1995 CSI SECTION 08411 Aluminum-Framed Storefront
2004 CSI SECTION 08 41 13 Aluminum-Framed Entrance and Storefront
(Window Walls/Ribbon Walls)

Part 1 – General

1.01 Summary
- A. Section includes:
  - 1. Aluminum-Framed Storefront
    - a. Arcadia, Inc., AFG601T Series, 2" x 6" Thermally broken; offset captured glazed, stick, screw spline, shear block fabrication system for 1" glass.
- B. Related Sections:

1.02 References
- A. American Architectural Manufacturers Association (AAMA)
- B. American Society for Testing and Materials (ASTM)
- C. Aluminum Association (AA)

1.03 System Description
- A. General: In addition to requirements shown or specified, comply with:
  - 1. Applicable provisions of AAMA Aluminum Storefront and Entrance Manual for design, materials, fabrication and installation of component parts.
- B. Design Requirements: Arcadia AFG601T Series is a framing system suitable for outside or inside glazing. Glass shall be forward or inward of frame. Provides for two-color capability.
- C. Performance Requirements:
  - 1. Limit air leakage through assembly to 0.06 CFM/min/sq. ft. (.00003 m^3/sm^2) of wall area at 6.24 PSF (300 Pa) as measured in accordance with ASTM E283.
  - 2. Water Resistance: No water leakage when measured in accordance with ASTM E331 with a static test pressure of 8PSF(383 Pa).
  - 3. Limit mullion windload deflection of L/175 with full recovery of glazing materials, when measured in accordance with ASTM E 330.
  - 4. System shall not deflect more than 1/8" at the center point, or 1/16" at the center point of a horizontal member, once deadload points have been established.
  - 5. System shall accommodate expansion and contraction movement due to surface temperature differential of 180 degrees F.
  - 6. Seismic testing shall conform to AAMA recommended static test method for evaluating performance of curtain walls and storefront wall systems due to horizontal displacements associated with seismic movements and building sway.
  - 7. Energy Efficiency- As determined per NFRC 100, NFRC 200 and NFRC 500.

1.04 Quality Assurance
- A. Single Source Responsibility:
  - 1. Obtain entrances, storefronts, ribbon walls, window walls, curtain walls, window systems, and finish through one source from a single manufacturer.
- B. Provide test reports from AAMA accredited laboratories certifying the performances as specified in 1.03.

1.05 Warranty
- A. System shall be warranted against failure and/or deterioration of metals due to manufacturing process for a period of two (2) years.

Part 2 – Products

2.01 Manufacturers
- A. Acceptable Manufacturers:
  - 1. Arcadia, Inc., 2301 E Vernon, Vernon, CA. Telephone 323/269-7300, Fax 323/269-7390.
- B. Acceptable Products:
  - 1. Arcadia, Inc., AFG601T Series.

2.02 Framing Materials and Accessories
- A. Framing members, transition members, mullions, adaptors, and mounting: Extruded 6063-T6 aluminum alloy (ASTM B221 – Alloy G.S. 10a T6).
- B. Screws, fastening devices, and internal components: Aluminum, stainless steel, or zinc-plated steel. Perimeter anchors shall be aluminum or steel, providing the steel is properly isolated from aluminum.
- C. Glazing Gasket
  - 1. Compression-type design, replaceable, molded or extruded santoprene, polyvinyl chloride (PVC), or ethylene propylene diene monomer (EPDM).
  - 2. Shall be of type that locks securely into the glazing reglet to prevent glazing gaskets from disengaging.

2.03 Finish
- A. Finish all exposed areas of aluminum and components as indicated.
  - 1. An Architectural Class II or I color anodic coating conforming with AA-M12C22A34/AA-M12C22A44.
    - a. Anodized finish color shall be Colornodic _____. (AB1 Light Champagne, AB2 Champagne, AB3 Light Bronze, AB4 Medium Bronze, AB5 Standard Medium Bronze, AB6 Dark Bronze, AB7 Standard Dark Bronze, AB8 Black.)

(or)
  - 1. An Architectural Class II or I anodic coating conforming with AA-M12C22A31/AA-M12C22A41.
    - a. Anodize finish color shall be Colornodic _____ (#11 Clear)

(or)
  - 1. Fluorocarbon Coating: AAMA 2605.2.
    - a. Resin: 70% PVDF Kynar 500/Hylar 5000.
    - b. Substrate: cleaned and pretreated with chromium phosphate.
    - c. Primer: Manufacturer's standard resin base compatible coating. Dry film thickness.
      - (a) Extrusion: Minimum 0.20 mil.
    - d. Color Coat: 70% PVDF, dry film thickness.
      - (a) Extrusion: 1.0 mil.
    - e. Color: As selected by Architect.
    - f. Acceptable Coatings Manufacturers:
      - (a) PPG Industries, Inc.
      - (b) Sherwin Williams

2.04 System Fabrication
- A. Set sill members in bed of sealant or with gaskets, as indicated, for weather tight construction.
- B. Install aluminum-framed storefront system and components to drain condensation, water penetrating joints, and moisture migrating with aluminum-framed storefront system to the exterior.
- C. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.
- D. Framing members shall be internally reinforced and secured at head and sill as necessary for structural performance requirements, for hardware attachment, and as indicated.
- E. Fasteners shall be so located as to ensure concealment from view in the final assembly.

Part 3 – Execution

3.01 Examinations
- A. Examine conditions and verify substrate conditions are acceptable for product installation.

3.02 Installation
- A. Install in accordance with approved shop drawings and manufacturers installation instructions.

3.03 Field Quality Control
- A. Test the storefront for water leaks in accordance with AAMA 501.2. Conduct test in the presence of the Architect. Correct deficiencies observed as a result of this test.

END OF SECTION