



ENGCO Inc.
Engineering Services

ENGCO, Inc. - CA 8116
9715 West Broward Blvd. 247
Plantation, FL - 33324
Engco@aol.com

PRODUCT EVALUATION REPORT
RULE 61G20-3 – EVALUATION REPORT FROM A PROFESSIONAL ENGINEER
Report Number: 20-165

- 1- Date:** 10/13/2020
- 2- Manufacturer:** Roller Star USA
6278 North Federal Hwy #162
Fort Lauderdale, Florida
- 3- Product Name:** RE 1000, 1500, 600 and 400 Series
Extruded Aluminum Roll Up Shutter
Large & Small Missile Impact Rated
- 4- Evaluation Entity:** Florida Professional Engineer
Pedro Paulo M. De Figueiredo – PE 52609
9715 West Broward Blvd #247
Plantation – Florida – 33324

5- Statement of Compliance: This product evaluation report is being issued per Rule 61G20-3 of the Florida Department of Business and Professional Regulation. The products covered by this report have proven to be in compliance with the Florida Building Code 2020 – 7th edition, not limited to the following standards: ASTM E330; TAS 201, 202, 203, Aluminum Design Manual 2015 and AF&PA NDS 2018.

6- Product Description: This product is an Aluminum Roll-up Shutter designed, constructed and erected to easily enclose an area, providing protection from hurricane force winds and large missile windborne debris within the allowable designed pressures and limitations stated in this approval. Specification for design, fabrication and installation is found in drawings 20-165 and 20-165 MS.

7- Technical Documentation:

7.1- Approval Document: Drawings number 20-165 (12 sheets), 20-165 MS (22 sheets) prepared by Engco, Inc. on 10/13/2020, titled "RE 400 & 600", RE 1500 & 1000" and "Storm Bars, Headers & Mullions", signed and sealed by Pedro De Figueiredo, PE.

7.2- Test Reports – Product has been tested at HETI, CTC and FTL as per attached documents.

7.3- Calculations:

Original calculations and design 11-144 RE1000, RE1500 for slats and track anchorage, prepared on 7/19/2011.

Original calculations and design 11-144MS for storm bars, headers and mullions, prepared on 7/19/2011.

Revised calculations and design 12-031 RE600, RE400 for slats and track anchorage, prepared on 2/23/2012.

Revised anchorage calculations 15-143, prepared on 04/28/2015.

Revised drawings in compliance with the FBC 2020 – 7th edition, prepared on 10/13/2020

All documents prepared, signed and sealed by Pedro De Figueiredo, PE.

8- Limitation and Conditions of use:

8.1 – Use proper sheets marked as “HVHZ” for installations under High Velocity Hurricane Zones (Miami and Broward Counties) as defined in the Florida Building Code. Glazing separation is mandatory.

8.2 – Product to be manufactured, designed and installed as per drawing specifications 20-165 & 20-165 MS, prepared by Engco, Inc dated on 10/13/2020 and signed and sealed by Pedro De Figueiredo, PE.

9- Others:



OCT 13 2020

Pedro De Figueiredo

Fl. P.E. License: 52609

System ID: 2504