

November 1, 2018

**Engineering Evaluation  
Report: 18-0816.01**

**Prepared by:** Theodore Berman, P.E.  
Florida Professional Engineer License No. 09814

**1. Manufacturer:**

THERMASTEEL INC  
609 West Rock Road  
Radford, Virginia 24141

**2. Product Line:**

Thermasteel Wall Panels

**3. Product Description:**

12 foot Structural Panels described on test report as: "The ThermaSteel hurricane panels are molded in a 5-1/2" thick by 48" wide by 144" high configuration. On the exterior (outside facing or impact surface) eleven 3/4" by 3-1/2" by 144" 24 gauge galvanized TS-C profiles are spaced at 5" on center with a 3/4" by 4-1/4" "L" metal overlapping the adjoining panel and is screw attached to the adjoining component with #8 x 1/2" galvanized self-tapping screws at 12" on center. On the opposite non-impact side, four 20 gauge galvanized 1-5/8" by 3-5/8" by 144" CSJs are spaced at 16" on center. Two 20 gauge galvanized 1-5/8" by 3-5/8" by 144" CSJs are positioned and screw attached through the leg of the interior side stud into the web of the perpendicular internal studs. The two center studs are braced such that the webs of the two internal studs are perpendicular to the webs of the interior surface studs."

**4. Code Compliance:**

The above mentioned product has been evaluated for compliance with the requirements of the Florida Building Code 6<sup>th</sup> Edition (2017) and as per Rule 61G20-3.

**5. Supporting Documents:**

Testing: Architectural Testing, Report No. : 55247.01-122-1 Dated 02/24/05

Testing Standards: TAS 201, TAS 202, TAS 203 and ASTM E72

**6. Limitations and Conditions of Use:**

1. Maximum allowable design pressure: +75/-75 PSF
2. This product has been tested for large impact protection in accordance with TAS 201 and TAS 203
3. Maximum racking shear value of : 642 plf
4. Maximum compression value of : 750 plf
5. Exterior wall panels shall be protected with a water-resistive barrier in accordance with Chapter 14.
6. All steel members shall be manufactured in accordance with ASTM A653 SS, Grade 37, and coated with ASTM A924 G60 galvanizing/galvalume.
7. EPS panels shall be manufactured in accordance with ASTM C578. The flame-spread index and smoke density index shall be less than 25 and 450, respectively, at a nominal density of 1.3 pounds per cubic foot.
8. This product may be used outside and inside the HVHZ zone.
9. All supporting host structures shall be able to support the superimposed loads.
10. Product data shall be in accordance with these Installation Instructions and manufacturer's published instructions.
11. Product shall be installed with anchors shown on installation drawings not to exceed the spacing indicated. All screws shall be stainless steel.
12. All components that are permanently installed shall be protected from contamination and corrosion.
13. Site conditions that deviate from the details on the installation instructions and/or drawings will require further analysis from a licensed Professional Engineer.

**7. Quality Assurance:**

The manufacturer has demonstrated compliance of products in accordance with the Florida Building Code and Rule 61G20---3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity:

IAPMO UES

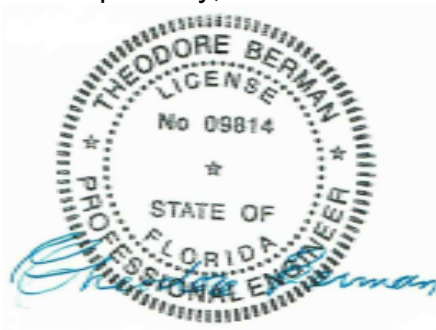
(FBC Organization QUA 10547)

Product shall be labeled in accordance with the requirements of the quality assurance entity.

**8. Certification of Independence**

Theodore Berman, P.E., does not have nor will acquire a financial interest in any company manufacturing or distributing the product(s) for which this report is being issued. Also, Theodore Berman, P.E. does not have nor will acquire a financial interest in any other entity involved in the approval process of the listed product(s).

Respectfully,



11/01/2018

\_\_\_\_\_  
Theodore Berman, P.E.  
Florida License No. 09814  
Ted Berman and Associates, LLC  
Certificate of Authorization No. 27502