

# E Series Wardrobe Specifications

## A. UNIT FEATURES

1. All units shall be by-pass sliders with bottom mounted rollers.
2. Top guides shall be dual roller assemblies for friction free movement.
3. Bottom rollers shall be heavy duty acetal mounted on adjustable brackets with  $\pm 9/16''$  height adjustment.
4. Frame shall be anodized aluminum joined at the corners by preassembled rollers and guides with removable unhandled connectors.
5. Two and three panel configurations available.
6. Detailed instruction sheets and cross sections with custom unit fabrication formulas.
7. 24 hour product information and support via the **Alumax Bath Enclosures Website** ([www.alumaxbath.com](http://www.alumaxbath.com)).

## B. UNIT VALIDITY

1. Mechanical test: Moving parts or components subject to wear are cycle tested to simulate 20 years of use.
2. Quality: Alumax Bath Enclosures are produced in accordance with procedures specified by ISO 9000.

## C. MATERIALS AND CONSTRUCTION

1. Size Limitations:  
Maximum allowable size of 2 panel unit = 96" wide x 96" tall.  
Maximum allowable size of 3 panel unit = 144" wide x 96" tall.
2. Alloy and Temper: Extruded aluminum shall be 6463-T6 alloy per ASTM B 221. This alloy is designed to accept a bright finish after anodizing. Used for decorative trim applications, machineable, polished, and anodized - also heat treatable.

<b>MECHANICAL PROPERTIES OF 6463-T6 (b)</b>					
<b>Thickness in inches</b>	<b>Tensile Strength - ksi</b>				<b>Elongation percent</b>
	<b>Ultimate</b>		<b>Yield</b>		<b>min. in 2 in. or 4D</b>
<b>(b)</b>	<b>min.</b>	<b>max.</b>	<b>min.</b>	<b>max.</b>	
Up thru 0.124	30	..	25.0	..	8
0.125 - 1.000	30	..	25.0	..	10

- a. Hardness of 6463-T6 on Rockwell B scale: 20-50.
  - b. T6 temper designates a material that is thermally treated to produce stable tempers then solution heat treated and artificially aged. For complete temper designation consult technical publications ANSI 35.1 or the Aluminum Association publication, Aluminum Standards and Data.
  - c. The thickness of the cross-section from which the tension test specimen is taken determines the applicable mechanical properties. The data base and criteria upon which these mechanical property limits are established are outlined in the Aluminum Association publication Aluminum Standards and Data (ASD) Section 6, "Mechanical Properties".
3. Metal Gauge: The nominal wall thickness of individual aluminum extruded components for this unit varies with structural needs.

<b>Component</b>	<b>Description</b>	<b>Nominal Wall Thickness</b>
SC-578	Vertical Rail	.050"
SC-579	Top & Bottom Rail	.050"
SC-580	Header	.055"
SC-581	Curb	.050"

4. Tolerances: Tolerances on all aluminum extruded components shall comply with Aluminum Association requirements unless otherwise specified.
5. Hardware: All hardware parts that are incorporated in the product shall be of aluminum, stainless steel, or other corrosion resistant material(s) compatible with aluminum. Cadmium or zinc-plated parts, where used, shall be in compliance with ASTM A 164-71 or 165-74. Nickel or chrome-plated parts, where used, shall be in compliance with ASTM B 456.71, SC2. Stainless material should have a preference of a 310 alloy with a 410 alternative.
- a. Fasteners to follow International Fasteners Institute standard B18.6.3 for Slotted and Recessed Head Machine Screws and Metallic Drive Screws or B18.6.4 for Slotted and Recessed Head Tapping Screws and Metallic Drive Screws.
  - b. Preassembled rollers shall have plain bearing acetal wheels.

6. Glazing Vinyls: Vinyls and other glazing seal materials shall be of material compatible with aluminum, be resistant to water and common household chemicals and shall secure the glass in the surrounding frame.

a. MECHANICAL PROPERTIES OF GLAZING VINYL Plasticized, filled with Shore A Durometer Hardness of 60	
Tensile Break Strength	920 psi
Ultimate Elongation	600%
Specific Gravity 23/23 C	1.28
Shore "A" Hardness Initial @ 10 sec.	61 58
Brittleness Point, F 50% Failure @	-6

7. Glazing Materials: All glazing materials to be safety back mirror with a nominal thickness of .156", .188", or .250" to conform to Federal Standard CPSC 16 CFR 1201 Category 2, Safety Standard for Architectural Glazing Materials. Dimensional tolerances shall conform to ASTM C 1036-85 and ASTM C 1048-85.
8. Finish Specifications (Anodized): The finish on anodized aluminum components shall conform to the following Aluminum Association Specifications:
- a. Silver: AA-M21-C31-A21 for buffed, clear, bright anodized aluminum.
  - b. Gold: AA-M21-C31-A23 for buffed, colored, bright anodized aluminum.

Anodized aluminum components are tested or inspected for thickness of anodic coating (.00015" min.\.00030" max.), color range variation, and integrity of the anodic seal.

**NOTE:** The finished surface of anodized aluminum parts can be damaged by harsh cleansers. In particular, glass cleaners or other cleaning products with a PH of less than 7 or more than 9 can damage the anodized finish with prolonged exposure.

9. Finish Specifications (Painted)

Painted components shall conform to AAMA 603.8, Voluntary Performance Requirements and Test Procedures For Pigmented Organic Coatings On Extruded Aluminum.

- a. White powder coating shall conform to Aluminum Association standard AA-M10-C40-R1X.

Material used is polyurethane powder coating.

<b>TYPICAL PROPERTIES OF POWDER COATING</b>		
<b>Property</b>	<b>ASTM Method</b>	
Specific Gravity, PCI #4	---	1.2 – 1.9
Gloss	D523	5 – 95+
Pencil Hardness	---	H – 2H
Impact	D2794	To 160 Inch lbs
Mandrel Bend	D522	1/8 Inch
Cross Hatch Adhesion	D5339	Excellent
MFK resistance, PCI #8	---	50 Double Rubs
Abrasion resistance	D1044	Good
Salt Spray	D8117	500 Hrs. Min
Film Thickness	D1186	1.0 – 4.0 Mils