

SW440RC - PRODUCT SPECIFICATION SHEET

PRODUCT DESCRIPTION

Safe Haven Defense SW440RC- Riot Control laminate film offers protection for glass breakage due to forced entry such as burglaries, hurricanes, and blast. SW440RC incorporates an extraordinary capability in protection by hindering entry into your property. Keeping valuables and loved ones safe.



TECHNICAL DATA

PROTECTION LEVEL	Exigent Protection
THICKNESS (1 layer)	30 mil
NUMBER PLIES	2
BREAK STRENGTH	900 psi
TENSILE STRENGTH	32,500psi
PEEL STRENGTH	6psi
TOTAL SOLAR ENERGY	20%
REJECTION	
IR REJECTION	59%
UV REJECTION	99%

CERTIFICATIONS & STANDARDS

ANSI Z97.1 - Bldg Glaze Materials

CPSC 16 CFR 1201 – Impact Test

GSA EXPLOSIVE TEST: GSA TS01-2003

UL972 – Burglary Protection

FLAME SPREAD – ASTM E-84



USES/APPLICATION

Safe Haven Defense SW440RC laminate is applied onsite, to the **INTERIOR** of existing windows in commercial, municipal and residential buildings. Unlike traditional Riot Control glass, no special modifications or retrofitting to existing structure needs to be done. Because our laminate can be applied over **existing glass as thin as ¼ inch**, customers achieve the end goal of hardening their structure at a significant cost savings to traditional RC glass.

*existing window must be inspected to be structurally sound. Window must be free from debris and thoroughly cleaned prior to application.

Visit WWW.SAFEHAVENDEFENSE.COM to watch demos of 1 Directional Bullet Resistance

Safe Haven Defense, LLC

P: 480-689-7871 | steve@safehavendefense.com | 3120 W. Carefree Hwy STE 1-543 Phoenix, AZ 85086

*proprietary information not for public distribution



PRODUCT DESCRIPTION

Safe Haven Defense SW440BR laminate offers protection for small arms bullet resistance as well as glass breakage due to burglaries, hurricanes, and blast. SW440BR incorporates an extraordinary capability in protection by allowing individuals INSIDE the structure to fire OUT, while maintaining directional bullet and blunt force resistance from external threats.

TECHNICAL DATA

PROTECTION LEVEL	Exigent
	Protection
THICKNESS (1 layer)	Varies
NUMBER PLIES	Varies
BREAK STRENGTH	Starting at
	1200 psi
TENSILE STRENGTH	32,000psi
PEEL STRENGTH	6psi
TOTAL SOLAR ENERGY	20%
REJECTION	
IR REJECTION	59%
UV REJECTION	99%



CERTIFICATIONS & STANDARDS

NIJ 0108.01 –
Bullet Resistance
(3 rd Party Lab)
UL752 –
Bullet Resistance
(3 rd Party Lab)



USES/APPLICATION

Safe Haven Defense SW440BR laminate is applied onsite, to the **INTERIOR** of existing windows in commercial, municipal and residential buildings. Unlike traditional BR Glass, no special modifications or retrofitting to existing structure needs to be done. Because our laminate can be applied over **existing glass as thin as ¼ inch, Dual Pane ¼ inch and ½ Inch,** customers achieve the end goal of hardening their structure at a significant cost savings to traditional BR Glass

*existing window must be inspected to be structurally sound. Window must be free from debris and thoroughly cleaned prior to application.

Visit WWW.SAFEHAVENDEFENSE.COM to watch demos of 1 Directional Bullet Resistance





Close Focus Research

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Ballistic Test Report

Ballistic Testing Services

Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

Report Number: BTR-03-01-2019-Sample 2

CloseFocusResearch.com

Name: Safe Haven Defense Inc.

Address: 3120 W Carefree Hwy, Suite 1-543, Phoenix, AZ 85086

Phone: Phone: 480-689-7871

Report Date: March 1, 2019

Contact: Steven Johnson

Email: steve@myshsinc.com

Ballistic Results

Project Summary

Type of Products to be tested: Single Pane Security Glazings

Test Specimen Sample size(s): 12×12 and 18×18 inch

Number of test specimens: 3 Samples
Weight of all samples: 16.6 lbs
Are Materials a Health Hazard: No

Need the Tests performed by: March 1, 2019
Need products shipped back: Customer Pickup
Purchase Order Number: Not Applicable

International Ballistic Standards / Specifications Testing ASTM Canadian FRA NIJ CFR Pass All

