SECTION 084114

ALUMINUM STOREFRONTS SERIES IG500

PART 1 – GENERAL DESCRIPTION

A. Work included: Furnish all necessary materials, labor, and equipment for the complete installation of aluminum framing as show on the drawings and specified herein.

1.01 QUALITY ASSURANCE

A. Drawings and specifications are based on the Series (Specify) IG500 system as manufactured by U.S. Aluminum. Whenever substitute products are to be considered, supporting technical literature, samples, drawings, and performance data must be submitted 10 days prior to bid in order to make a valid comparison of the products involved. Test reports certified by an independent test laboratory must be made available upon request.

1.02 PERFORMANCE REQUIREMENTS

A. Air Infiltration: Shall be tested in accordance with ASTM E 283-91. Infiltration shall not exceed:

- Dade County Protocol TAS 202-94
  1. IG500 Storefront – 1.00 cfm/ft² @ 6.24 psf = (5.08 L/s/m²)
  2. IG500 Pair of Doors – 1.00 cfm/ft² @ 6.24 psf = (6.10 L/s/m²)

B. Water Infiltration: Shall be tested in accordance with ASTM E 331-93. No water penetration at test pressure of:

- Dade Country Protocol TAS 202-94
  1. IG500 Storefront 12 psf
  2. IG500 Pair of Doors 12 psf (Water resistant threshold)

C. Structural Performance: Shall be tested in accordance with ASTM 330-96 and based on:

1. Maximum deflection of L/175 of the span. ¾" (19.1) max.
2. Allowable stress with a safety factor of 1.65. The system shall perform to these criteria under a wind load of (Specify) psf.

- Dade Country Protocol TAS 202-94
  1. IG500 Storefront
     a) Design 65 psf (159 mph)
     b) Structural +/- 97.5 psf (195 mph)
  2. IG500 Pair of Doors
     a) Design 65 psf (159 mph)
     b) Structural +/- 97.5 psf (195 mph)

D. Forced Entry Resistance: Shall be tested with a 300 lb. force applied to the active door panel simultaneously with a 150 lb. force applied in both perpendicular directions to the 300 lb. force.

- Dada Country Protocol TAS 220-94
  1. IG500 Pair of Doors

Large Missile Impact Test – Shall be tested in accordance with: Dade Country Protocols TAS 201-94 with a 9 lb. 2x4 traveling at 50 fps.

- Dada Country
  1. IG500 Storefront
  2. IG500 Pair of Doors

Cycle Load Test – Shall be tested in accordance with: Dade Country Protocols TAS 201-94 for 9,000 cycles.

- Dada Country
  1. IG500 Storefront
  2. IG500 Pair of Doors

PART 2 – PRODUCTS MATERIALS

A. Extrusions shall be 6063-T5 alloy and temper (ASTM B221 alloy T5 temper). Fasteners, where exposed, shall be aluminum or stainless steel in accordance

with ASTM A 164. Perimeter anchors shall be aluminum or stainless steel, providing the steel is properly isolated from the aluminum. Glazing gaskets shall be E.P.D.M. elastomeric extrusions.

1.01 FINISH

A. Aluminum extrusions shall be given a caustic etch followed by an anodic oxide treatment to obtain ... (Specify one of the following):

1. #11 Clear anodic coating

1.02 FABRICATION

A. The framing system shall provide for flush glazing on all sides with no projecting stops. Vertical and horizontal framing members shall have a nominal face dimension of 2-1/2" (63.5). Overall depth shall be 5" (127). Entrance framing members shall be compatible with glass framing in appearance. Provide for internal drainage of infiltrated water into an extruded aluminum subsill channel where it is drained to the exterior through weep slots.

1.03 GLAZING

A. Dade Country

1. IG500 Storefront – 1-5/16" (33) Glazing must meet Impact and Cycle to Local Building Codes.
2. IG500 Pair of Doors 1-5/16" (33) Glazing must meet Impact and Cycle to Local Building Codes.
3.

1.04 SEALANTS

A. All metal-to-metal joints shall use DOW 795 Silicone. Door Seal Gaskets Shall Require Small Joint sealer.

Part 3 – EXECUTION INSTALLATION

A. All glass framing shall be sent in corrects locations as shown in the details and shall be level, square, plumb, and in alignment with the manufacture's installation instructions and approved shop drawings. All joints between framing and the building structure shall be sealed in order to secure a watertight installation.

1.01 PROTECTION AND CLEANING

A. After installation, the Contractor shall adequately protect exposed portions of aluminum surfaces from damage by grinding and polishing compounds, plaster, lime, acid, cement, or other contaminants. The Contractor shall be responsible for final cleaning.

END OF SECTION