## REPORT NUMBER: 2211141-012

Test Performed For: Ambico Limited 1120 Cummings Avenue Ottawa, Ontario Canada, K1J 7R8 (P) (613) 746-4663 x341 (F) (613)746-4721



Test Performed By: Bosik Technologies Limited 2495 Delzotto Avenue Ottawa, Ontario Canada, K1T 3V6 (P) (613) 822-8898 (F) (613) 822-3672 email: ballistics@bosik.com

website: www.bosik.com

email: mbazinet@ambico.com

website:

## TEST AND TEST MATERIAL IDENTIFICATION

Contract: Contract Number	2211141	Purchase Order	N/A	
Material Identification: Panel Description		Lot Number	N/A	
	Ballistic Door Sample	Piece Number	N/A	
	Ballistic Bool Sample	Panel Weight Dry (lbs.)	71.20	
		Panel Weight Wet (lbs.)	N/A	
Model Number	N/A	Measured Thickness	1.771"	
Serial Number	N/A	Date of Manufacture	N/A	
Size	18" x 18" x 1.75"	Date Tested	October 10, 2013	
Laboratory Conditions: Temperature (°C	18	Clay Calibration (mm)	N/A	
Relative Humidity (%	44	Target Base Line (m)	V <sub>1</sub> =1.51, V <sub>2</sub> =1.01	

**Velocity Measurement** Instrumentation:

3 Oehler Model 57 Infrared Photoelectric Screens with Oehler Chronograph Model 30 (V1) and Hewlett Packard Model 5315A (V2) Universal Counter reading the bullet time of flight on a 2 and 1 metre distance.

Firing Range: Distance between the front face of the Test material and the muzzle of the test barrel

4.6 Meters

Test Barrel: Calibre: .50 BMG Length: 45 inch Twist rate: 1-15 inch Manufacturer: H-S Precision **Loading Components:** Case IVI .50 BMG Primer **CCI 35** Powder Hodgdon H870 **Bullet Manufacturer** N/A

Test Specification: V<sub>proof</sub> Ballistic Bullet-Resisting Equipment test in a dry condition in accordance with UL 752 Level X using .50 BMG (M2) 710 grain FMJ bullets with a velocity range between 856m/s and 942m/s and firing one shot located in the centre of the test article, with a corrugated cardboard witness plate (0.125") thick placed 18 inches behind the test specimen to determine penetration.

## **BALLISTIC RESULTS**

Shot Number	Shot Load	Shot Angle	Instrumentation Velocity (m/s)	Penetration: Partial or	Deformation Depth	Fair or Unfair	Shot Counted
Number	(grains)	(degrees)	[(V <sub>1</sub> +V <sub>2</sub> )/2]	Complete	(mm)	Impact	(m/s)
1	238.6	0	877	Partial	N/A	Fair	877
2	260.5	0	959	Partial	N/A	Fair	959
3	250.4	0	940	Partial	N/A	Fair	940
Average velocity:					925		

Note: Shot number, 3 was taken 1" from the edge.

Does this armour meet or exceed the specified requirements? Yes

Test Performed By:

Daniel Lavallee

Test Results Checked By:

Hailom Gebremeskel, B.Eng.