



1995 CSI SECTION 08160 SLIDING METAL DOORS
2004 CSI SECTION 08 32 13 SLIDING ALUMINUM - FRAMED GLASS
DOOR (Window Walls/Ribbon Walls)

Part 1 – General

1.01 Summary

- A. Section includes:
 - 1. Sliding Metal Doors
- 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 Windows and Sliding Glass Doors Manual for design, materials, fabrication and installation of component parts.
- B. Design Requirements: Arcadia LS1000 Mirage Series Lift & Slide SGD-CW 50 (thermal) Heavy Commercial Sliding Doors 5 7/8" depth.
- C. Performance Requirements: Each assembly shall be tested by a recognized testing laboratory or agency in accordance with specified test methods.
 - 1. Conformance to SGD-CW50 specifications in AAMA/NWWDA 101/I.S. 2-97.
 - a. Air Infiltration: Accordance with ASTM E 283.
 - b. Water Resistance: Accordance with ASTM E 331.

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. Warranted against failure and/or deterioration of metals due to manufacturing process for a period of two (2) years providing the product was installed in accordance with Arcadia's installation instructions and maintained in accordance with Arcadia's operations and maintenance manual.

Part 2 – Products

2.01 Manufacturers

- A. Acceptable Manufacturers:
 - 1. Arcadia Inc., 2301 E Vernon Avenue, Vernon, CA 323-771-9819
- B. Acceptable Products:
 - 1. Arcadia, LS1000 Mirage Series Lift & Slide (Thermal) Heavy Commercial Sliding Doors, 5 7/8" depth.

2.02 Materials

- A. All doors shall be fabricated from aluminum extrusions of 6063-T5 alloy and temper with a minimum wall thickness of 0.100" for the sill member and a minimum of 0.072" for all other members, including frame, sash and optional sash dividers. The aluminum shall be free of defects which impair strength and appearance.
- B. Component parts and accessories shall be of aluminum alloy, stainless steel or non-metallic materials, which will neither deteriorate nor promote corrosion.
- C. All aluminum profiles are extruded and thermally broken by means of two (2) continuous polyamide bars with 25% glass fiber content as per standard ASTM D 5630. These polyamide bars have a tensile strength of 652,000 psi as per standard ASTM D638 and are attached to the aluminum extrusions via continuous mechanical crimping. Prior to the crimping, both aluminum profiles have to be properly knurled.
- D. Sill shall have a full-length roll-formed 0.025" thick, stainless steel track cap.
- E. Operable sash shall be equipped with two stainless steel tandem ball bearing rollers and housings.
- F. