

## SECTION 08 41 13

### ALUMINUM FRAMED STOREFRONTS

#### PART 1 - GENERAL

##### 1.01 SUMMARY

- A. Provisions of Division 01 apply to this section.
- B. Section Includes:
  - 1. Aluminum windows, doors, and frames as indicated.
- C. Related Sections:
  - 1. Section 07 92 00: Joint Sealants.
  - 2. Section 08 71 00: Door Hardware.
  - 3. Section 08 80 00: Glazing.

##### 1.02 SYSTEM DESCRIPTION

- A. Design Requirements: Drawings indicate locations, sizes, profiles and general details of aluminum windows, door and frame construction and installation.
- B. Performance Requirements: Comply with the following as a minimum requirement:
  - 1. Air Infiltration: When system is tested according to NAAMM TM-1-68T, Section 4.3, air infiltration at perimeter of operating doors shall not exceed 0.25 cubic feet per minute per foot of sash perimeter, with air infiltration from other sources, including fixed doors and windows, not exceeding 0.06 cubic feet per minute per square foot of wall area, except the more restrictive requirements of governing laws and codes shall determine the maximum allowable infiltration. In computing wall area, areas of operating doors is not included.
- C. Regulatory Requirements: Comply with CBC requirements.

##### 1.03 SUBMITTALS

- A. Shop Drawings: Submit Shop Drawings for the Work of this section, prepared and reviewed before fabrication. Include plans, elevations, opening, identification symbols, sizes, and complete details for materials, finishes, sizes, profiles, moldings, dimensioned locations of hardware items with reinforcement, methods of anchoring, assembly, installation, isolation, glazing procedure as well as reglazing procedures, materials, and caulking.
- B. Product Data: Submit manufacturer's Product Data.

- C. Material Samples: Submit the following:
  - 1. Window, door and frame sections with specified finish, fasteners and accessories.
  - 2. Cured sealant colors.
- D. Calculations: Provide structural calculations, signed and sealed by a structural engineer licensed in the State of California, indicating that materials furnished for installation conform to requirements specified.
- E. Deferred Approval by Division of the State Architect:
  - 1. Submit to the OWNER a complete set of drawings, calculations and specifications for approval by the Division of the State Architect (DSA).
  - 2. Documents must be signed by an engineer licensed in the State of California.
  - 3. Allow six months in the schedule for DSA review.
  - 4. Respond to DSA comments and resubmit until final approval is received.

1.04 QUALITY ASSURANCE

- A. Quality Standards: Provide aluminum Work so that glass installation conforms to ANSI Z97, as applicable.

1.05 WARRANTY

- A. Manufacturer shall provide a 20 year material warranty for aluminum storefront.
- B. Manufacturer shall provide a 10 year material warranty for doors.

PART 2 - PRODUCTS

2.01 Materials:

- A. Extrusions shall be 6063-T5 alloy and temper, ASTM B 221 alloy G.S. IDA-T5. Fasteners, where exposed, shall be aluminum, stainless steel, or zinc-plated steel in accordance with ASTM B 663. Perimeter anchors shall be aluminum or steel. Steel anchors shall be isolated from the aluminum as required.
  - 1. Major portions of door sections, except glazing beads, shall be nominal 0.125 inch.
  - 2. Wall thickness of frame members shall be nominal 0.093 inch.
- B. Glazing gaskets shall be EPDM elastomeric extrusions or vinyl reinforced with fiberglass cord.
- C. Door stiles and rails shall be tubular sections, accurately joined at corners with heavy concealed reinforcement brackets secured with bolts and screws, and shall be MIG- welded. Doors shall be furnished with snap-in stops with bulb glazing gasket both sides of glass. Exposed screws are not permitted. Each door leaf shall be furnished with an adjusting mechanism, located in the

top rail near the lock stile, which provides for minor clearance adjustments after installation. A hard-backed poly-pile weatherstrip shall be installed in both stiles of center hung single doors.

- D. Hardware: Finish hardware shall be as specified in Section 08 71 00: Door Hardware.

## 2.02 FINISH

- A. Windows and accessories shall be furnished with an organic finish applied over a five-stage aluminum pre-treatment. Finish shall be a two-coat PVDF fluorocarbon coating system with a minimum of 1.2 mil thickness and conforming to AAMA 2605.

## 2.03 MANUFACTURERS

- A. Framing system shall be as manufactured by Arcadia, Kawneer. Framing sections shall be 2-1/4 inches x 6 inches off-set Glazing System x 1 inch glazing.
- B. Basis of Design Storefront: Arcadia, TC670 Series system with Insulated glazing for storefronts.
- C. Basis of Design Storefront: Arcadia, AFG451T Series system with Insulated glazing for storefronts.
- D. Basis of Design Operable Windows: Arcadia, T-200 Hopper window with Insulated glazing and Pole operator.

## 2.04 FABRICATION

- A. The framing system shall provide continuous head and sill channels spliced together with formed brake metal sleeves at center of vertical mullions. The framing system shall provide for flush glazing on sides with no projecting stops. Vertical and horizontal framing members shall have a nominal face dimension and overall depth shall be as noted above. Door framing members shall match glass framing appearance.

## PART 3 - EXECUTION

### 3.01 INSTALLATION

- A. Glass framing shall be installed in correct locations as indicated in the details and shall be level, square, plumb and in alignment with other members. Joints between framing and the building structure shall be sealed as required.

### 3.02 PROTECTION

- A. Protect the Work of this section until Substantial Completion.

### 3.03 CLEAN UP

- A. Remove rubbish, debris and waste materials and legally dispose of off the Project site.

END OF SECTION

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