

Ballistic Testing Services

Report Number: BTR-02-11-2023-20230102-Sample 1

Phone: 800-513-4291 Email: [techsupport@CloseFocusResearch.com](mailto:techsupport@CloseFocusResearch.com)

CloseFocusResearch.com

Name: Avalon International Aluminum, Inc  
 Address: 21451 SW 108th Avenue, Tualatin, OR 97062  
 Phone: 208-272-0524

Report Date: February 11, 2023  
 Contact: Rick Carleton  
 Email: [gm@avalon.solutions](mailto:gm@avalon.solutions)

**Ballistic Results**

**Project Summary**

Type of Products to be tested: Security Door and Frame  
 Test Specimen Sample size(s): Unknown  
 Number of test specimens: 2 Samples  
 Weight of all samples: 13.2 lbs  
 Are Materials a Health Hazard: No  
 Need the Tests performed by: within 5 to 7 days  
 Need products shipped back: No  
 Purchase Order Number: 20230102

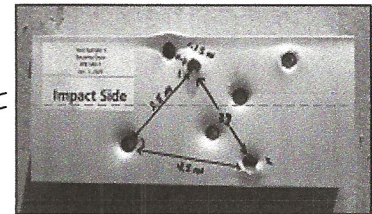
**International Ballistic Standards / Specifications Testing**

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: Underwriters Laboratory UL752  
 Particular Test: UL Level 3 (.44 Magnum SWC) - Multi-shot  
 Velocity Range: 1,350 to 1,485 ft/s  
 Shots: 5 shots  
 Shot Pattern: Multiple shots distributed over test sample

**Test Results**

Test Sample: Sample 1  
 Item / Part Number: 1 / WS-500-1  
 D.O.M.: January 3, 2023  
 Description: Bullet Resistant Security Door  
 Sample Size: 12.00 x 4.94 inch (304.8 x 125.5 mm)  
 Thickness: 1.750 inch (44.5 mm)  
 Weight: 6.50 lbs (2.95 kg)  
 Weapon Type: .44 Magnum  
 Cartridge / Projectile Type: .44 Magnum SWC  
 Projectile Weight: 240 grains  
 Target Distance: 15 feet  
 Number of Shots: 5 shots

12.00 inch  
(304.8 mm)



4.94 inch (125.5 mm)

Shot Sequence:	Shot 1	Shot 2	Shot 3	Shot 4	Shot 5
Impact Velocity (ft/sec) *:	1,416	1,408	1,413	1,419	1,423
Impact Energy (ft-lbs):	1,068	1,056	1,064	1,073	1,079
Impact Momentum (lb-sec.):	1.51	1.50	1.51	1.51	1.52
Impact Angle (degrees):	0°	0°	0°	0°	0°
Sample Penetration:	NP	NP	NP	NP	NP
Witness Plate Penetration:	NP	NP	NP	NP	NP

Impact Spacing (inches) \*\*: See the shot spacing in the impact side photo  
 Impact Spacing / Pattern: Multiple shots distributed over test sample  
 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: 69 °F  
 Test Date: February 11, 2023  
 Pass / Fail Results: Passed the Test  
 Comments:

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

**Footnotes**

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

**Test and Report Engineers**

Tested and Reported by: Sam Raheb

Signature: *Sam Raheb*

Date: February 11, 2023

Ballistic Testing Services

Report Number: BTR-02-11-2023-20230102-Sample 2

Phone: 800-513-4291 Email: [techsupport@CloseFocusResearch.com](mailto:techsupport@CloseFocusResearch.com)

CloseFocusResearch.com

Name: Avalon International Aluminum, Inc  
 Address: 21451 SW 108th Avenue, Tualatin, OR 97062  
 Phone: Phone: 208-272-0524

Report Date: February 11, 2023  
 Contact: Rick Carleton  
 Email: [gm@avalon.solutions](mailto:gm@avalon.solutions)

Ballistic Results

Project Summary

Type of Products to be tested: Security Door and Frame  
 Test Specimen Sample size(s): Unknown  
 Number of test specimens: 2 Samples  
 Weight of all samples: 13.2 lbs  
 Are Materials a Health Hazard: No  
 Need the Tests performed by: within 5 to 7 days  
 Need products shipped back: No  
 Purchase Order Number: 20230102

International Ballistic Standards / Specifications Testing

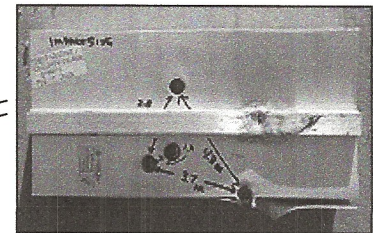
- ASTM  Canadian  FRA  NIJ  CFR Pass All
- Australian  EN1063  Germ DIN  State Dept  CFR SYA
- British  EN1522/23  MIL-SAMIT  UL 752  Other

Test Standard: Underwriters Laboratory UL752  
 Particular Test: UL Level 3 (.44 Magnum SWC) - Multi-shot  
 Velocity Range: 1,350 to 1,485 ft/s  
 Shots: 7 shots  
 Shot Pattern: Multiple shots distributed over test sample

Test Results

Test Sample: Sample 2  
 Item / Part Number: 2 / E-500-1  
 D.O.M.: February 7, 2023  
 Description: Bullet Resistant Security Frame  
 Sample Size: 12.00 x 5.64 inch (304.8 x 143.1 mm)  
 Thickness: 1.500 inch (38.1 mm)  
 Weight: 6.70 lbs (3.04 kg)  
 Weapon Type: .44 Magnum  
 Cartridge / Projectile Type: .44 Magnum SWC  
 Projectile Weight: 240 grains  
 Target Distance: 15 feet  
 Number of Shots: 7 shots

12.00 inch  
(304.8 mm)



5.64 inch (143.1 mm)

Shot Sequence:	Shot 1	Shot 2	Shot 3	Shot 4	Shot 5	Shot 6	Shot 7
Impact Velocity (ft/sec) *:	1,413	1,421	1,410	1,420	1,424	1,415	1,417
Impact Energy (ft-lbs):	1,064	1,076	1,059	1,074	1,080	1,067	1,070
Impact Momentum (lb-sec.):	1.51	1.51	1.50	1.51	1.52	1.51	1.51
Impact Angle (degrees):	0°	0°	0°	0°	0°	0°	0°
Sample Penetration:	NP	NP	NP	NP	NP	NP	NP
Witness Plate Penetration:	NP	NP	NP	NP	NP	NP	NP

Impact Spacing (inches) \*\*: See the shot spacing in the impact side photo  
 Impact Spacing / Pattern: Multiple shots distributed over test sample  
 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: 69° F  
 Test Date: February 11, 2023  
 Pass / Fail Results: Passed the Test  
 Comments:

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

Footnotes

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

Test and Report Engineers

Tested and Reported by: Sam Raheb

Signature: *Sam Raheb*

Date: February 11, 2023