

SAFEWOOD DESIGNS BALLISTICS PERFORMANCE TEST REPORT

SCOPE OF WORK

UL-752, LEVEL 8, BALLISTIC TESTING ON 1-1/2" THICK FIBERGLASS CLOTH MIXED WITH RESIN WALL PANEL

REPORT NUMBER

M1468.02-119-12 R0

TEST DATE

04/12/21

ISSUE DATE

06/25/21

RECORD RETENTION END DATE

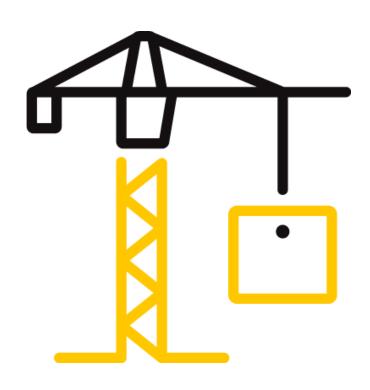
04/12/25

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DOCUMENT CONTROL NUMBER

RT-R-AMER-TEST-2788 (06/15/18) © 2017 INTERTEK





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TEST REPORT FOR SAFEWOOD DESIGNS

Report No.: M1468.02-119-12 R0

Date: 06/25/21

REPORT ISSUED TO

SAFEWOOD DESIGNS

7281 Commerce Cir. W. Fridley, MN 55432

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by SafeWood Designs, Fridley, PA, to perform ballistics resistance testing in accordance with UL-752, Level 8 on 1-1/2" thick fiberglass cloth mixed with resin wall panel. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at the Intertek B&C test facility in York, Pennsylvania. Intertek B&C in York, Pennsylvania has demonstrated compliance with ISO/IEC International Standard 17025 and is consequently accredited as a Testing Laboratory (TL-144) by International Accreditation Service, Inc. (IAS). Intertek B&C is accredited to perform all testing reported herein.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

SECTION 2

SUMMARY OF TEST RESULTS

Product Type: 1-1/2" Thick Fiberglass Cloth Mixed with Resin Wall Panel

| TITLE | TEST SPECIMEN |
|----------------------------------|---------------|
| Ballistic Resistance Level/Class | Level 8 |
| Ballistic Resistance Test Result | Pass |

For INTERTEK B&C:

| COMPLETED BY: | Isaiah W. Gebhart | REVIEWED BY: | Travis A. Hoover |
|---------------|----------------------------|--------------|------------------|
| TITLE: | Ballistics Lead Technician | TITLE: | Program Manager |
| | | | |
| | | | |
| SIGNATURE: | | SIGNATURE: | |
| DATE: | 06/25/21 | DATE: | 06/25/21 |
| IWG:tah/aas | | | |

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SECTION 3

TEST METHOD

Each test specimen was evaluated in accordance with the following:

UL-752, *Bullet-Resisting Equipment*, Underwriters Laboratories, Inc., Eleventh Edition, September 2005 (Revised December 2015)

SECTION 4

MATERIAL SOURCE/INSTALLATION

The test specimen was provided by the client in good condition. Representative samples of the test specimen will be retained by Intertek B&C for a minimum of four years from the test completion date.

SECTION 5

EQUIPMENT

UL752, Level 8

Firearm: H&S Precision Universal Receiver (UR-01)

Test Ammunition: 7.62 mm rifle, 150 grain, lead core full metal jacket, military ball

Velocity Range: 2750 - 3025 fps

Ballistic Screens: Oehler Model 57, infrared

SECTION 6

LIST OF OFFICIAL OBSERVERS

| NAME | COMPANY | |
|-------------------|--------------|--|
| Travis A. Hoover | Intertek B&C | |
| Isaiah W. Gebhart | Intertek B&C | |

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SECTION 7

TEST PROCEDURE

The sample was rigidly mounted for ballistics resistance testing. The muzzle of the test firearm was set at 15 feet from the sample at zero degree (±3°) obliquity. Ballistic screens were set at 5 feet and at 10 feet from the muzzle of the firearm. Per UL-752, Section 17.1.2, a 1/8" thick cardboard indicator was positioned 18" from the protected side of the specimen. Test ammunition was reloaded to conform to UL-752, Table 3.1 requirements.

SECTION 8

TEST SPECIMEN DESCRIPTION

| PRODUCT TYPE | Wall panel | |
|--------------|--|--|
| OVERALL SIZE | 12" wide by 12" high | |
| DESCRIPTION | 1-1/2" thick fiberglass cloth mixed with resin; three layers of 1/2" | |
| | material joined with polyurethane adhesive to make the 1-1/2" | |
| | thickness | |

SECTION 9

TEST RESULTS

Test Date: 04/12/21

Ambient Temperature: 66°F

The ballistic results are tabulated as follows:

Specimen No. 1

| SHOT NO. | SHOT LOCATIONS | TEMP. (°F) | VELOCITY (fps) | RESULTS | PASS/FAIL |
|-------------|------------------------------------|---------------|-------------------|------------------------------|-----------|
| 1 | Five Shot Pattern (top left) | 65 | 2894 | No spalling on witness panel | Pass |
| 2 | Five Shot Pattern (top right) | 65 | 2877 | No spalling on witness panel | Pass |
| 3 | Five Shot Pattern (bottom right) | 64 | 2914 | No spalling on witness panel | Pass |
| 4 | Five Shot Pattern (bottom left) | 63 | 2905 | No spalling on witness panel | Pass |
| 5 | Five Shot Pattern (center) | 63 | 2899 | No spalling on witness panel | Pass |



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SECTION 10

CONCLUSION

The test specimen at the standard temperature condition, met the specified performance requirements of UL 752, Level 8.

All test specimens met the specified performance requirements per UL 752 standard.

SECTION 11

PHOTOGRAPHS

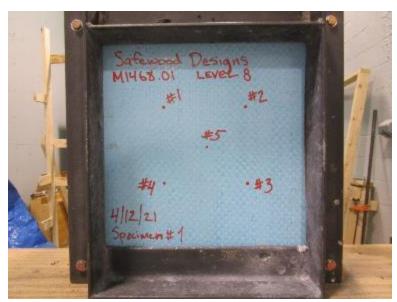


Photo No. 1 UL 752, Level 8, Pre-Test Exterior



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Photo No. 2 UL 752, Level 8, Pre-Test Interior



Photo No. 3 UL 752, Level 8, Post-Test Exterior



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Photo No. 4 UL 752, Level 8, Post-Test Interior



Photo No. 5
Post-Test Witness Panel



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SECTION 12

REVISION LOG

| REVISION # | DATE | PAGES | REVISION |
|------------|----------|-------|-----------------------|
| 0 | 06/25/21 | N/A | Original Report Issue |
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