

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

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PRODUCT EVALUATION REPORT

REPORT NO.: 11-1209.03
DATE: December 9, 2011
PRODUCT CATEGORY: Hurricane Shutters
PRODUCT SUB-CATEGORY: Roll Up Shutters
PRODUCT NAME: ASSA/40mm & 60 mm Bertha Roll Up
SUBMITTED BY: A.S.S.A./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. 9B-72.070, Method 1d of the State of Florida Product Approval, Department of Community Affairs-Florida Building Commission.

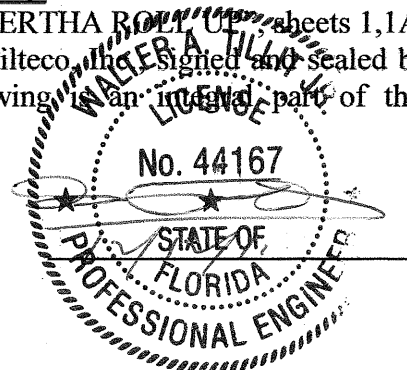
This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2010 edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

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. 11-209, titled "ASSA/40MM & 60 MM BERTHA ROLL UP SHUTTERS", sheets 1,1A, 2, 3, 3A, 4, 5, 5A, 5B, 6 thru 14 of 14, prepared by Tilteco, Inc. signed and sealed by Walter A. Tillit, Jr., P.E.; dated 12/07/11. 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 1609.1.2 of the Florida Building Code. Uniform Static loads in accordance with Protocol TAS 202. Test reports prepared by Fenestration Testing Lab, Reports No. 2749 and No. 2751 dated August 24, 2000, and No. 2760 dated August 31, 2000 ; signed and sealed by Antonio Acevedo, P.E., and Jose Chan, P.E., and # 0619.01-02, dated 09/30/03, signed and sealed by William R. Mehner, P.E.

Tensile test as per ATC Associates, Report No.13974, dated September 20, 2000; signed and sealed by Steven A. Black., P.E., as per ASTM B557-94.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

On ASSA/40mm & 60 mm Bertha Roll Up for maximum shutter span vs. design wind load, as well as maximum anchor spacing vs. design wind load and shutter span including storm bars, headers and mullions 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 November 6, 2006, signed and sealed by Walter A. Tillit, Jr., P.E.

3. MISSILE IMPACT RESISTANCE:

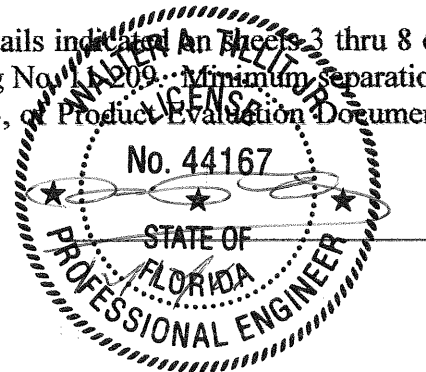
Large missile impact under section 1609.1.2 of the Florida Building Code, as per Protocol TAS 201.

4. WIND LOADS RESISTANCE:

ASSA/40mm & 60 mm Bertha Roll Up has been verified to sustain wind pressures. Maximum Shutter Span shall be as indicated on sheets 9 thru 14 of 14, of Product Evaluation Document (P.E.D.), drawing No. 11-209. Maximum Anchor Spacing shall be as indicated on sheets 4 thru 8 of 14, of Product Evaluation Document (P.E.D.), drawing No. 11-209. ASSA/40mm & 60 mm Bertha Roll Up has been verified for code compliance to work as a wind load resistant storm shutter assembly, as per section TAS 202 Protocol.

5. INSTALLATION:

Shall be performed strictly in accordance with the details indicated on sheets 3 thru 8 of 14, of Product Evaluation Document (P.E.D.), drawing No. 11-209. Minimum separation to glass shall be as indicated on sheets 5 thru 9 of 14, of Product Evaluation Document (P.E.D.), drawing No. 11-209.



6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes and Components indicated on sheets 1 thru 3A of 14 of Product Evaluation Document (P.E.D.), drawing No. 11-209. Anchor specifications shall be as indicated on sheets 1, 3 and 4 thru 8 of 14, of Product Evaluation Document (P.E.D.), drawing No. 11-209.

7. LIMITATIONS AND CONDITIONS OF USE:

7.1. Shall be strictly in compliance with General Notes No. 1, 5, 6, 8 thru 15, indicated on sheet 1 of 14, of Product Evaluation Document (P.E.D.), drawing No. 11-209 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 1620.2 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 EB-0006719).

