

# FB Series Wardrobe Specifications

## A. UNIT FEATURES

1. All units shall be frameless, bi-fold mirror doors.
2. Bi-fold hinge shall be steel, zinc plated.
3. Pull Handle shall be clear acrylic.
4. Frame shall be anodized aluminum.
5. Two and four panel units available.
6. Pivots shall be steel, zinc plated, spring loaded with nylon glides. Top and bottom adjustment of  $\pm 5/16$ ".
7. Detailed instruction sheets and cross sections with custom unit fabrication formulas.
8. 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:
  - 2 Panel  
Maximum allowable width of unit = 36" (@ 96" tall)  
Maximum allowable height of unit = 96" (@ 36" wide)
  - 4 Panel  
Maximum allowable width of unit = 72" (@ 96" tall)  
Maximum allowable height of unit = 96" (@ 72" wide)
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>(b)</b>                                  | <b>Ultimate</b>               |             | <b>Yield</b> |             | <b>min. in 2 in.</b>      |
|   | <b>min.</b>                   | <b>max.</b> | <b>min.</b>  | <b>max.</b> | <b>or 4D</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-599           | Track               | .050"/.062"                   |
| 66491            | Top and Bottom Rail | .062"                         |
| 66492            | Side Rail           | .062"                         |

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. Bi-fold hinge to be steel, zinc plated.
6. Glazing: Tapes and other glazing seal materials shall be of material compatible with aluminum and shall secure the glass in the surrounding frame.

7. Glazing Materials: All glazing materials to be safety back mirror with a nominal thickness of .156" 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  |