Close Focus Research Page 1 of 2 **Ballistic Test Report** Report Number: BTR-03-26-2009-PO-020355-BR-8 - Sample 2 **Ballistic Testing Services** Phone: 800-513-4291 Email: <u>techsupport@CloseFocusResearch.com</u> CloseFocusResearch.com

Name: Security Metal Products Corporation

Address: 5700 Hannum Avenue, Suite 250, Culver City, CA 9023

Phone: Phone: 310-641-6690, cell: 562-618-5720 Report Date: March 26, 2009 Contact: Roger Lange Email: sales@secmet.com

Ballistic Results

Project Summary

Type of Products to be tested: Door and Frame Assembly

Test Specimen Sample size(s): 14 x 16 inch Number of test specimens: 6 Sample(s) 215 lbs Weight of all samples:

Are Materials a Health Hazard: No

Need the Tests performed by: March 31, 2009

Need products shipped back: Yes Purchase Order Number: PO-020355

International Ballistic Standards / Specifications Testing ☐ ASTM ☐ Brunswick ☐ FRA □ NIJ CFR Pass All

☐ Australian ☐ Canadian ☐ Germ DIN ☐ State Dept ☐ CFR SYA British ■ EN 1063 ■ MIL-SAMIT ✓ UL 752

Test Standard: **UL 752**

> Shot 5 2.823

2,654

1.88

0 ° NP

Particular Test: UL Level 8 (.30 cal. 7.62 NATO FMJ)

2,750 to 3,025 ft/s Velocity Range:

Number of Shots: 5 shots Spacing / Pattern: 4.5 inch square

Test Results

Product Number: BR-8 - Sample 2

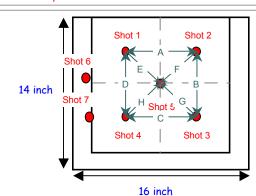
Sample Type: Door and Frame Assembly

Sample Size: 14 x 16 inch Thickness: 6 inches Weight: 41 lbs Weapon Type: 7.62 Rifle

Cartridge / Projectile Type: 7.62 x 51 NATO / M80 FMJ

Projectile Weight: 150 gr Target Distance: 15 ft

Particular Test:	UL Level 8 (.30 cal. 7.62 NATO FMJ)					
Number of Shots:	5 shots	Door Section				
Shot Sequence:	Shot 1	Shot 2	Shot 3	Shot 4	Sh	
Impact Velocity (ft/sec) *:	2,787	2,833	2,802	2,834	2,	
Impact Energy (ft-lbs):	2,587	2,673	2,615	2,675	2,	
Impact Momentum (lb-sec.)	1.86	1.89	1.87	1.89	1.	
Impact Angle (degrees):	0 °	0°	0°	0 °	C	
Penetration Effect:	NP	NP	NP	NP	1	



Frame shots				
2 shots				
Shot 6	Shot 7			
2,790	2,852			
2,592	2,709			
1.86	1.90			
0 °	0 °			
NP	NP			

Witness plate material: 0.125 in. thick corrugated cardboard

Witness Plate Distance: 18 inches Spall Occurrence: None 74 °F Test Temperature:

Test Date: March 26, 2009 NP = No Penetration Comments: Passed the Test CP = Complete Penetration

Comments and Test Descriptions

Velocity measurements were taken at a distance of 6.6 ft from muzzle

Impact Spacing (inches)				
Α	4.40			
В	4.50	Average		
С	4.60	4.48		
D	4.40			
Е	3.10			
F	3.10	Average		
G	2.90	3.18		
Н	3.60			

Test and Report Engineers

Signature: Sam Wilson Tested and Reported by: Sam Wilson Date: March 26, 2009

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Page 2 of 2 Close Focus Research **Ballistic Test Report**

Report Number: BTR-03-26-2009-PO-020355-BR-8 - Sample 2 **Ballistic Testing Services**

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CloseFocusResearch.com

Security Metal Products Corporation Report Date: March 26, 2009

Ballistic Test Results and Photographs

Ballistic Test Results:

The Door and Frame Assembly sample passed the UL Level 8 (.30 cal. 7.62 NATO FMJ) Ballistic test.

Projectile Penetration Effects:

There was no partial or complete projectile penetration of the Door and Frame Assembly sample for all 7 shots.

Witness Plate and Spall Effects:

No spall was observed and no damage occurred to the 0.125 in. thick corrugated cardboard witness plate.

The following photographs show both the pre and post-test Transparent Armor Window. Additional larger sized photographs are included with this report.

Sample 2 - UL752 Level 8 (7.62 NATO) Door and Frame Assembly - 16 x 14 x 6 in.



Sample 2 Pre Test Impact Side



Sample 2 Pre Test Rear Side

Sample 2 Post Test Impact Side Sample 2 Post Test Rear Side



Sample 2 Pre Test Impact Side



Sample 2 Post Test Impact Side



Sample 2 Pre Test Rear Side



Sample 2 Post Test Rear Side

Test and Report Engineers

Sam Wilson Tested and Reported by: Sam Wilson Signature: Date: March 26, 2009

Form: BTR-12 © 11/04 Close Focus Research