P	0°		
5	237.4	11.3	3937	3937	1270	1270	1270	UH	0°		Insufficient Velocity / Partial
6	240.0	11.5	3641	3641	1373	1373	1373	P	0°		

REMARKS:
P=Partial Penetration
C=Complete Penetration
UH=Unfair Hit

TEST RESULTS:
Test sample satisfied the ballistic requirements given.

FOOTNOTES: