

SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 RELATED SECTIONS

- A. 079200: Joint Sealants
- B. 085113: Aluminum Windows
- C. 088000: Glazing

1.2 SECTION REQUIREMENTS

- A. Structural Performance: Provide systems, including anchorage, capable of withstanding loads indicated.
 - 1. Main-Framing-Member Deflection: Limited to 1/175 of clear span or 3/4 inch (19 mm), whichever is smaller.
 - 2. Structural Testing: Systems tested according to ASTM E 330 at 150 percent of inward and outward wind-load design pressures do not evidence material failures, structural distress, deflection failures, or permanent deformation of main framing members exceeding 0.2 percent of clear span.
- B. Air Infiltration: Limited to 0.06 cfm/sq. ft. of system surface area when tested according to ASTM E 283 at a static-air-pressure difference of 6.24 p.s.f. for single doors and 1.567 p.s.f. for pairs of doors.
- C. Water Resistance: The test specimen shall be tested in accordance with ASTM E 331. There shall be no leakage at a minimum static air pressure differential of 8 p.s.f. as defined in AAMA 501.
- D. Thermal Transmittance (U- value): When tested to AAMA Specification 1503, the average thermal transmittance (U-value) shall not be more than: .44
- E. Submittals: Product Data, Shop Drawings.
 - 1. For entrance systems, include hardware schedule and locations.

PART 2 - PRODUCTS

2.1 ALUMINUM-FRAMED STOREFRONTS

- A. Medium Style Storefront Entrances:
 - 1. Vistawall “Series 375”.
 - 2. Kawneer “Series 350”.

- B. Glazed To The Center Storefront Glazing:
 - 1. Vistawall “Series 3000”.
 - 2. Kawneer “Trifab VG 451”
- C. Aluminum: ASTM B 209 sheet; ASTM B 221 extrusions.
- D. Doors: 1-3/4-inch- thick glazed doors with minimum 0.125-inch- thick, extruded tubular rail and stile members, mechanically fastened corners with reinforcing brackets that are deep penetration and fillet welded or that incorporate concealed tie-rods, snap-on extruded-aluminum glazing stops, and preformed gaskets.
 - 1. Exterior Doors: Provide compression weather stripping at fixed stops. At other locations, provide sliding weather stripping retained in adjustable strip mortised into door edge.
 - 2. Hardware: Entrance manufacturer to provide standard door hardware components as scheduled. Door Hardware contractor to provide balance of door hardware as scheduled.
- E. Fasteners and Accessories: Compatible with adjacent materials, corrosion-resistant, non-staining, and non-bleeding. Use concealed fasteners except for application of door hardware.
- F. Fabrication: Fabricate framing in profiles indicated for flush glazing (without projecting stops). Provide sub frames and reinforcing of types indicated or, if not indicated, as required for a complete system. Factory assemble components to greatest extent possible. Disassemble components only as necessary for shipment and installation.
 - 1. Door Framing: Reinforce to support imposed loads. Factory assemble door and frame units and factory install hardware to greatest extent possible. Reinforce door and frame units for hardware indicated. Cut, drill, and tap for factory-installed hardware before finishing components.
- G. Aluminum Finish: Comply with NAAMMs "Metal Finishes Manual for Architectural and Metal Products." Color anodic, Architectural Class I: AA-M12C22A42/A44.
 - 1. Color: Dark Bronze Anodized.
- H. Sill and Head Flashing at Exterior Window Units: .03” Aluminum to match frames.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Isolate metal surfaces in contact with incompatible metal or corrosive substrates, including wood, by painting contact surfaces with bituminous coating or primer, or by applying sealant or tape recommended by manufacturer.
- B. Install components to provide a weatherproof system.
- C. Install framing components true in alignment with established lines and grades to the following tolerances:
 - 1. Variation from Plane: Limit to 1/8 inch in 12 feet; 1/4 inch over total length.

2. Alignment: For surfaces abutting in line, limit offset to 1/16 inch. For surfaces meeting at corners, limit offset to 1/32 inch.
 3. Diagonal Measurements: Limit difference between diagonal measurements to 1/8 inch.
- D. Install doors without warp or rack. Adjust doors and hardware to provide 90 degree operation, tight fit at contact points and smooth operation.
- E. Install exterior window units with through wall sill flashing.

END OF SECTION 084113