



ENGCO Inc.
Engineering Services

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PRODUCT EVALUATION REPORT
RULE 9B-72.070 (1) (d) – EVALUATION REPORT FROM A PROFESSIONAL ENGINEER
Report Number: 11-239

- 1- Date:** 12/12/2011
- 2- Manufacturer:** Croci North America
11600 Adelmo Lane – Fort Myers
Florida, 33966
- 3- Product Name:** 11-239 – ES 55 – ES 44
Extruded Aluminum Roll Shutter
Level D Impact Rated
- 4- Evaluation Entity:** Florida Professional Engineer
Pedro Paulo M. De Figueiredo – PE 52609
5595 Orange Drive, Suite 201
Davie – Florida – 33314

5- Statement of Compliance: This product evaluation report is being issued per Rule Chapter No. 9B-72 section 9B-72.070 (1) (d) of the Department of Community Affairs – Florida Building Commission. The products covered by this report have proven to be in compliance with the Florida Building Code 2010, not limited to the following standards: ASTM E330, E1996, E1886; SSTD12-99, Aluminum Design Manual 2005 and AF&PA NDS 2005.

6- Product Description: This product is an Aluminum Rolling Shutter designed, constructed and erected to easily enclose an area, providing protection from hurricane force winds and level D missile windborne debris within the allowable designed pressures and limitations stated in this approval. Specification for design, fabrication and installation is found in drawings 11-239.

7- Technical Documentation:

7.1- Approval Document: Drawing number 11-239 prepared by Engco, Inc. on 12/12/2011 sheets 1 through 18 of 18, titled "ES 55 – ES 44" extruded aluminum rolling shutter, signed and sealed by Pedro De Figueiredo, PE.

7.2- Test Reports – Product has been tested at Fenestration Testing Laboratory, Inc. (FTL) with the following reports: FTL 6175, FTL 6156, FTL 5448, CTC 05-011 AND NCTL 210-2937.1.

7.3- Calculations: Calculations numbered 10-084 for slats design, track anchorage, storm bars, headers, mullions and analysis of test results, prepared by Engco, Inc. on 4/16/2010 signed and sealed by Pedro De Figueiredo, PE. Compliance update report numbered 11-239 prepared by Engco Inc on 12/12/2011.

8- Limitation and Conditions of use:

8.1 – Glazing separation must be used when the installation of this product is in the following locations:

a - "Wind Zone 4" as defined in the ASTM E1996-05 and the FBC 2010 section 1609.1.2.4.

b- "Essential Facilities" as defined in the ASCE 7.

8.2 – Product to be manufactured, designed and installed as per drawing specifications 11-239, prepared by Engco, Inc dated on 12/12/2011 and signed and sealed by Pedro De Figueiredo, PE.

9- Others:

