



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

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## **PRODUCT EVALUATION REPORT**

**REPORT No.:** 23-0919.09

**DATE:** September 19, 2023

**PRODUCT CATEGORY:** Windows

**PRODUCT SUB-CATEGORY:** Fixed

**PRODUCT NAME:** **SERIES 21000 HIGH IMPACT FIXED  
LAMINATED GLASS WINDOWS**

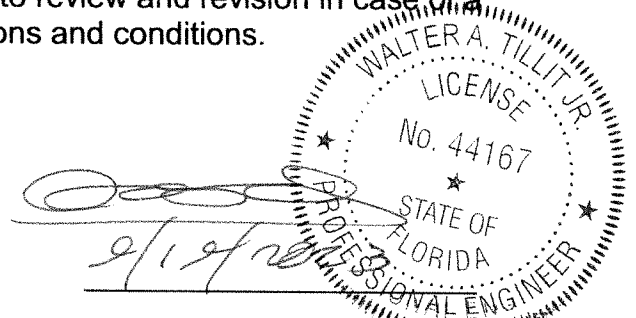
**MANUFACTURER:** **GIG WINDOWS & DOORS**  
290 West 78th Road  
Hialeah, FL 33014

### **1. PURPOSE OF EVALUATION:**

This is a Product Evaluation Report issued by **Walter A. Tillit, Jr., P.E.** (System ID # 1906) to **GIG WINDOWS & DOORS**, based on 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 8<sup>th</sup> 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. 23-208, titled “**SERIES 21000 HIGH IMPACT FIXED LAMINATED GLASS WINDOWS**” sheets 1 thru 17 (Including 2A, 4A, 10A, 12A) prepared by Tilteco, Inc.; signed and sealed by **Walter A. Tillit, Jr., P.E.**; dated **9/1/2023**. This drawing is an integral part of this Evaluation Report.

### **2.2. TEST REPORTS:**

Impact and Cyclic Tests as per protocol TAS-201, TAS-203, Uniform Static Load as per Protocol TAS 202 per sections 1626 and 1609.1.2, respectively of the Florida Building Code.

Test reports prepared by Fenestration Testing Lab Inc., Report No.6058, signed and sealed by Julio E. Gonzalez, P.E.

### **2.3. STRUCTURAL ENGINEERING CALCULATIONS:**

On Series 21000 high impact fixed laminated glass windows for Maximum Pressure Rating vs. Maximum anchor spacing, maximum width and height, and Maximum Glass Size, based on rational and comparative analysis, in accordance with sections 1604 and 1616 of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated 11/02/2009, signed and sealed by Walter A. Tillit, Jr., P.E. Glass verified per ASTM E-1300-9a, per section 2404.1 of the Florida Building Code

## **3. MISSILE IMPACT RESISTANCE:**

Large Missile Impact resistance is provided per TAS 201 (9 lbs., 50 feet/sec).

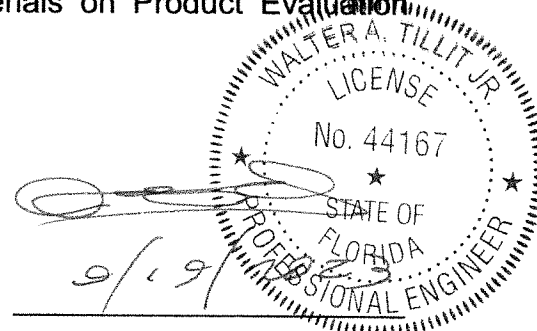
## **4. WIND LOADS RESISTANCE:**

On Series 21000 high impact fixed laminated glass windows has been verified to keep sustain wind pressures. Maximum Glass Panel Dimensions, window dimensions shall be as indicated on Product Evaluation Document (P.E.D.), Drawing No. **23-208**.

## **5. INSTALLATION:**

Installation shall be performed strictly in accordance with General Notes # 3 thru 13, indicated on sheet 1 and details indicated on sheets 3 thru 5 of Product Evaluation Document (P.E.D.), drawing **23-208**.

Gaskets and setting blocks used at installations comply with section 2411.3.4 of the Florida Building Code as specified on Bill of Materials on Product Evaluation Document (P.E.D.), drawing No.**23-208**.



**6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:**

Shall be strictly in accordance with General Notes and Components indicated on Product Evaluation Document (P.E.D.), **Drawing No. 23-208.**

Anchor specifications shall be as indicated on sheet 1, of Product Evaluation Document (P.E.D.), Drawing No. **23-208.** Max anchor spacing shall be per Product Evaluation Document (P.E.D.), **Drawing No. 23-208.**

**7. LIMITATIONS AND CONDITIONS OF USE:**

7.1. Shall be strictly in compliance with General Notes No. 1 thru 5, indicated on sheet 1 of Product Evaluation Document (P.E.D.), Drawing No. **23-208** 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 substrates with limitations as indicated on Product Evaluation Document (P.E.D.), drawing No. **23-208.**

Product Evaluation Report prepared by Walter A. Tillit, Jr., P.E. (Florida License No. 44167), President of Tilteco, Inc. (Florida CA-0026719).

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