□ Australian □ EN1063 □ Germ DIN □ State Dept □ CFR SYA

☐ British ☐ EN1522/23 ☐ MIL-SAMIT ☐ UL 752 ☐ Other

Test Standard: National Institute of Justice 0108.01

Particular Test: NIJ I Part 1 (.22 LR HV Lead)

18.0 inch

(457 mm)

Velocity Range: 1,010 to 1,090 ft/s Shots: 5 shots

Shot Pattern: > 2 inch

Test Results

Test Sample: Sample 2
Item / Part Number: 2 / SW440BR
Sample ID: SW440BR-15

Sample Type: Single Pane Security Glazing System Sample Size: $18.0 \times 18.0 \text{ inch } (457 \times 457 \text{ mm})$

Thickness: 0.3 inch (6.4 mm)
Weight: 5.4 lbs (2.4 kg)
Weapon Type: .22 Caliber Rifle
Cartridge / Projectile Type: .22 Caliber RNL
Projectile Weight: 40 grains
Target Distance: 16.4 feet

Target Distance: 16.4 fee
Number of Shots: 5 shots
Shot Sequence: Shot 1

Impact Velocity (ft/sec) *: Impact Energy (ft-lbs): Impact Momentum (lb-sec.): Impact Angle (degrees): Sample Penetration: Witness Plate Penetration:

	Shot 1	Shot 2	Shot 3	Shot 4	Shot 5
	1,165	1,135	1,167	1,161	1,155
	121	114	121	120	118
:	0.21	0.20	0.21	0.21	0.21
	0 °	0 °	0 °	0 °	0 °
	NP	NP	NP	NP	NP
	NP	NP	NP	NP	NP

Shot 1 Shot 2 A B H Shot 5 C Shot 4 Shot 3

18.0 inch (457 mm)

Impact Spacing		(inches)
Α	5.50	
В	6.00	Average
С	5.75	5.75
D	5.75	
Е	3.80	
F	4.20	Average
G	4.20	4.03
Н	3.90	

NP = No Penetration
PP = Partial Penetration

N/A = Not Applicable

CP = Complete Penetration

Witness Plate & Spall Result:

Witness plate material: 0.020 in. type 2024-T4 Aluminum foil alloy

68° F

Spall catch box: Not required
Witness / Box Distance: 6.0 inches
Spall Occurrence: No spall occurred

Test Date: March 01, 2019

Pass / Fail Results: Passed the Test

Comments: All velocities exceeded the maximum standard's velocity of 1,090 ft/s

Footnotes

* Velocity measurements were taken at a distance of 6.6 feet from muzzle.

Test and Report Engineers

Test Temperature:

Tested and Reported by: Sam Raheb Signature: Date: March 1, 2019

Close Focus Research Page 2 of 2 Ballistic Test Report

Ballistic Testing Services Report Number: BTR-03-01-2019-Sample 2

 $Phone: 800-513-4291 \quad \text{Email:} \\ \underline{\text{techsupport@CloseFocusResearch.com}} \\ CloseFocusResearch.com$

Name: Safe Haven Defense Inc. Report Date: March 1, 2019

Ballistic Test Results and Photographs

Ballistic Test Results:

Test Sample 2 passed the National Institute of Justice 0108.01 NIJ I Part 1 (.22 LR HV Lead) Ballistic test. There was no complete penetration of the test sample from any of the .22 Caliber RNL caliber projectiles.

Witness Plate and Spall Effects:

No spall occurred or damage to the 0.020 in. type 2024-T4 Aluminum foil alloy witness plate was observed.

Test and Report Engineers

Tested and Reported by: Sam Raheb Signature: Date: March 1, 2019

Close Focus Research

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Ballistic Test Report

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Shot 2

Shot 3

4.05

Ballistic Testing Services
Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

Report Number: BTR-03-01-2019-Sample 3

Name: Safe Haven Defense Inc.

