

SECTION 08 41 13 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 SYSTEM REQUIREMENTS

- A. Design Requirements:
 - 1. Curtain wall framing systems preferred, storefront glazing systems acceptable only for ground floor glazing not greater than 10 feet in height and for punched or ribbons windows located not greater than 60 feet above grade. All storefront glazing systems must be provided with extruded sills and end dams.
 - 2. All aluminum-framed storefront glazing members shall be thermally-broken.
 - 3. Narrow and medium stile doors are not permitted.
 - 4. Sliding entrance doors are not permitted.
- B. Performance Requirements:
 - 1. Delegated Design: Contractor to design aluminum-framed systems.
 - 2. Structural Performance:
 - a. Wind Loads: Project specific.
 - 3. Deflection of Framing Members:
 - a. Deflection Normal to Wall Plane: Limited to $L/175$.
 - b. Deflection Parallel to Glazing Plane: Limited to $L/360$ or $1/8$ inch, whichever is smaller.
 - 4. Air Infiltration: 0.06 cfm/sq. ft. when tested according to ASTM E 283 at a minimum static-air-pressure difference of 6.24 lbf/sq. ft.
 - 5. Water Penetration under Static Pressure: No water penetration when tested according to ASTM E 331 at a minimum static-air-pressure difference of 20 percent of positive wind-load design pressure, but not less than 6.24 lbf/sq. ft.
 - 6. Water Penetration under Dynamic Pressure: No water penetration when tested according to AAMA 501.1 under dynamic pressure equal to 20 percent of positive wind-load design pressure, but not less than 6.24 lbf/sq. ft.
 - 7. Condensation Resistance: No condensation shall form on interior surfaces of aluminum glazing at exterior and interior winter design temperature and relative humidity.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Kawneer TrifabVG-451T or comparable products by one of the following:
 - 1. EFCO Corporation.
 - 2. Oldcastle BuildingEnvelope.
 - 3. United States Aluminum.
 - 4. YKK AP America Inc.

2.2 MATERIALS

- A. Aluminum: Alloy and temper recommended by manufacturer.
- B. Steel reinforcement as required for loads.

2.3 FRAMING SYSTEMS

- A. Framing Members: Manufacturer's standard extruded-aluminum framing members.
 - 1. Construction: Thermally broken.

2. Glazing System: Retained mechanically with gaskets on four sides.
3. Glazing Plane: Multiplane.
4. Nominal Size: 2-inch-wide by 4-1/2-inch-deep.

2.4 ENTRANCE DOOR SYSTEMS

- A. Entrance Doors:
 1. Door Construction: 1-3/4-inch overall thickness.
 2. Door Design: Wide stile.
 - a. Stiles must be wide enough to accommodate rim type metal exit hardware.
 3. Glazing: Insulating glass.
- B. Entrance Door Hardware:
 1. Butt hinges; pivots not permitted on new installations.
 2. Closers: surface mounted.
 3. Reinforce doors to accept magnetic locking hardware, door position switches and request-to-exit devices for control by security system.
 4. Locks: Where provided cylinders must accept small format (7-pin) interchangeable cores.

2.5 ALUMINUM FINISHES

- A. Aluminum Finishes: High-performance organic (three coats).

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 08 41 13