

## LETTER REPORT

July 15, 2021

Intertek Report No. G104464357SAT-011

Intertek Project No. G1044464357

Armatherm, Inc.  
1 Titleist Drive  
Acushnet, MA 02743  
tom@armatherm.com

Ph: 1-844-360-1036

**Subject:** NFPA 285 Evaluation of the Armatherm Z-Girt Wall Assembly

This letter report represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

**NFPA 285-2019, Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components**

Intertek Testing Services NA, Inc. (Intertek) conducted screening testing for Armatherm, Inc. on their Z-Girt wall assembly on June 8, 2021. The wall assembly described herein met the conditions of acceptance of the standard. Details of the assembly constructed are below.

| TEST REQUIREMENTS   | TEST RESULTS   | PASS/FAIL |
|---|--|-----------|
| Flames are not to reach 10 ft. above the window opening header.                   | Flames did not reach 10 ft. above the window opening header.                           | PASS      |
| Flames are not to reach a lateral distance of 5 ft. from the vertical centerline. | Flames did not reach a lateral distance of 5 ft. from the vertical centerline.         | PASS      |
| Flames are not to propagate beyond the limits of the first story test room.       | Flames did not propagate beyond the limits of the first story test room.               | PASS      |
| No visible flaming allowed in the second story test room                          | No visible flaming in the second story test room.                                      | PASS      |
| TC's 11 and 14-17 (1000°F limit)  | TC's 11 and 14-17 did not exceed their 1000°F limit.                                   | PASS      |
| TC's 18-19, 28, and 31-40 (750°F above ambient)                                   | TC's 18-19, 28, and 31-40 did not exceed their 750°F above their ambient temperatures. | PASS      |
| TC's 49-54 (500°F above ambient)  | TC's 49-54 did not exceed 500°F above their ambient temperatures.                      | PASS      |
| TCs 55-67 (750°F above ambient)   | TC's 65-65 did not exceed their 750°F above their ambient temperatures.                | PASS      |

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

## LETTER REPORT

### Base Frame:

- Interior Sheathing: 5/8 in. Type X gypsum board installed in a staggered fashion and fastened 24 in. on center (oc) horizontally and 12 in. oc vertically with 1-3/4 in. self-tapping screws.
- Stud and track layout: 20 GA 3-5/8 in. deep steel studs spaced 24 in. oc with track fastened horizontally along the top and bottom of the window opening as well as on the top and bottom of the wall assembly with 1/2 in self-tapping screws.
- Cavity Insulation: none
- Exterior Sheathing: 1/2 in. Densglass installed in a staggered fashion and fastened 24 in. on center (oc) horizontally and 12 in. oc vertically with 1-3/4 in. self-tapping screws.
- 

### External Cladding System:

- Armatherm™ Z Girt installed horizontally space approximately 1-1/2 ft oc vertically with #12 x 2-1/2 hex head screws. Tremco Spectrum1 was applied to all external sheathing joints and screw heads.
- Tremco ExoAir® 130 weather barrier installed around the window opening perimeter and sheathing joints
- Hunter Xci 3.5" thick Foil Class A insulation installed by friction fitting into the Z-Girt cavities.
- Alucoil Larson FR 4-mm thick panels, incorporating the NOW 8000 System, fastened onto the Armatherm Z-Girts with #12 x 2-1/2 in. hex head self-drilling screws.

Window flashing detail: 040 Aluminum with a 2 in. long vertical leg on the interior surface with the horizontal leg extended until flush with the exterior face.

**LETTER REPORT**

**APPENDIX A: Photos**




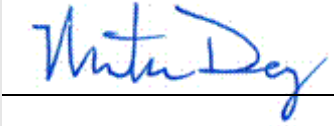
**Photo No. 1**  
**Armatherm Z-Girt assembly before test.**



**Photo No. 2**  
**Armatherm Z-Girt assembly after test. (Panels were removed to extinguish fire after the test).**

## LETTER REPORT

If there are any questions regarding the results contained in this report, or any of the other services offered by Intertek, please do not hesitate to contact your dedicated Intertek Project Manager.

|               |   |              |   |
|---------------|---|--------------|---|
| Completed by: | Philip G. Casso, E.I.T.   | Reviewed by: | Mike Dey  |
| Title:        | Project Engineer  | Title:       | Senior Project Engineer   |
| Signature:    |  | Signature    |  |
| Date          | July 15, 2021   | Date:        | July 15, 2021   |

Please note: this Letter Report does not represent authorization for the use of any Intertek certification marks.