



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

PRODUCT EVALUATION REPORT

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

REPORT NO.: 21-0415.03

DATE: APRIL 15, 2021

PRODUCT CATEGORY: Panel Walls

PRODUCT SUB-CATEGORY: Curtain Walls

PRODUCT NAME: HR-251 Captured Curtain Wall System Large and Small Missile Impact Insulated Glass

MANUFACTURER: Oldcastle BuildingEnvelope™
803 Airport RD. Terrell, TX 75160

1. PURPOSE OF EVALUATION:

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

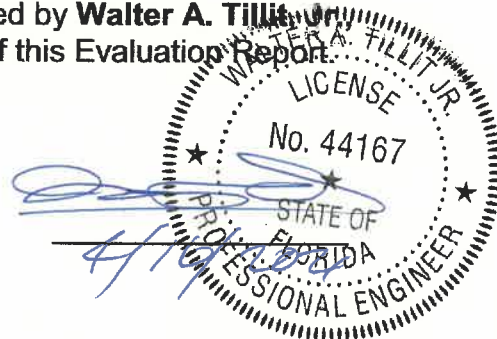
This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2020 Seventh Edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

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. **21-058**, titled "**HR-251 Captured Curtain Wall System Large and Small Missile Impact Insulated Glass**" sheets 1 thru 36 of 36 (includes 14A, 16A, 22A and 24A) prepared by **Tilteco, Inc.**; signed and sealed by **Walter A. Tillit, Jr., P.E.**; dated 04/15/2021. This drawing is an integral part of this Evaluation Report.



2.2. TEST REPORTS:

Impact and Cyclic Test as per Protocols TAS 201 and 203 per Sections 1626 and 1609.1.2., Uniform Static Load Test per TAS-202 Protocol, and as per AAMA 501, per sections 2411.3.2.1.1. & 1709.8.4 of the Florida Building Code

Test reports prepared by Hurricane Testing Lab, Report No. 0105-0903-08, No. 0105-0117.05 and No. 0105-0210-04, signed and sealed by Vinu J. Abraham, P.E., and Test Reports prepared by Architectural Testing Lab, Report No. A4707.01-801-18, signed and sealed by Shawn G. Collins, P.E.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

On "HR-251 Captured Curtain Wall System Large and Small Missile Impact Insulated Glass" for Maximum Pressure Rating vs. Maximum anchor spacing, maximum Mullion Span, and Maximum Glass Size, 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 01/13/2011 and 04/07/15 signed and sealed by Walter A. Tillit, Jr., P.E., and on 3/28/2018.

3. MISSILE IMPACT RESISTANCE:

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

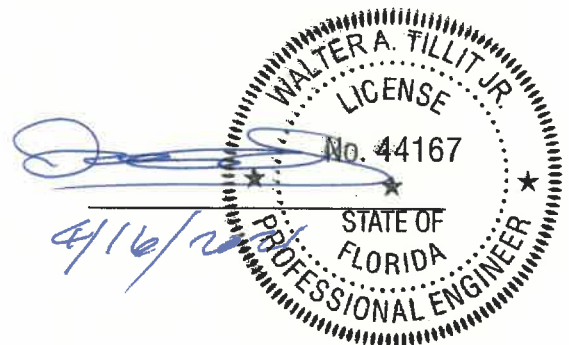
4. WIND LOADS RESISTANCE:

"HR-251 Captured Curtain Wall System Large and Small Missile Impact Insulated Glass" has been verified to sustain wind pressures. Maximum Glass Panel Dimensions and Mullions Spans, shall be as indicated on sheets 8, 9, 10 and 22A, of Product Evaluation Document (P.E.D.), Drawing No. 21-058.

Maximum Design Pressure Rating for Mullions Head/Sill connections for applicable substrates shall be as indicated on sheets 12 thru 17, of Product Evaluation Document (P.E.D.), Drawing No. 21-058.

5. INSTALLATION:

Installation shall be performed strictly in accordance with General Notes # 3 thru 15, indicated on sheet 1 and details indicated on sheets 6, 7, 11, 18 thru 36, of Product Evaluation Document (P.E.D.), drawing No. 21-058. 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 sheet 4, drawing No. 21-058.



6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes and Components indicated on sheets 1 thru 5 and 7, of Product Evaluation Document (P.E.D.), Drawing No. **21-058**.

Fastener specifications shall be as indicated on sheets 12 thru 17, and Bill of Materials on sheets 4 and 5, of Product Evaluation Document (P.E.D.), Drawing No. **21-058**.

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. **21-058** 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 within NON HIGH VELOCITY HURRICANE ZONES w/ limitations as per General Notes 1 thru 4, sheet 1 of Product Evaluation Document (P.E.D.), Drawing No. **21-058**.

7.3. Product shall only be installed into poured concrete, grouted filled concrete block and steel, with limitations indicated on sheets 12 thru 17 of Product Evaluation Document (P.E.D.), Drawing No. **21-058**.

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

