



Ballistic Resistance – Test Report

Client: Ballistiglass LLC

Report date: 17 July 2018

Job number: 000008508A

Test procedure and supporting documentation: Per Customer Instructions

Sample receipt, identification information, and disposition:

The sample(s) were received on **16 July 2018**. Sample item identification and description details are provided on the attached data record(s). The test sample(s) were inspected prior to testing and no anomalies were discovered. Sample(s) will be returned, discarded, or held, per customer instructions.

Test date(s) and location:

Testing commenced on **17 July 2018**, at the H.P. White Laboratory, Inc. facilities located at 3114 Scarboro Road, Street, Maryland. Testing concluded on **17 July 2018**.

Report prepared by: Ashley Gowland, Customer Operations Coordinator

Report reviewed by: Chris D'Amario, Engineer

Revision number and date: NA

Supplement to report: NA

Test data transmittal method and storage location:

This test report and test data were transmitted via email in a manner compliant with ISO 17025 requirements. Permanent electronic and hardcopy files are maintained in accordance with HPWLI data storage policy on data storage systems, filed by job number.

Disclaimer:

Testing was performed on sample(s) provided by the client. H.P. White Laboratory, Inc. holds no responsibility for sample selection methods. This report is based on data obtained from testing only the sample(s) submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality or performance of any other items of the same, or similar, design. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. This testing was performed by H.P. White Laboratory, Inc. to client specification, and the test results are the property of the client, who holds all rights of reproduction or publication of this report and related test data.

Destination control statement:

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Test Procedures

Ballistic Testing: All testing was conducted on an indoor range at ambient conditions, in accordance with your instructions and the modified provisions of NIJ-STD-0108.01, Level IIIA. Testing was conducted using caliber .44 Magnum, SWCGC, 240 grain ammunition. The test sample(s) were positioned 16.4 feet from the muzzle of the barrel to produce zero (0°) degree obliquity impacts. Photoelectric infrared screens were located at 6.6 feet and 9.8 feet which, in conjunction with electronic chronographs, were used to compute bullet velocities at 8.2 feet forward of the muzzle. Penetrations were determined by visual examination of the 0.020-inch-thick 2024-T3 aluminum alloy witness plate, placed 6.0 inches behind and parallel to the test sample(s). Table I provides a summary of information on the attached data record(s).

Table I: Ballistic Resistance, Summary of Results

Test Sample			Set-Up			Results	
Sample No.	Thickness (in.) (a)	Weight (lbs.)	Caliber	Obliquity	Shots	Velocity (fps) Max/Min	Penetrations
SAMPLE-1 WOOD DOOR	1.693	110.1	.44 MAGNUM	0°	5	1445/1410	0
(a) Average of thickness of door measurements (not glass)							
(b) See individual data record(s) for specific footnotes/remarks							

Report prepared by:



Ashley Gowland
 Customer Operations Coordinator

Report reviewed by:



Chris D'Amario
 Engineer



H.P. White Laboratory, Inc.

BALLISTIC RESISTANCE TEST

Client : 7122: BALLISTIGLASS LLC.

Job No. : 000008508 Test Date : 7/17/18

TEST PANEL

Manufacturer : BALLISTIGLASS LLC.
 Size : 79.5 x 35.5 in.
 Thicknesses : 1.693, 1.697, 1.693, 1.690 in.
 Avg. Thick : 1.693 in.
 Description : WOOD SCHOOL DOOR

Sample No. : SAMPLE-1
 Weight : 110.1 lbs.
 Hardness : NA
 Plies/Laminates : NA

Date Rec'd. : 7/16/18
 Via :
 Returned :

SET-UP

Shot Spacing : PER CUSTOMER REQUEST
 Witness Panel : 0.020", 2024-T3 ALUMINUM
 Obliquity : 0 deg.
 Backing Material : NA
 Conditioning : AMBIENT

Primary Vel. Screens : 6.6 ft., 9.8 ft.
 Primary Vel. Location : 8.2 ft. From Muzzle
 Residual Vel. Screens : NA
 Residual Vel. Location : NA
 Range to Target : 16.4 ft.
 Target to Wit. : 6.0 in.

Range No. : 3
 Temp. : 73 F
 BP : 30.01 in. Hg
 RH : 70%
 Barrel No./Gun : R3/ 44 MAG.
 Gunner : MILLER
 Recorder : STREETT

AMMUNITION

- (1) : .44 MAG, SWCGC, 240 gr.
- (2) :
- (3) :
- (4) :

Lot No. : HPW-0046
 Lot No. :
 Lot No. :
 Lot No. :

APPLICABLE STANDARDS OR PROCEDURES

- (1) : NIJ-STD-0108.01
- (2) : Level IIIA (MODIFIED)
- (3) : Required Velocity: 1350-1450 fps.

Shot No.	Ammo.	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Footnotes
1	1	2325	1411	2330	1408	1410	None	
2	1	2316	1417	2321	1414	1415	None	
3	1	2276	1441	2280	1439	1440	None	
4	1	2321	1414	2321	1414	1414	None	
5	1	2271	1445	2271	1445	1445	None	

<u>REMARKS :</u>	<u>FOOTNOTES :</u>