Address: 3120 W Carefree Hwy, Suite 1-543, Phoenix, AZ 85086

Phone: Phone: 480-689-7871

Report Date: March 1, 2019

Contact: Steven Johnson

Email: steve@myshsinc.com

Ballistic Results

Project Summary

Type of Products to be tested: Single Pane Security Glazings

Test Specimen Sample size(s): 12×12 and 18×18 inch

Number of test specimens: 3 Samples
Weight of all samples: 16.6 lbs

Are Materials a Health Hazard: No

Need the Tests performed by: March 1, 2019

Need products shipped back: Customer Pickup

Purchase Order Number: Not Applicable

International Ballistic Standards / Specifications Testing ASTM Canadian FRA NIJ CFR Pass All

Australian ☐ EN1063 ☐ Germ DIN ☐ State Dept ☐ CFR SYA☐ British ☐ EN1522/23 ☐ MIL-SAMIT ☐ UL 752 ☐ Other

Test Standard: National Institute of Justice 0108.01

Particular Test: NIJ I Part 2 (.38 Special RNL)

Velocity Range: 800 to 900 ft/s

Shots: 5 shots
Shot Pattern: > 2 inch

Test Results

 Test Sample:
 Sample 3

 Item / Part Number:
 3 / SW440BR
 18.0 inch

 Sample ID:
 SW440BR-16
 (457 mm)

Sample Type: Single Pane Security Glazing System
Sample Size: 18.0 x 18.0 inch (457 x 457 mm)

Thickness: 0.3 inch (6.4 mm)
Weight: 5.4 lbs (2.4 kg)
Weapon Type: .38 Special
Cartridge / Projectile Type: .38 Special RNL
Projectile Weight: 158 grains
Target Distance: 16.4 feet

Number of Shots: 5 shots

Shot Sequence:
Impact Velocity (ft/sec) *:
Impact Energy (ft-lbs):
Impact Momentum (lb-sec.):
Impact Angle (degrees):
Sample Penetration:
Witness Plate Penetration:

	5 snots				
	Shot 1	Shot 2	Shot 3	Shot 4	Shot 5
:	803	810	805	808	806
	226	230	227	229	228
):	0.56	0.57	0.56	0.57	0.57
	0 °	0 °	0 °	0 °	0 °
	NP	NP	NP	NP	NP
:	NP	NP	NP	NP	NP

18.0 inch (457 mm) Impact Spacing (inches) 5.10 Α В 5.80 Average С 5.40 5.70 D 6.50 Е 3.80 F 3.20 Average

G

Shot 1

Witness Plate & Spall Result:

Witness plate material: 0.020 in. type 2024-T4 Aluminum foil alloy

Spall catch box: Not required
Witness / Box Distance: 6.0 inches
Spall Occurrence: Spall occurred

Test Temperature: 68°F

Test Date: March 01, 2019
Pass / Fail Results: Passed the Test

Comments:

Footnotes

* Velocity measurements were taken at a distance of 6.6 feet from muzzle.

NP = No Penetration
PP = Partial Penetration
CP = Complete Penetration
N/A = Not Applicable

4.40

4.80

voluerly measurements were raken at a distance of 0.0 feet from mazzie

Test and Report Engineers

Form: BTR-12 @ 2/06 Close Focus Research

Tested and Reported by: Sam Raheb

Signature:

Date: March 1, 2019

Close Focus Research Page 2 of 2 Ballistic Test Report

Ballistic Testing Services Report Number: BTR-03-01-2019-Sample 3

 $Phone: 800-513-4291 \quad Email: \\ \underline{techsupport@CloseFocusResearch.com} \\ CloseFocusResearch.com$

Name: Safe Haven Defense Inc. Report Date: March 1, 2019

Ballistic Test Results and Photographs

Ballistic Test Results:

Test Sample 3 passed the National Institute of Justice 0108.01 NIJ I Part 2 (.38 Special RNL) Ballistic test. There was no complete penetration of the test sample from any of the .38 Special RNL caliber projectiles.

Witness Plate and Spall Effects:

Spall occurred but no damage to the 0.020 in. type 2024-T4 Aluminum foil alloy witness plate was observed.

Test and Report Engineers

Tested and Reported by: Sam Raheb Signature: Date: March 1, 2019

Ballistic Testing Services Report Number: BTR-07-23-2018-Sample 1

Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

Name: Safe Haven Defense Inc.

Address: 3120 W Carefree Hwy, Suite 1-543, Phoenix, AZ 85086

Phone: Phone: 480-689-7871

CloseFocusResearch.com

Report Date: July 23, 2018
Contact: Steven Johnson
Email: steve@myshsinc.com

Ballistic Results

Project Summary

Type of Products to be tested: Dual Pane Security Glazings

Test Specimen Sample size(s): 18 x 18 inch
Number of test specimens: 2 Samples
Weight of all samples: 30 lbs
Are Materials a Health Hazard: No

