

450 TB

SPECIFICATIONS

I. GENERAL

DESCRIPTION

Work included: Furnish all necessary material, labor and equipment for the complete installation of aluminum framing as shown on the drawings and specified herein. (Specifier Note: It is suggested that related items such as glass, sealants and entrances be included for single source responsibility.)

Work Not Included: Structural support of the aluminum framing, trim, shims, and perimeter sealants. (Specifier list any other exclusions.)

Related Work Specifies Elsewhere: (Specifier List).

QUALITY ASSURANCE

Drawings and specifications are based upon the 450 TB framing system as manufactured by CMI Architectural Products, Inc., De Smet, SD. Whenever substitute products are to be considered, supporting technical literature, samples, drawings and performance test data must be submitted ten (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.

PERFORMANCE REQUIREMENTS

AIR INFILTRATION: Shall be tested in accordance with ASTM E 283. Air infiltration shall not exceed .06 CFM per square foot of fixed area at a test pressure of 6.24 P.S.F.

WATER INFILTRATION: Shall be tested in accordance with ASTM E 331. No water penetration at a test pressure of 8.0 P.S.F.

THERMAL PERFORMANCE: Shall be tested in accordance with ASTM C-236 and AAMA 1502.7. The assembly shall have a maximum U-value of 0.42 and a minimum CRF of 60.

STRUCTURAL PERFORMANCE shall be based on:

- Maximum deflection of $L/175$ of the span and
- Allowable stress with safety factor of 1.5

The system shall perform to these criteria under a windload of (Specify) _____ PSF (Architect to specify.)

II. PRODUCTS

MATERIALS

Extrusions shall be 6063-T5 alloy and temper (ASTM B221 alloy G.S. 10A-T5). Fasteners used for assembly, shall be aluminum, stainless, or zinc plated steel in accordance with ASTM A 164-71. Perimeter anchors shall be stainless, or zinc plated steel. (Anchors are provided by the glazing contractors). Glazing gaskets shall be E.P.D.M., Elastomeric or Neoprene.

(NOTE: Product improvements may require specification changes without notice.)

Thermal break material shall consist of a two-part high density polyurethane. Separation of interior and exterior sections shall be a minimum 1/4 inch.

FINISH

All exposed aluminum surfaces shall be free of scratches and other serious blemishes. All exposed surfaces shall be given a caustic etch followed by an anodic oxide treatment to obtain the following finish: (Specifier select).

An Architectural Class II clear anodic coating in accordance with the Aluminum Association Standard AA-M12 C22 A31 designated as #20 Clear.

An Architectural Class I anodic coating with integral color in accordance with the Aluminum Association Standard AA-M12 C22 A44 designated as #33 Dark Bronze.

(Specifier note: Champagne, Lt. Bronze, Medium Bronze, and Black are available colors offered at a premium price.)

ORGANIC COATING: High performance fluorocarbon coatings in accordance with AAMA 2605. Color as selected by Architect and offered at a premium price.

FABRICATION

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". Overall depth shall be 4-1/2". All intermediate horizontal frame members shall have plastic water diverters installed per manufacturers directions to provide positive water control. All frames shall be set onto a thermally broke aluminum sill flashing as directed by the manufacturer.

III. EXECUTION

INSTALLATION

All aluminum frames shall be installed in their prepared openings as detailed and shall be level, square, plumb, and according to manufacturer's instructions and approved shop drawings. Perimeter shims shall be located under glass setting blocks, vertical mullions, and as additionally necessary. All joints between framing and the building structure shall be sealed at both interior and exterior in order to secure a weather tight installation.

PROTECTION AND CLEANING

After installation, the General Contractor shall protect exposed aluminum surfaces from damage by other trades. The General Contractor shall be responsible for the final cleaning.