

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

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PRODUCT EVALUATION REPORT

REPORT NO.: 23-0714.18

DATE: July 14, 2023

PRODUCT CATEGORY: Impact Protective System

PRODUCT SUB-CATEGORY: Operable

PRODUCT NAME: **TITAN II FOLDING IMPACT PROTECTIVE SYSTEM**

SUBMITTED BY: Folding Shutter Corporation
7089 Hemstreet Place
West Palm Beach, FL 33413

1. PURPOSE OF EVALUATION:

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

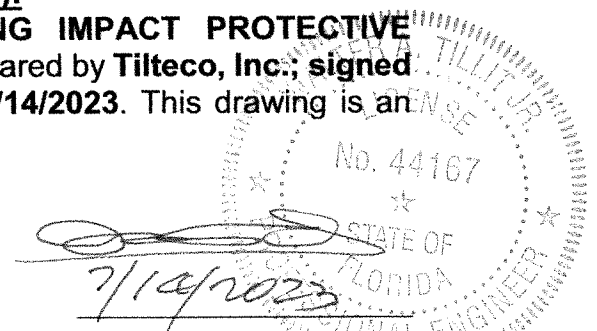
This product is being issued an Evaluation Report as described herein and has been verified for compliance in accordance with the 2023 8th Edition Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

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. 23-106, titled "TITAN II FOLDING IMPACT PROTECTIVE SYSTEM", sheets 1 thru 13 of 13, including 9A, prepared by Tilteco, Inc.; signed and sealed by **Walter A. Tillit, Jr., P.E.**; dated 7/14/2023. This drawing is an integral part of this Evaluation Report.



2.2. TEST REPORTS:

Hurricane Testing Lab, Report # 0143-0408-02, dated 4/24/02, signed and sealed by Mr. Vinn Abraham, P.E.; report # 0143-0806-00, dated 8/15/00, signed and sealed by Mr. Vinn Abraham, P.E.

Hurricane Engineering & Testing Inc., Report # HETI 94-191, dated 7/15/94, signed and sealed by Mr. Arshad Vigar, P.E.; Report # HETI 96-541, dated 4/3/96, signed and sealed by Mr. Hector Medina, P.E.; Report # HETI 96-542, dated 4/17/96, signed and sealed by Mr. Hector Medina, P.E.; Report # HETI 94-375, dated 11/16/94, signed and sealed by Mr. Hector Medina, P.E.; Report # HETI 94-379, dated 11/21/94, signed and sealed by Mr. Hector Medina, P.E.; Report # HETI 94-195, dated 7/16/94, signed and sealed by Mr. Arshad Vigar, P.E.

Tensile Test Report # HETI 95-T97, dated 9/28/95, signed and sealed by Mr. Hector Medina, P.E.; Report # HETI 96-T16, dated 4/11/96, signed and sealed by Mr. Hector Medina, P.E., QC Metallurgical, Inc. # 14DM-383, signed by Jerry Laciofano, dated 5/7/14.

American Testing Lab of South Florida, Report # 0320.01-14, dated 4/26/14, signed and sealed by Mr. Stephen Walter, P.E.

Qualifications for Sabic Innovative Plastic Polycarbonate with resin 103, equivalent to approved # 9034 sheet grade with current NOA addressing its burning characteristics, weathering and structural (mechanical) properties.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

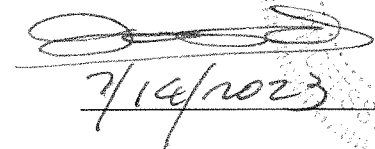
On “**Titan II Folding Impact Protective System**” for maximum shutter span vs. design wind load, as well as maximum anchor spacing vs. design wind load and connection type based on rational and comparative analysis, and in accordance with sections **1604** and **1616** of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated October 13, 2013, signed and sealed by Walter A. Tillit, Jr., P.E.

3. MISSILE IMPACT RESISTANCE:

Large missile impact under section **1609.1.2** and **1626** of the Florida Building Code, as per Protocol TAS 201 (50ft/sec, 2”x 4”).

4. WIND LOADS RESISTANCE:

“**Titan II Folding Impact Protective System**” has been verified to sustain wind pressures. Maximum Slat Span shall be as indicated on sheet 13 of 13 of Product Evaluation Document (P.E.D.), **Drawing # 23-106**. Maximum Anchor Spacing shall be as indicated on sheets 13 of 13 of Product Evaluation Document (P.E.D.), Drawing No. 23-106


7/14/2023

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

5. INSTALLATION:

Shall be performed strictly in accordance with the details indicated on sheets 4 thru 12 including 9A of 13 of 13 of Product Evaluation Document (P.E.D.), Drawing No. **23-106**. Minimum separation to glass shall be as indicated on sheets 13 of 13 of Product Evaluation Document (P.E.D.), Drawing No. **23-106**. Requirements for use of locks and/or locking rods shall be as indicated on sheets 9 and 9A of 13 of 13 of Product Evaluation Document (P.E.D.), Drawing No. 23-106.

Slat # 1 Installation, working in unison with Slat 1A shall be performed strictly in accordance with limitations included on sheets 2 and 3 of 13 of Drawing # **23-106**. Minimum separation to glass shall be as indicated on sheet 13 of 13 of Drawing # **23-106**.

6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes and Components indicated on sheets 1, through 3 of 13 of Product Evaluation Document (P.E.D.), drawing No. **23-106**. Anchor specifications shall be as indicated on sheets 1 and 13 of 13 of Product Evaluation Document (P.E.D.), Drawing No. **23-106**.

7. LIMITATIONS AND CONDITIONS OF USE:

7.1. Shall be strictly in compliance with General Notes No. 1, 8, 9, 10, 11 and 12 indicated on sheet 1, of Product Evaluation Document (P.E.D.), Drawing No. **23-106** 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, and out of it

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