

WALTER A. TILLIT, JR., P.E.

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PRODUCT EVALUATION REPORT

REPORT NO.: 23-0809.03

DATE: August 9, 2023

PRODUCT CATEGORY: Hurricane Shutters

PRODUCT SUB-CATEGORY: Storm Panels

PRODUCT NAME: 0.050" BERTHA ALUMINUM STORM PANEL
(2.25" DEEP)

MANUFACTURER: Eastern Metal Supply, Inc.
4268 Westroads Drive
West Palm Beach, Florida 33407

1. PURPOSE OF EVALUATION:

This is a Product Evaluation Report issued by **Walter A. Tillit, Jr., P.E.** (System ID # 1906) to the **Eastern Metal Supply, Inc.**, Rule Chapter No. 61G20-3, Method 1D of the Florida Department of Business and Professional Regulation.

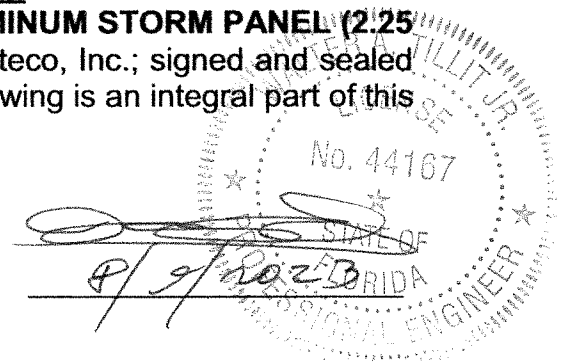
This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2023 8th Edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

This Product Evaluation Report shall be subject to review and revision in case of a Building Code change that may affect its limitations and conditions.

2. EVIDENCE SUBMITTED:

2.1. PRODUCT EVALUATION DOCUMENT (P.E.D.):

Drawing No. 23-158, titled "0.050" BERTHA ALUMINUM STORM PANEL (2.25" DEEP)", sheets 1, 1A thru 15 of 15 prepared by Tilteco, Inc.; signed and sealed by Walter A. Tillit, Jr., P.E.; dated 8/9/2023. This drawing is an integral part of this Evaluation Report.



2.2. TEST REPORTS:

Large missile impact and fatigue load tests were performed under Protocols TAS 201 and TAS 203 as per section 1626 of the Florida Building Code. Uniform static loads as per section 1626, per Protocol TAS 202. Test reports prepared by American Testing Lab of South Reports No. 1022.01-96, dated November 8, 1996, signed and sealed by William R. Mehner, P.E., Report No. 0221.01-01, dated May 02, 2001, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P.E., Report No. 0616.02-05, dated September 14, 2005, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P.E.

Tensile test reports No. 1CM-384 dated March 26, 2001 signed and sealed by Robert Kelley, P.E. and Report No. 5IM-927 by QC Metallurgical, Inc., dated September 20, 2005, signed and sealed by Frank Grate, P.E.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

On 0.050" Bertha Aluminum Storm Panel (2.25" Deep) for maximum anchor spacing vs. design wind load and panel length based on rational and comparative analysis, and in accordance with section 1616 of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated 09/07/05 and 03/24/15, signed and sealed by Walter A. Tillit, Jr., P.E.

3. MISSILE IMPACT RESISTANCE:

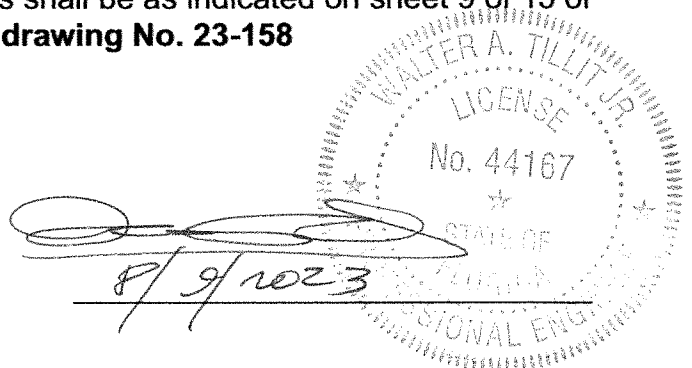
Large missile impact under section 1626 of the Florida Building Code, as per TAS 201 Protocol (50 ft/sec, 2'x 4")

4. WIND LOADS RESISTANCE:

0.050" Bertha Aluminum Storm Panel (2.25" Deep) has been verified to sustain wind pressures. Maximum panel length shall be as indicated on sheet 9 of 15 of Product Evaluation Document (P.E.D.), **drawing No.23-158**. Maximum Anchor Spacing shall be as indicated on sheets 10 and 11 of 15, of Product Evaluation Document (P.E.D.), **drawing No. 23-158**.

5. INSTALLATION:

Installation shall be performed strictly in accordance with the details indicated on sheets 2, thru 9 and 12 thru 15, of Product Evaluation Document (P.E.D.), **drawing No.23-158** Minimum separation to glass shall be as indicated on sheet 9 of 15 of Product Evaluation Document (P.E.D.), **drawing No. 23-158**


8/9/2023

6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes and Components indicated on sheets 1, 1A of 15, of Product Evaluation Document (P.E.D.), **drawing No. 23-158**.

Anchor specifications shall be as indicated on sheets 1 and 10 thru 15 of 15, of Product Evaluation Document (P.E.D.), **drawing No. 23-158**.

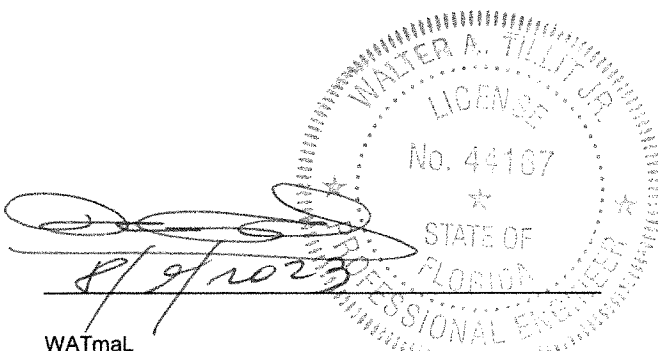
7. LIMITATIONS AND CONDITIONS OF USE:

7.1. Shall be strictly in compliance with General Notes No. 1, 7, 8, 9, 10, 11 and 12, indicated on sheet 1 of 15, of Product Evaluation Document (P.E.D.), **drawing No. 23-158** prepared by Tilteco, Inc. and signed and sealed by Walter A. Tillit, Jr., P.E.

7.2. Product **may** be installed within HIGH VELOCITY HURRICANE ZONES as defined on section 202 of the Florida Building Code.

7.3. Product shall only be installed into poured concrete, concrete block, and wood frame structures.

Product Evaluation Report prepared by Walter A. Tillit, Jr., P.E. (Florida License No. 44167), President of Tilteco, Inc. (Florida CA-0006719).



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D:\TILTECO ADMIN RECORDS \ P. E. REPORT.203\ EASTERN METAL SUPPLY, INC \ 0.050" BERTHA ALUMINUM STORM PANEL (2.25" DEEP) \ DRWG # 23-158 \ REPORT # 23-0809.03