Ballistic Testing and Design Services
Phone: 800-513-4291 Email: technicalsupport@CloseFocusResearch.com

Report Number: BTR-05-20-2005-N/A-Sample 2
CloseFocusResearch.com

Name:	North American Bullet Proof
Address:	P.O. Box 628, Cibolo, Texas 78108
Phone:	Phone: 210-225-0982

Report Date:	May 20, 2005
Contact:	Barry L. White
Email:	bwhite@shotgard.com

Ballistic Results

General Information

Type of Products to be tested:	Composite Armor
Test Specimen Sample size(s):	24 x 24 inch
Number of test specimens:	3 Sample(s)
Weight of all samples:	420 lbs
Are Materials a Health Hazard:	No
Need the Tests performed by:	May 30, 2005
Need products shipped back:	Yes
Purchase Order Number:	N/A

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 ☐ Other

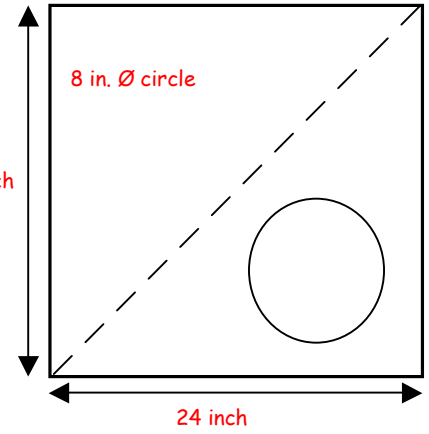
Test Standard:	MIL-SAMIT
Particular Test:	MIL-SAMIT Part 1 (.30 cal. 7.62 NATO M80)
Velocity Range:	2,750 to 2,850 ft/s
Number of Shots:	25 shots
Spacing / Pattern:	8 in. Ø circle

Test Results

Product Number:	Sample 2
Sample Type:	Composite Armor
Sample Size:	24 x 24 inch
Thickness:	1.75 inch
Weight:	140 lbs
Weapon Type:	7.62 Rifle
Cartridge / Projectile Type:	7.62 x 51 NATO M80
Projectile Weight:	147 gr
Target Distance:	75 ft
Number of Shots:	25 shots

NP = No Penetration
CP = Complete Penetration

Shot Sequence *:	Shot 1	Shot 12	Shot 25
Impact Velocity (ft/sec)**:	2,794	2,792	2,799
Impact Energy (ft-lbs):	2,548	2,544	2,557
Impact Momentum (lb-sec):	1.82	1.82	1.83
Impact Angle (degrees):	0 °		
Penetration Effect:	NP		
Bulge Height (inches) ***:	~0.06 maximum		



Impact Spacing / Pattern:	All 25 shots within the 8 inch diameter circle
Witness plate material:	Aluminum Foil
Witness Plate Distance:	6 inches
Spall Occurrence:	None
Test Temperature:	82 °F
Test Date:	May 20, 2005
Comments:	Passed the Test - All 25 shots penetrated the impact surface but did not exit the rear surface

Comments and Test Descriptions

* Shot Sequence: velocity measurments were taken at the beginning, middle, and at the end of the 25 shot sequence.
** Velocity measurements were taken at a distance of 6.6 ft from muzzle
*** The post impact Bulge Height is the distance between the apex of the extruded deformation bulge to the tangent plane of the flat surface. This measurement is taken from the side opposite to the impacts.

Test and Report Engineers

Tested and Reported by: Sam Wilson Signature: Sam Wilson Date: May 20, 2005

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Ballistic Test Results and Photographs

Ballistic Test Results:

This Composite Armor test sample passed the 25 shot MIL-SAMIT Part 1 (.30 cal. 7.62 NATO M80) Ballistic test.

Projectile Penetration Effects:

There was no partial or complete projectile penetration of the Composite Armor sample for all 25 shots. All 25 shots penetrated the impact surface but did not exit the rear surface.

Witness Plate Spall Effects:

The Aluminum foil witness plate was unaffected by the test. No spall was observed.

Photographs

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

Sample 2: 24 x 24 x 1.75 inch MIL-SAMIT 7.62 NATO M80 Composite Armor


Sample2 Pre Test Impact Side


Sample2 Pre Test Rear Side


Sample2 Post Test Impact Side


Sample2 Post Test Impact Side Closeup


Sample2 Post Test Rear Side


Sample2 Post Test Reart Side Closeup

Test and Report Engineers

Tested and Reported by: Sam Wilson Signature: Sam Wilson Date: May 20, 2005