

Loss Mitigation Grant Program Wind Resistive Device (WRD) Product Evaluation

The product as described herein has been evaluated by the Department of Commerce and Consumer Affairs (DCCA) for compliance with the technical requirements for wind resistive devices installed in single or multi-family residential dwellings. Installation costs of approved products are partially reimbursable under the provisions of the Loss Mitigation Grant Program. The results of the product evaluation are presented in the following report.

1.0 Product Information

1.1 Product Name:

Southern Extrusions Extruded Aluminum Colonial Hurricane Shutter "Impact" (two panel)

1.2 Description:

The Colonial Hurricane Shutter is an extruded aluminum operable shutter designed to be permanently mounted to an exterior wall. It can be folded open or closed and be latched to provide impact and wind pressure resistance to glazed openings. Two panel models have a maximum overall frame width of 38.5" and the maximum height is 88".

1.3 Category:

Submitted for evaluation as a WRD option 3- Exterior opening protection

1.4 Submitted By:

Hawaii Security Shutters, Inc.
4309 Palahinu Place
Honolulu, HI 96818
Ph: (808) 422-0707
Fax: (808) 422-1311

- a. Manufacturer:
Southern Extrusion, Inc.
3401 West Navy Blvd.
Pensecola, FL 32505
- b. Technical Representative:
Tim Baughn
Ph: (850) 432-2485
seishutters@bellsouth.com
- c. Local Sales Representative:
T.R. Bongartz
Hawaii Security Shutters, Inc.
Ph: (808) 422-0707
Fax: (808) 422-1311

2.0 Product Evaluation

2.1 Wind Loads:

According to the sheet 1 of 5 of drawing No. FL-102, the maximum allowable design pressure is +/-100 psf. It is also stated that the product has been tested for wind pressure resistance in accordance with Florida Test Application Standard (TAS) 202 and 203. No test data has been submitted. Although the WRD Loss Mitigation Grant Program requires that these tests be conducted in accordance with ASTM E330 and E1996, the Florida TAS tests have an equal or more stringent protocol and will be acceptable in lieu of the ASTM testing provided that the minimum testing and test report information requirements of Section 4.0 of the Hawaii Department of Commerce and Consumer Affairs *Submittal Requirements for Product Evaluations* are fulfilled.

2.2 Impact Resistance:

No test data has been submitted to substantiate the impact resistance rating of the Colonial Hurricane Shutter. Page 3 of 3 of Product evaluation report No. FL 871.1 (R2) states that this product has been tested for missile impact under the provisions of Florida TAS 201-94. This is equivalent to a missile impact rating of D under ASTM E1996-05. The TAS 201 will be accepted in lieu of ASTM E1996-05 if the required documentation per Section 4.0 of the *Submittal Requirements for Product Evaluations* is provided.

2.3 Installation:

Installation shall be performed strictly in accordance with the details indicated on sheets 1 through 5 of 5 of drawing No. FL-102. A minimum separation of 2.5" between the Colonial Hurricane Shutter and the opening glazing is specified in the design drawings.

2.4 Substantiating Data:

- a. Drawing No. FL-102, titled "Southern Extrusions Extruded Aluminum Colonial Hurricane Shutter", sheets 1 through 5 of 5, prepared by Building Consultants Inc., signed and sealed by Wendell W. Haney, P.E. (FL License No. 54158) dated 10/30/2003
- b. Product Evaluation Report No. FL 871.1 (R2), product name "Colonial Hurricane Shutter Extruded Aluminum "Impact"", sheets 1 through 3 of 3, signed and sealed by Walter Wendell W. Haney, P.E. (FL License No. 54158) of R W Building Consultants, Inc. 3/1/2007

3.0 Findings

Evaluation in review of the submitted data indicates that the Colonial Hurricane Shutter as described in this report may conform to the requirements of the loss mitigation grant program however at this time insufficient data has been provided. The minimum testing and test report information required per Section 4.0 of the Hawaii Department of Commerce and Consumer Affairs *Submittal Requirements for Product Evaluations* must be submitted for verification. Furthermore, no anchorage details or test results have been provided for single wall construction common to Hawaii. Additional data must be submitted for WRD approved use on this construction type.

May 14, 2008

3.1 Limitations:

- a. The Colonial Hurricane Shutter is conditionally approved as an acceptable WRD under the requirements of the loss mitigation grant program, subject to these limitations:
- b. Minimum test report information must be submitted for final verification. The TAS 201 will be accepted in lieu of ASTM E1996-05 if the required documentation per Section 4.0 of the *Submittal Requirements for Product Evaluations* is provided.
- c. Submit additional details and test data for approved use on single wall construction.



Gary Y. K. Chock, S.E.
Product Examiner
May 14, 2008