450 DT

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 specified elsewhere (Specifier list).

QUALITY ASSURANCE

Drawings and specifications are based upon the 450 DT framing system as manufactured by CMI Architectural Products, Inc. Whenever substitute products are to be considered, supporting technical literature, samples, drawings and performance testing data must be submitted ten (10) business days prior to bid date 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 0.06 CFM per square foot of fixed area at a test pressure of 6.24 PSF.

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

THERMAL PERFORMANCE: Shall be tested in accordance with AAMA 1503-09. The assembly shall have a maximum U-Value of 0.34 and a minimum frame CRF of 68.

STRUCTURAL PERFORMANCE: Shall be based on a maximum deflection of L/175 of the span and an allowable stress with a safety factor of 1.5.

The system shall perform to these criteria with the design loads as specified in the project documents.

II. PRODUCTS

MATERIALS

Extrusions shall be a minimum of 6063-T5 alloy and temper (ASTM B221 alloy G.S. 10A-T5). Fasteners used for the assembly of the framing shall be zinc plated steel or stainless steel in accordance with ASTM A 164-71. Perimeter fasteners shall be as required per the given substrate and be provided by the glazing contractor. Glazing gaskets shall be EPDM, silicone or silicone compatible rubber.

The thermal break shall consist of two separate 1/4" poured and debridged pockets filled with a two-part high density polyurethane.

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 selection).

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

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

(Specifier note: Class I Clear (#21), Champagne (#30), Light Bronze (#31), Medium Bronze (#32) and Black (#35) are available at a premium price).

ORGANIC COATING: High performance flurocarbon coatings in accordance with AAMA 2605. Color as selected by the Architect and available 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".

Please review and follow the fabrication and installation instructions as recommended 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 the manufacturer's instructions, approved shop drawings and structural calculations. Perimeter shims shall be located under glass setting points, vertical mullions and as additionally necessary. All joints between framing and the building structure shall be sealed at both the 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 final cleaning.

NOTE: Product improvements may require specification changes without notice.