Need the Tests performed by: within 7 to 10 days

Need products shipped back: No

Purchase Order Number: Not Applicable

International Ballistic Standards / Specifications Testing □ ASTM □ Canadian □ FRA □ NIJ □ CFR Pass All □ Australian □ EN1063 □ Germ DIN □ State Dept □ CFR SYA □ British □ EN1522/23 □ MIL-SAMIT □ UL 752 □ Other Test Standard: National Institute of Justice 0108.01

Particular Test: NIJ II Part 1 (9 mm Parabellum FMJ)

Velocity Range: 1,135 to 1,215 ft/s

Shots: 5 shots
Shot Pattern: > 2 inch

Test Results

Test Sample: Sample 1

Sample ID / Part Number: BRDP-004 / SW440BR 18 inch
Date of Manufacture: July 20, 2018 (457 mm)

Sample Type: Dual Pane 1 inch Air Gap Security Glazing System

Sample Size: 18 x 18 inch (457 x 457 mm)

Thickness: 4 inch (89 mm)

Weight: 15 lbs (6.8 kg)

Weapon Type: 9 mm Parabellum

Cartridge / Projectile Type: 9 mm Parabellum FMJ

Projectile Weight: 124 grains
Target Distance: 16.4 feet
Number of Shots: 5 shots

Shot Sequence: Shot 1 Shot 2 Shot 3 Shot 4 Shot 5 Impact Velocity (ft/sec) *: 1,137 1,148 1,142 1,139 1,146 Impact Energy (ft-lbs): 356 363 359 357 362 0.63 0.63 0.63 0.63 0.63 Impact Momentum (lb-sec.): o° 0 ° o° 0° Impact Angle (degrees): Sample Penetration: NP NP NP NP NP Witness Plate Penetration: NP NP NP

Shot 1 Shot 2 A B Shot 5 Shot 4 Shot 3

18 inch (457 mm)

Impact Spacing		(inches)
Α	6.00	
В	5.25	Average
С	6.50	6.01
D	6.30	
Е	4.30	
F	3.75	Average
G	4.10	4.29
Н	5.00	

NP = No Penetration

N/A = Not Applicable

PP = Partial Penetration

CP = Complete Penetration

Witness Plate & Spall Result:

Witness plate material: 0.020 in. type 2024-T4 Aluminum foil alloy

Spall catch box: Not required
Witness / Box Distance: 6.0 inches
Spall Occurrence: Spall occurred
Test Temperature: 103 ° F
Test Date: July 23, 2018

Pass / Fail Results: Passed the Test

Comments: See Page 2 for National Institute of Justice 0108.01 Pass / Fail Criteria

Footnotes

* Velocity measurements were taken at a distance of 6.6 feet from muzzle.

Test and Report Engineers

Tested and Reported by: Sam Raheb Signature: Date: July 23, 2018

Ballistic Testing Services Report Number: BTR-07-23-2018-Sample 1

Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

CloseFocusResearch.com

Name: Safe Haven Defense Inc. Report Date: July 23, 2018

Ballistic Test Results and Photographs

Ballistic Test Results

Test Sample 1 passed the National Institute of Justice 0108.01 NIJ II Part 1 (9 mm Parabellum FMJ) Ballistic test. There was no complete penetration of the test sample from any of the 9 mm Parabellum FMJ caliber projectiles.

Witness Plate and Spall Effects

Spall occurred but no perforation damage to the 0.020 in. type 2024-T4 Aluminum foil alloy witness plate was observed.

Photographs

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

Sample 1: BRDP-004 - SW440BR - July 20, 2018 - NIJ II Part 1 - 18.00 x 18.00 x 3.50 in.



Pre Test Impact Side



Pre Test Rear Side



Post Test Impact Side Dual Pane Glazing 1 Outside



Post Test Rear Side Dual Pane Glazing 1 Outside



Post Test Impact Side Dual Pane Glazing 2 Inside



Post Test Rear Side Dual Pane Glazing 2 Inside

Close Focus Research Page 1 of 2 Ballistic Test Report

Ballistic Testing Services Report Number: BTR-07-23-2018-Sample 2

Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

Name: Safe Haven Defense Inc.

