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PRODUCT EVALUATION REPORT

REPORT NO.: 07-0726.01
DATE: July 26, 2007
PRODUCT CATEGORY: Hurricane Shutters
PRODUCT SUB-CATEGORY: Colonial Shutters
PRODUCT NAME: ASSA/Bertha HV Colonial Shutter
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.

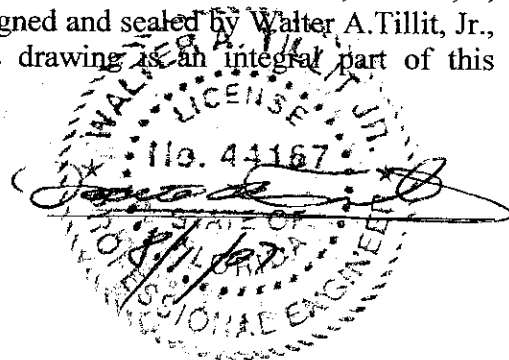
This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2004 edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

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. 06-216, titled "ASSA/BERTHA HV COLONIAL SHUTTER", sheet 1, 2, 3, 3A, 4 thru 14 of 14, prepared by Tilteco, Inc.; signed and sealed by Walter A. Tillit, Jr., P.E.; dated 12/20/06, revised on 07/20/07. This drawing is an integral part of this Evaluation Report.



PRODUCT EVALUATION REPORT NO. 07-0726.01**2.2. TEST REPORTS:**

Large missile impact loading under ASTM E-1886-05 and ASTM E 1996-05 Standards, as per section 1609.1.4 of the Florida Building Code. Uniform Static loads in accordance with Protocol TAS 202 and ASTM E-330 Standard. Test reports prepared by American Testing Lab of South Florida, Reports No. 1215.01-06, dated December 18, 2006 thru January 4, 2007, and Report No. 0131.01-07 dated 03/06/07 signed and sealed by William Mehner, P.E. and Henry Hattem P.E with addendum dated 07/31/07 signed and sealed by William Mehner, P.E. and Henry Hattem P.E.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

On ASSA/Bertha HV Colonial Shutter for maximum anchor spacing vs. design wind load and shutter span based on rational and comparative analysis, and in accordance with sections 1612 and 2002 of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated 02/12/07, revised 07/20/07, signed and sealed by Walter A. Tillit, Jr., P.E.

3. MISSILE IMPACT RESISTANCE:

Large missile impact under section 1609.1.4 of the Florida Building Code, as per ASTM E 1886-05 and ASTM E 1996-05 Standards, qualifying missile type D.

4. WIND LOADS RESISTANCE:

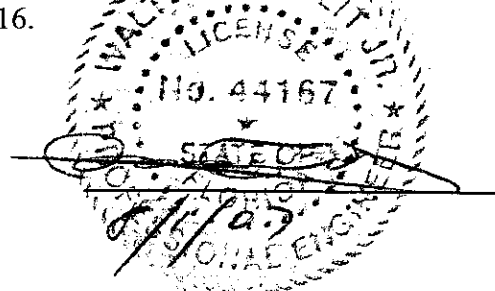
ASSA/Bertha HV Colonial Shutter has been verified to sustain wind pressures. Maximum Shutter Span shall be as indicated on sheets 3, 3A, 4 and 9 of 14, of Product Evaluation Document (P.E.D.), drawing No. 06-216. Anchor Details shall be as indicated on sheets 5, 6, 7, 10, 11 and 12 of 14, of Product Evaluation Document (P.E.D.), drawing No. 06-216. ASSA/Bertha HV Colonial Shutter has been verified for code compliance to work as a porous wind load resistant storm shutter assembly, as per section 3.2.8 of ASTM E 1996-05 Standard, qualifying Wind Zone 3.

5. INSTALLATION:

Shall be performed strictly in accordance with the details indicated on sheets 3 thru 14 of 14, of Product Evaluation Document (P.E.D.), drawing No. 06-216. Minimum separation to glass shall be as indicated on sheets 3, 4, 5 and 10 of 14, of Product Evaluation Document (P.E.D.), drawing No. 06-216.

6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes and Components indicated on sheets 1 and 2 of 14 of Product Evaluation Document (P.E.D.), drawing No. 06-216. Anchor specifications shall be as indicated on sheets 5, 6, 7, 11, 12 and 13 of 14, of Product Evaluation Document (P.E.D.), drawing No. 06-216.



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7. LIMITATIONS AND CONDITIONS OF USE:

7.1. Shall be strictly in compliance with General Notes No. 1, 2, 8, 9, 10, 11, 12 and 13, indicated on sheet 1 of 14, of Product Evaluation Document (P.E.D.), drawing No. 06-216 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 wood frame, poured concrete or concrete block structures.

7.4. Product shall only be installed within Wind Zones 3 (basic wind speed equal or less than 140 mph) as per ASTM E 1996-05 Standard.

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

