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PRODUCT EVALUATION REPORT

REPORT NO.: 23-0721.27

DATE: July 21, 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 Florida Department of Business and Professional Regulation.**

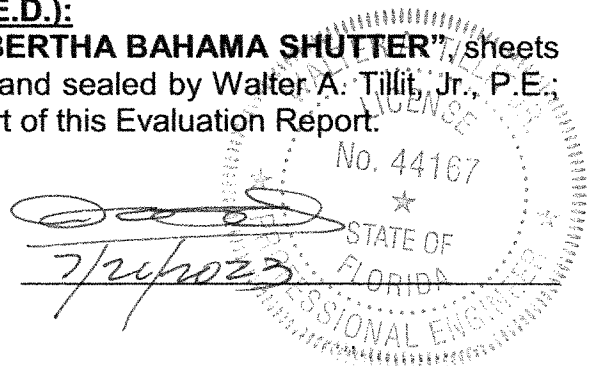
This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2023 8th Edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

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.23-131**, titled "**ASSA/EXTRUDED BERTHA BAHAMA SHUTTER**", sheets 1 thru 9 of 33, prepared by Tilteco, Inc.; signed and sealed by **Walter A. Tillit, Jr., P.E.**; dated 07/21/2023. 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 Grate, P.E., as per ASTM E-8 and Report No. 4DM-348, dated April 15, 2004, signed and sealed by Frank Grate, 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 1604 and 2002 of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated May 6, 2005, signed and sealed by Walter A. Tillit, Jr., P.E.

3. MISSILE IMPACT RESISTANCE:

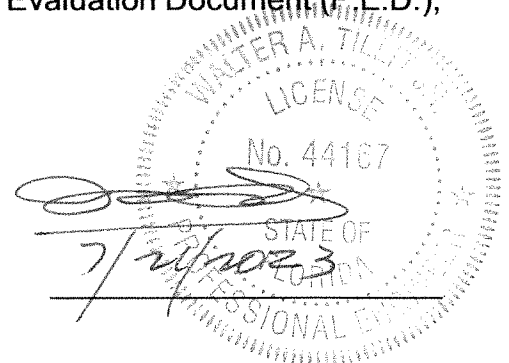
Large missile impact under section 1626 of the Florida Building Code, as per Protocol TAS 201.

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 33, of Product Evaluation Document (P.E.D.), drawing No. **23-131**. Maximum Anchor Spacing shall be as indicated on sheet 9 of 33, of Product Evaluation Document (P.E.D.), drawing No. **23-131**. 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. **23-131**. Minimum separation to glass shall be as indicated on sheet 9 of 33, of Product Evaluation Document (P.E.D.), drawing No. **23-131**.



6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes and Components indicated on sheet 1 and 2 of 33 of Product Evaluation Document (P.E.D.), drawing No. **23-131**. Anchor specification shall be as indicated on sheet 1, 7 and 8 of 33 of Product Evaluation Document (P.E.D.), drawing No. **23-131**.

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. 23-131 prepared by Tilteco, Inc. and signed and sealed by Walter A. Tillit, Jr., P.E.

7.2. Product **shall not 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).



7/24/2023

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