



**ELEGANT PROTECTION FOR WINDOWS & DOORS**

## **Roll-Up Shutter – Architectural Specification**

### **ALUMINUM ROLL-UP SHUTTERS / DOORS (OVERHEAD-COILING)**

#### **PURPOSE:**

**This document provides the necessary requirements for Submittals, Approvals and Instructions for Architectural and Product Specifications related to Roller Star USA Aluminum Roll-Up Shutter / Door Systems.**

#### **SECTION 1 of 4 - GENERAL**

##### **1.1 Submittals**

- 1.1.1 Submit specified submittals to the architect for approval.
- 1.1.2 Submit manufacturer's product data including, installation instructions and Product Approvals.
- 1.1.3 Building footprint: Submit shop drawings showing building footprint indicating local PSF requirements of each fabricated unit. Note end zones and specific pertinent building requirements.
- 1.1.4 Submit color samples to the architect for approval prior to ordering from the manufacturer.
- 1.1.5 Submit Manufacturer's Quality Assurance Certificate from UL (Underwriters Laboratories) Windstorm Products Quality Assurance Program.
- 1.1.6 Submit operating and maintenance instructions from the manufacturer.
- 1.1.7 Submit minimum 5-year parts warranty direct from the manufacturer.
- 1.1.8 Submit minimum 1-year labor warranty from the product dealer / installer.

##### **1.2 Installation Requirements**

- 1.2.1 Use only licensed qualified installers.
- 1.2.2 Comply with all local and governing building code requirements.
- 1.2.3 Comply with General Contractor or Developer meetings and/or pre-installation schedules and meetings.

### 1.3 Ordering, Delivery, Storage and Handling

- 1.3.1 Provide field measurements before ordering. Show recorded field measurements on manufacturers order form or equivalent.
- 1.3.2 Deliver shutters in manufacturer's original boxes, unopened. Immediately upon delivery open all boxes and inspect for product compliance and/or shipping damage. Review Manufacturing Inspection Reports for accuracy. Report all imperfections and/or unacceptable materials to the manufacturer upon knowing or detecting any imperfections or shipping damage.
- 1.3.3 Provide on-site storage, protection of materials and security of the shutters and accessories.

### 1.4 Warranty

- 1.4.1 Provide minimum 5-year parts warranty direct from manufacturer.
- 1.4.2 Provide minimum 1-year labor warranty from the seller.

### 1.5 Product

- 1.5.1 Select shutter model (Contact Roller Star USA for model selection).

### 1.6 Manufacturer

- 1.6.1 Roller Star USA  
3029 NW 25<sup>th</sup> Avenue  
Pompano Beach, Florida 33069  
(954) 328-5277

[rollerstarusa@aol.com](mailto:rollerstarusa@aol.com)

[www.rollerstarusa.com](http://www.rollerstarusa.com)

## **SECTION 2 of 4 – PRODUCT MATERIAL SPECIFICATIONS**

### 2.1 Roll-Up Mechanism

- 2.1.1 Roller Tube, width/design weight limitations.
  - 2.1.1.1 Less than 96"/50 lbs: Roll formed octagonal galvanized steel tube 2.36"x .031" wall thickness (AXL-608).
  - 2.1.1.2 Less than 96"/50 lbs: Extruded Aluminum 6063-T6 2.36" octagonal (AXL-EX6)
  - 2.1.1.3 Less than 144"/300 lbs: Extruded Aluminum 6063-T6, 3.07" round (AXL- EX7).
  - 2.1.1.4 Less than 260"/495 lbs: Welded cold rolled round galvanized steel tube 4" nominal Dia. (AXL-103-2G)

