

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.: 23-0728.07
DATE: July 28, 2023
PRODUCT CATEGORY: Hurricane Shutters
PRODUCT SUB-CATEGORY: Bahama Shutters
PRODUCT NAME: ASSA/EXTRUDED BERTHA BAHAMA SHUTTER
SUBMITTED BY: American Shutter Systems Association, 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 **American Shutter Systems Association, Inc. (A.S.S.A.)**, based on **Rule Chapter No. 61G20-3, Method 1d** of the **State of Florida Department of Business and Professional Regulation**.

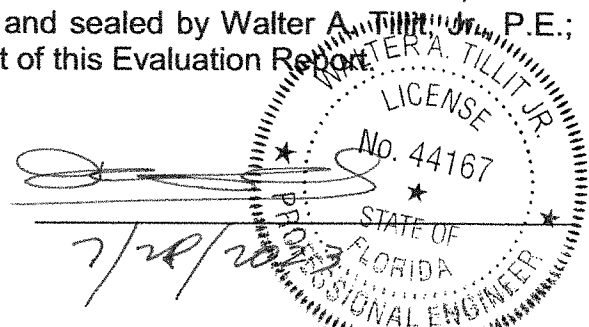
This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2023 8th Edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

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.23-140**, titled "**ASSA/EXTRUDED BERTHA BAHAMA SHUTTER**", sheets 1 thru 9 of 9, prepared by Tilteco, Inc.; signed and sealed by **Walter A. Tillit, Jr., P.E.**; dated 7/28/2023. This drawing is an integral part of this Evaluation Report.



2.2. TEST REPORTS:

Large missile impact and cyclic loadings under Protocols TAS 201 and 203 as per section 1626 of the Florida Building Code. Uniform Static loads in accordance with Protocol TAS 202.

Test reports prepared by American Testing Lab of South Florida, Reports No. 0923.01-97, dated July 30, 1998, signed and sealed by William Mehner, P.E., and 0309.01-04, dated April 7, 2004, signed and sealed by William Mehner, P.E. and Henry Hattem, P.E.

Tensile test as per QC Metallurgical, Inc Report No. 8GM-1873, dated July 30, 1998; signed and sealed by Frank Gate, P.E., as per ASTM E-8 and Report No. 4DM-348, dated April 15, 2004, signed and sealed by Frank Gate, P.E.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

On ASSA/Extruded Bertha Bahama Shutter for maximum shutter span vs. design wind load, as well as maximum anchor spacing vs. design wind load and shutter span based on rational and comparative analysis, and in accordance with sections 1616 and 2003 of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated May 6, 2005 and 4/10/15, 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 Protocol TAS 201.(9 Lb 2" x 4". 50ft/sec)

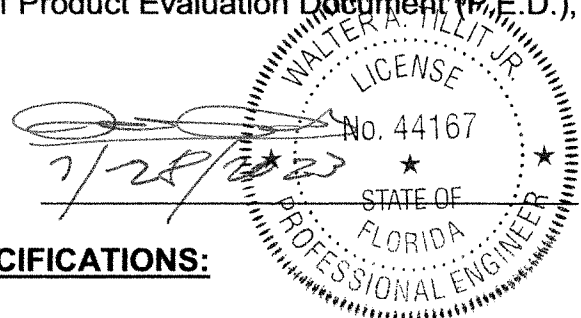
4. WIND LOADS RESISTANCE:

ASSA/Extruded Bertha Bahama Shutter has been verified to sustain wind pressures. Maximum Shutter Span shall be as indicated on sheet 9 of 9, of Product Evaluation Document (P.E.D.), **drawing No. 23-140**. Maximum Anchor Spacing shall be as indicated on sheet 9 of 9, of Product Evaluation Document (P.E.D.), **drawing No. 23-140**. ASSA/Extruded Bertha Bahama Shutter has been verified for code compliance to work as a wind load resistant storm shutter assembly, as per Protocol TAS 202.

5. INSTALLATION:

Shall be performed strictly in accordance with the details indicated on sheets 3 thru 8 of 9, of Product Evaluation Document (P.E.D.), **drawing No. 23-140**. Minimum separation to glass shall be as indicated on sheet 9 of 9, of Product Evaluation Document (P.E.D.), **drawing No. 23-140**

6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:



Shall be strictly in accordance with General Notes and Components indicated on sheet 1 and 2 of 9 of Product Evaluation Document (P.E.D.), **drawing No. 23-140**. Anchor specifications shall be as indicated on sheets 1, 7 of 9, of Product Evaluation Document (P.E.D.), **Drawing 23-140**.

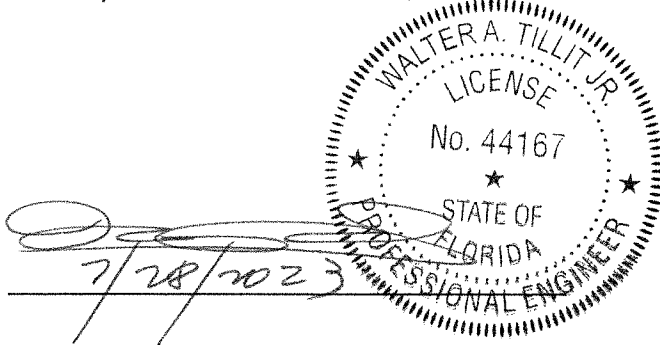
7. LIMITATIONS AND CONDITIONS OF USE:

7.1. Shall be strictly in compliance with General Notes No. 1, 7, 8, 9, 10 and 11, indicated on sheet 1 of 9, of Product Evaluation Document (P.E.D.), **drawing No. 23-140** 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.

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 CA-0006719).



WAT\ma

D:\TILTECO ADMN RECORDS \ P. E. REPORT.23 \ AMERICAN SHUTTER SYSTEMS ASSOCIATION INC \ ASSA/EXTRUDED BERTHA BAHAMA SHUTTER \ DRWG # 23-140\ REPORT # 23-0728.07