Address: 3120 W Carefree Hwy, Suite 1-543, Phoenix, AZ 85086

Phone: Phone: 480-689-7871

CloseFocusResearch.com

Report Date: July 23, 2018

Contact: Steven Johnson

Email: steve@myshsinc.com

Ballistic Results

Project Summary

Type of Products to be tested: Dual Pane Security Glazings

Test Specimen Sample size(s): 18 x 18 inch
Number of test specimens: 2 Samples
Weight of all samples: 30 lbs
Are Materials a Health Hazard: No

Need the Tests performed by: within 7 to 10 days

Need products shipped back: No

Purchase Order Number: Not Applicable

Internat	tional Ballis	tic Standards	/ Specificat	ions Testing
ASTM	Canadian	FRA	✓ NIJ	CFR Pass All
Australian	EN1063	Germ DIN	State Dep	ot CFR SYA
British	EN1522/23	B MIL-SAMI	T 🗌 UL 752	Other
Test Standard:	National In	nstitute of Jus	stice 0108.01	
Particular Test:	NIJ II Par	rt 2 (.357 Mag	num JSP)	
Velocity Range:	1,345 to 1,4	445 ft/s		
Shots:	5 shots			
Shot Pattern:	> 2 inch			

18 inch

(457 mm)

Test Results

Test Sample: Sample 2

Sample ID / Part Number: BRDP-003 / SW440BR

Date of Manufacture: July 20, 2018

Sample Type: Dual Pane 1 inch Air Gap Security Glazing System

Sample Size: 18×18 inch $(457 \times 457 \text{ mm})$

Thickness: 4 inch (89 mm)

Weight: 15 lbs (6.8 kg)

Weapon Type: .357 Magnum

Cartridge / Projectile Type: .357 Magnum JSP

Projectile Weight: 158 grains
Target Distance: 16.4 feet
Number of Shots: 5 shots

Shot Sequence:	Shot 1	Shot 2	Shot 3	Shot 4	Shot 5
Impact Velocity (ft/sec) *:	1,351	1,349	1,356	1,350	1,358
Impact Energy (ft-lbs):	640	638	645	639	647
Impact Momentum (lb-sec.):	0.95	0.95	0.95	0.95	0.95
Impact Angle (degrees):	0 °	0 °	0 °	0 °	0 °
Sample Penetration:	NP	СР	СР	NP	CP
Witness Plate Penetration:	NP	NP	NP	NP	NP

Shot 1 Shot 2 A B H Shot 5 Shot 4 Shot 3

18 inch (457 mm)

Impact Spacing		(inches)
Α	6.40	
В	5.10	Average
С	5.65	5.98
D	6.75	
Е	3.75	
F	3.75	Average
G	4.00	4.20
Н	5.30	

NP = No Penetration

N/A = Not Applicable

PP = Partial Penetration

CP = Complete Penetration

Witness Plate & Spall Result:

Witness plate material: 0.020 in. type 2024-T4 Aluminum foil alloy

Spall catch box: Not required
Witness / Box Distance: 6.0 inches
Spall Occurrence: Spall occurred
Test Temperature: 103 ° F
Test Date: July 23, 2018

Pass / Fail Results: Passed the Test

Comments: See Page 2 for National Institute of Justice 0108.01 Pass / Fail Criteria

Footnotes

* Velocity measurements were taken at a distance of 6.6 feet from muzzle.

Test and Report Engineers

Tested and Reported by: Sam Raheb Signature: Date: July 23, 2018

Ballistic Testing Services Report Number: BTR-07-23-2018-Sample 2

Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

CloseFocusResearch.com

Name: Safe Haven Defense Inc. Report Date: July 23, 2018

Ballistic Test Results and Photographs

National Institute of Justice 0108.01 Pass / Fail Criteria

According to the NIJ 0108.01 Ballistic Standard, a test sample is considered a Pass even if the projectile completely penetrates the test sample but does not perforate the witness plate. Perforation of the witness plate by any part of the test specimen or test bullet is determined by passage of light through the witness plate when held up to a 60 watt light bulb.

Ballistic Test Results

Test Sample 2 passed the National Institute of Justice 0108.01 NIJ II Part 2 (.357 Magnum JSP) Ballistic test. There was complete penetration (CP) of the test sample from three of the .357 Magnum JSP caliber projectiles.

Witness Plate and Spall Effects

Spall occurred but no perforation damage to the 0.020 in. type 2024-T4 Aluminum foil alloy witness plate was observed. Since no perforation of the witness plate occurred, the test is assigned a pass result.

Photographs

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

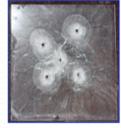
Sample 2: BRDP-003 - SW440BR - July 20, 2018 - NIJ II Part 2 - 18.00 x 18.00 x 3.50 in.