- 2.1.2 Idler, width/design weight limitations.
  - 2.1.2.1 Less than 96" / 50 lbs: PVC cap 6" lg x 2.37" O.D. with bearing support one end  
6 x 2.37" (IDL-EX6).
  - 2.1.2.2 Less than 144" / 300 lbs: Aluminum casting fitted with welded galvanized steel shaft. (IDL-MR7)
  - 2.1.2.3 Less than 260" / 495 lbs: 1" stainless steel shaft with galvanized fittings and bearings. (IDL-ER1)
- 2.1.3 Bearings, width/design weight limitations.
  - 2.1.3.1 Less than 96"/50 lbs: 28mm vinyl and galvanized steel bearing. (BAL-M12)
  - 2.1.3.2 Less than 144" / 300 lbs: 42mm galvanized steel bearing. (BAL-ESP)
  - 2.1.3.3 Less than 260" / 495 lbs: Bearing support 25mm round shaft opening. (SUP-AX2)
- 2.2 Operator
  - 2.2.1 Motors
    - 2.2.1.1 Progressive limit setting, 6-foot motor cable, UL recognized CSA Approved, IP44 Rated, FCC Approved.
  - 2.2.2 Gear
    - 2.2.2.1 Gearbox ratio 11 to 1 ¼" square input, ¾" hex output bi-directional plastic housing with a 45-degree arc mounting adjustment.
  - 2.2.3 Universal
    - 2.2.3.1 Square 8mm or hex 7mm input driveshaft assembly with 2 universal joints and a ball bearing at one end attached to a mounting bracket.
- 2.3 Side Caps (Frames)
  - 2.3.1 Material
    - 2.3.1.1 Die cast aluminum.
  - 2.3.2 Surface Preparation
    - 2.3.2.1 Mechanical etching to remove the mill scale.
    - 2.3.2.2 Chemical 5-stage pretreatment: clean, rinse, etch, rinse, de rinse.
    - 2.3.2.3 Heat-treating to outgas moisture prior to coating.
    - 2.3.2.4 Apply powder electrostatic paint to 3 - 4 mil.
    - 2.3.2.5 Cured in computer controlled heating oven.
  - 2.3.3 Finish
    - 2.3.3.1 Powder coated with Super Durable TIGER Drylac Series 38 TIGC Polyester powder on aluminum for marine environments. 3 - 4 mil thick.
    - 2.3.3.2 Passed 3000 Hrs. Salt Spray Resistant Test (ASTM B 117)

## 2.4 Additional Support Range:

- 2.4.1 11-gauge galvanized steel angle bracket, 3-7/16" Dia. holes end corners cut @ 45 degrees.
- 2.4.2 15-gauge galvanized steel angle bracket, 5-7/16" Dia. holes end corners cut @ 45 degrees.
- 2.4.3 4"x 4"x 1/4" square zinc plated steel plate with tapped mounting holes.
- 2.4.4 4"x 4"x 1/4" square aluminum plate with taped mounting holes.

## 2.5 Box (Housing)

- 2.5.1 Material: Aluminum Coil 3005 T14, 0.032" – 0.050" thickness.
- 2.5.2 Coating: Exterior Polyester Resin, 2 mil thickness, coil coated application.
  - 2.5.2.1 Interior sealed with .2-mil clear primer.

## 2.6 Slats, Guide Rails, Tubes and Angles

- 2.6.1 Extruded aluminum alloy 6063-T6
- 2.6.2 Thickness as indicated on Installation Drawings.
- 2.6.3 Preparation
  - 2.6.3.1 Six (6) Pre-treatment Steps in Surface Preparation:
  - 2.6.3.2 Sulfuric acid etch (dip)
  - 2.6.3.3 2-stage water rinsing process (dip)
  - 2.6.3.4 Single stage alkali solution (dip)
  - 2.6.3.5 Single stage water rinsing (dip)
  - 2.6.3.6 Chromium phosphate coating (dip)
  - 2.6.3.7 Final stage water rinsing (dip) dry
- 2.6.4 Coating
  - 2.6.4.1 DuPont polyester resin
  - 2.6.4.2 6 - 8 mill thick
  - 2.6.4.3 Powder coat applied
  - 2.6.4.4 Smooth glossy
- 2.6.5 Colors: White, Beige, Ivory, Bronze

## 2.7 Slat Locks

- 2.7.1 Injection molded UV Protected plastic component.

## 2.8 Fabrication Fasteners

- 2.8.1 410 Stainless steel self-drilling screws (unless otherwise noted)
- 2.8.2 Countersunk Pop Rivet 3/16"x 3/8" Dome Head (protruding) self-plugging

## SECTION 3 of 4 – LABELING

- 3.1 Fabricated units bear the following tamper resistant label specified to the model reference.



## SECTION 4 of 4 – INSTALLATION

- 4.1 Attach fabricated units to the host structure in strict conformance to Roller Star Installation Drawings for specified shutter model as per host conditions and location.
- 4.1.1 Install all fasteners in strict conformance to the manufacturer's recommendations.