

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

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

PRODUCT EVALUATION REPORT

REPORT NO.:

17-0726.04

DATE:

July 26, 2017

PRODUCT CATEGORY:

Hurricane Shutters

PRODUCT SUB-CATEGORY:

Storm Panels

PRODUCT NAME:

0.030 thick Galvanized Bertha Steel Storm

Panel (2.25" Deep)

MANUFACTURER:

Eastern Metal Supply, Inc.

4268 Westroads Drive

West Palm Beach, Florida33407

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 **2017 sixth** 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. 17-099 (Revises Drawing 15-048), titled "0.030 thick GALVANIZED BERTHA STEEL STORM PANEL (2.25" DEEP)", sheets 1, 1A thru 9 of 9 prepared by Tilteco, Inc.; signed and sealed by Walter A. Tillit, Jr. P.E., dated 07/26/17. This drawing is an integral part of this Evaluation Report.

2.2. TEST REPORTS:

Large missile impact and fatigue load tests were performed under TAS 201 and 203 standard 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 Florida, Report No. 0425.01-00, dated August 22, 2000, signed by William R. Mehner, P.E. and Henry Hattem, P.E. and Report No. 0616.01-05, dated September 15, 2005, signed and sealed by William R. Mehner, P.E.

Tensile test report No.5IM-926 by QC Metallurgical, Inc., dated September 20, 2005, signed and sealed by Frank Grate, P.E.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

On 0.030" thick Galvanized Bertha Steel 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.

4. WIND LOADS RESISTANCE:

0.030" thick Galvanized Bertha Steel Storm Panel (2.25" Deep) has been verified to sustain wind pressures. Maximum panel length shall be as indicated on sheet 4 of 9 of Product Evaluation Document (P.E.D.), **drawing No. 17-099**. Maximum Anchor Spacing shall be as indicated on sheets 5 thru 9 of 9, of Product Evaluation Document (P.E.D.), **drawing No. 17-099**.

5. INSTALLATION:

Installation shall be performed strictly in accordance with the details indicated on sheets 2, 3, 4 and 8, 9 of 9, of Product Evaluation Document (P.E.D.), **drawing No. 17-099** Minimum separation to glass shall be as indicated on sheet 4 of 9, of Product Evaluation Document (P.E.D.), **drawing No. 17-099.**

6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes and Components indicated on sheets 1, 1A of 9, of Product Evaluation Document (P.E.D.), drawing No. 17-099

Anchor specifications shall be as indicated on sheets 1 and 5 thru 9 of 9, of Product Evaluation Document (P.E.D.), drawing No. 17,099.

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 9, of Product Evaluation Document (P.E.D.), **drawing No. 17-099** 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 1620.2 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 EB-0006719).

