

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

tilteco@aol.com
FL P.E. License No. 44167
FL C.A. License No. 0006719

PRODUCT EVALUATION REPORT

REPORT NO.: 23-0809.04
DATE: August 9, 2023
PRODUCT CATEGORY: Hurricane Shutters
PRODUCT SUB-CATEGORY: Colonial Shutters
PRODUCT NAME: BERTHA HV BOARD AND BATTEN SHUTTER
SUBMITTED BY: 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.**

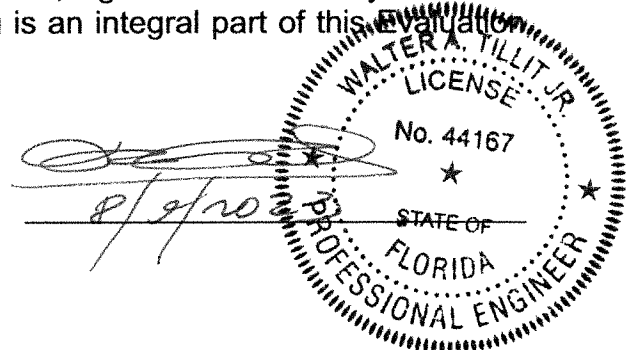
This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2023 8th Edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

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. 23-159, titled "**BERTHA HV BOARD AND BATTEN SHUTTER**", sheets 1 thru 13 of 13, 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 loading under ASTM E-1886 and ASTM E 1996 Standards, as per section 1609.1.2 of the Florida Building Code. Uniform Static loads in accordance with section 1709.8.3, per ASTM E-330 Standard. Test report prepared by American Testing Lab of South Florida, Report No. 0809.01-07, dated August 9, 2007 thru October 18, 2007, signed and sealed by William Mehner, P.E. and Henry Hattem P.E.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

On Bertha HV Board and Batten Shutter for anchor adequacy vs. design wind load and shutter span based on rational and comparative analysis, and in accordance with section 1604 of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated 10/26/07, signed and sealed by Walter A. Tillit, Jr., P.E., and on August 11, 2017.

3. MISSILE IMPACT RESISTANCE:

Large missile impact under section 1609.1.2 of the Florida Building Code, as per ASTM E 1886 and ASTM E 1996 Standards, qualifying missile type D (basic protection).

4. WIND LOADS RESISTANCE:

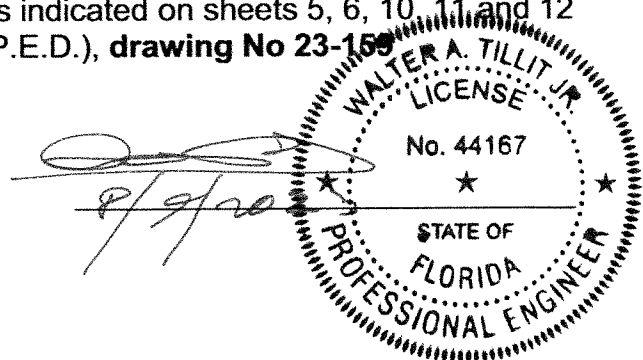
Bertha HV Board and Batten Shutter has been verified to sustain wind pressures. Maximum Shutter shall be as indicated on sheets 3, and 7 of 13, of Product Evaluation Document (P.E.D.), **drawing No. 23-159**. Anchor Details shall be as indicated on sheets 5, 6, 10, 11 and 12 of 13, of Product Evaluation Document (P.E.D.), **drawing No. 23-159**. Bertha HV Board and Batten Shutter has been verified for code compliance to work as a non-porous wind load resistant storm shutter assembly, as per section ASTM E 1996 Standard, qualifying Wind Zones 1, 2 and 3.

5. INSTALLATION:

Shall be performed strictly in accordance with the details indicated on sheets 3 thru 13 of 13, of Product Evaluation Document (P.E.D.), **drawing No. 23-159**. Minimum separation to glass shall be as indicated on sheets 4, and 9 of 13, of Product Evaluation Document (P.E.D.), **drawing No. 23-159**

6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes and Components indicated on sheets 1 and 2 of 13 of Product Evaluation Document (P.E.D.), **drawing No. 23-159**. Anchor specifications shall be as indicated on sheets 5, 6, 10, 11 and 12 of 13, of Product Evaluation Document (P.E.D.), **drawing No 23-159**



7. LIMITATIONS AND CONDITIONS OF USE:

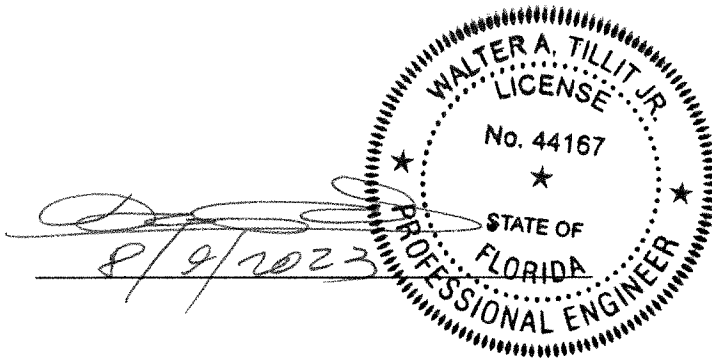
7.1. Shall be strictly in compliance with General Notes No. 1, 2, 8, 9, 10, 11, 12 and 13, indicated on sheet 1 of 13, of Product Evaluation Document (P.E.D.), **drawing No. 23-159** prepared by Tilteco, Inc. and signed and sealed by Walter A. Tillit, Jr., P.E.

7.2. Product **shall not** 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 wood frame, poured concrete or concrete block structures.

7.4. Product shall only be installed within Wind Zones 1, 2 and 3 as per ASTM E 1996 Standard (basic protection only).

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

A handwritten signature in black ink is written over a circular professional engineer seal. The seal is for Walter A. Tillit, Jr., License No. 44167, State of Florida, Professional Engineer. The signature appears to be "W.A. Tillit" followed by a date "8/9/2023" written below it.

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