Pre Test Impact Side



Post Test Impact Side Dual Pane Glazing 1 Outside



Post Test Rear Side Dual Pane Glazing 1 Outside



Post Test Impact Side Dual Pane Glazing 2 Inside

Date: July 23, 2018



Post Test Rear Side Dual Pane Glazing 2 Inside

Test and Report Engineers

Tested and Reported by: Sam Raheb Signature:

Page 1 of 2

Ballistic Test Report

CFR Pass All

Ballistic Testing Services
Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

Report Number: BTR-03-01-2019-Sample 1

CloseFocusResearch.com

Name: Safe Haven Defense Inc.

Address: 3120 W Carefree Hwy, Suite 1-543, Phoenix, AZ 85086

Phone: Phone: 480-689-7871

Report Date: March 1, 2019

Contact: Steven Johnson

Email: steve@myshsinc.com

International Ballistic Standards / Specifications Testing

☐ Australian ☐ EN1063 ☐ Germ DIN ☐ State Dept ☐ CFR SYA

□ NIJ

Ballistic Results

Project Summary

Type of Products to be tested: Single Pane Security Glazings

Test Specimen Sample size(s): 12×12 and 18×18 inch

Number of test specimens: 3 Samples
Weight of all samples: 16.6 lbs

Are Materials a Health Hazard: No
Need the Tests performed by: March 1

Need the Tests performed by: March 1, 2019
Need products shipped back: Customer Pickup
Purchase Order Number: Not Applicable

British □ EN1522/23 □ MIL-SAMIT ☑ UL 752

Test Standard: Underwriters Laboratory UL752

Particular Test: UL Level 7 (.223 cal. 5.56 NATO FMJ)

Canadian FRA

Velocity Range: 3,080 to 3,388 ft/s

Shots: 5 shots

Shot Pattern: 4.5 inch ± 0.5 inch square

Test Results

Test Sample: Sample 1

 Item / Part Number:
 1 / SW440BR-AR
 12.0 inch

 Sample ID:
 SW440BR-14
 (305 mm)

Sample Type: Single Pane Security Glazing System Sample Size: $12.0 \times 12.0 \text{ inch } (305 \times 305 \text{ mm})$

Thickness: 0.5 inch (12.7 mm)
Weight: 5.8 lbs (2.6 kg)

Weapon Type: .223 caliber / 5.56 NATO
Cartridge / Projectile Type: 5.56 NATO / M193 FMJ

Projectile Weight: 55 grains
Target Distance: 15 feet
Number of Shots: 5 shots

Shot Sequence: Shot 1 Shot 2 Shot 3 Shot 4 Shot 5 3,181 3,204 3,213 3,190 3,210 Impact Velocity (ft/sec) *: Impact Energy (ft-lbs): 1,236 1,253 1,261 1,243 1,258 0.78 0.78 0.78 0.78 Impact Momentum (lb-sec.): 0.78 0° o° 0° o° o° Impact Angle (degrees): NP NP NP NP NP Sample Penetration: Witness Plate Penetration: NP NP NP NP NP

Shot 1 Shot 2 E F B H Shot 5 C Shot 4 Shot 3

12.0 inch (305 mm)

Impact Spacing		(inches)
Α	4.80	
В	4.40	Average
С	4.20	4.54
D	4.75	
Е	3.30	
F	3.25	Average
G	3.25	3.20
Н	3.00	

NP = No Penetration

PP = Partial Penetration

N/A = Not Applicable

CP = Complete Penetration

Witness Plate & Spall Result:

Witness plate material: 0.125 in. thick corrugated cardboard

Spall catch box: Not required
Witness / Box Distance: 18.0 inches
Spall Occurrence: No spall occurred

Test Temperature: 68 ° F

Test Date: March 01, 2019
Pass / Fail Results: Passed the Test

Comments:

Footnotes

* Velocity measurements were taken at a distance of 6 feet from muzzle.

Test and Report Engineers

Tested and Reported by: Sam Raheb

Signature:

Date: March 1, 2019

Close Focus Research Page 2 of 2 Ballistic Test Report

Ballistic Testing Services Report Number: BTR-03-01-2019-Sample 1

Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

CloseFocusResearch.com

Name: Safe Haven Defense Inc. Report Date: March 1, 2019

Ballistic Test Results and Photographs

Ballistic Test Results:

Test Sample 1 passed the Underwriters Laboratory UL752 UL Level 7 (.223 cal. 5.56 NATO FMJ) Ballistic test. There was no complete penetration of the test sample from any of the 5.56 NATO / M193 FMJ caliber projectiles.

Witness Plate and Spall Effects:

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

Test and Report Engineers

Tested and Reported by: Sam Raheb Signature: Date: March 1, 2019







