



ELEGANT PROTECTION FOR WINDOWS & DOORS

Roll-Up Shutter – Product Specification

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

PURPOSE:

This document provides the necessary requirements for Product Specifications related to Roller Star USA Aluminum Roll-Up Shutter / Door Systems.

SECTION 1 of 2 – PRODUCT MATERIAL SPECIFICATIONS

1.1 Roll-Up Mechanism

1.1.1 Roller Tube, width/design weight limitations.

1.1.1.1 Less than 96"/50 lbs: Roll formed octagonal galvanized steel tube 2.36"x .031" wall thickness (AXL-608).

1.1.1.2 Less than 96"/50 lbs: Extruded Aluminum 6063-T6 2.36" octagonal (AXL-EX6).

1.1.1.3 Less than 144"/300 lbs: Extruded Aluminum 6063-T6, 3.07" round (AXL- EX7).

1.1.1.4 Less than 260"/495 lbs: Welded cold rolled round galvanized steel tube 4" nominal diameter round (AXL-103G-2G).

1.1.2 Idler, width/design weight limitations.

1.1.2.1 Less than 96" / 50 lbs: PVC cap 6" long x 2.37" O.D. with bearing support one end 6 x 2.37" (IDL-EX6).

1.1.2.2 Less than 144" / 300 lbs: Aluminum casting fitted with welded galvanized steel shaft. (IDL-MR7)

1.1.2.3 Less than 260" / 495 lbs: 1" stainless steel shaft with galvanized fittings and bearings. (IDL-ER1)

1.1.3 Bearings, width/design weight limitations.

1.1.3.1 Less than 96"/50 lbs: 28mm vinyl and galvanized steel bearing. (BAL-M12)

1.1.3.2 Less than 144" / 300 lbs: 42mm galvanized steel bearing. (BAL-ESP)

1.1.3.3 Less than 260" / 495 lbs: Bearing support 25mm round shaft opening. (SUP-AX2)

- 1.2 Operator
 - 1.2.1 Motors
 - 1.2.1.1 Progressive limit setting, 6-foot motor cable, UL recognized, CSA Approved, IP44 Rated, FCC Approved.
 - 1.2.2 Gear
 - 1.2.2.1 Gearbox ratio 11 to 1 ¼" square input, ¾" hex output bi-directional plastic housing with a 45-degree arc mounting adjustment.
 - 1.2.3 Universal
 - 1.2.3.1 Square 8mm or hex 7mm input driveshaft assembly with 2 universal joints and a ball bearing at one end attached to a mounting bracket.

- 1.3 Side Caps (Frames)
 - 1.3.1 Material
 - 1.3.1.1 Die cast aluminum.
 - 1.3.2 Surface Preparation
 - 1.3.2.1 Mechanical etching to remove the mill scale.
 - 1.3.2.2 Chemical 5 stage pretreatment: clean, rinse, etch, rinse, de rinse.
 - 1.3.2.3 Heat-treating to outgas moisture prior to coating.
 - 1.3.2.4 Apply powder electrostatic paint to 3 - 4 mil.
 - 1.3.2.5 Cured in computer controlled heating oven.
 - 1.3.3 Finish
 - 1.3.3.1 Powder coated with Super Durable TIGER Drylac Series 38 TIGC Polyester powder on aluminum for marine environments. 3 - 4 mil thick.
 - 1.3.3.2 Passed 3000 Hrs. Salt Spray Resistant Test (ASTM B 117)

- 1.4 Additional Support Range:
 - 1.4.1 11-gauge galvanized steel angle bracket, 3-7/16" Die. holes end corners cut @ 45 degree angle.
 - 1.4.2 15-gauge galvanized steel angle bracket, 5-.7/16" holes end corners cut @ 45 degrees.
 - 1.4.3 4"x 4"x ¼" square zinc plated steel plate with tapped mounting holes.
 - 1.4.4 4"x 4"x 1/4" square aluminum plate with taped mounting holes.

- 1.5 Box (Housing)
 - 1.5.1 Material: Aluminum Coil 3005 T14, 0.032" – 0.050" thickness.
 - 1.5.2 Coating: Exterior Polyester Resin, 2 mil thickness, coil coated. application.
 - 1.5.2.1 Interior sealed with .2-mil clear primer.

- 1.6 Slat, Guide rails, Tubes and Angles
 - 1.6.1 Extruded aluminum alloy 6063-T6
 - 1.6.2 Thickness as indicated on Installation Drawings.
 - 1.6.3 Preparation
 - 1.6.3.1 Six Pretreatment Steps in Surface Preparation:
 - 1.6.3.2 Sulfuric acid etch (dip)
 - 1.6.3.3 2-stage water rinsing process (dip)
 - 1.6.3.4 Single stage alkali solution (dip)
 - 1.6.3.5 Single stage water rinsing (dip)
 - 1.6.3.6 Chromium phosphate coating (dip)
 - 1.6.3.7 Final stage water rinsing (dip) dry
 - 1.6.4 Coating
 - 1.6.4.1 DuPont polyester resin
 - 1.6.4.2 6-8 mill thick
 - 1.6.4.3 Powder coat applied
 - 1.6.4.4 Smooth glossy
 - 1.6.5 Colors: White, Beige, Ivory, Bronze
- 1.7 Slat Locks
 - 1.7.1 Injection molded UV Protected plastic component.
- 1.8 Fabrication Fasteners
 - 1.8.1 410 Stainless steel self-drilling screws (unless otherwise noted)
 - 1.8.2 Countersunk Pop Rivet 3/16" x 3/8" Dome Head (protruding) self-plugging

SECTION 2 of 2 – LABELING

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

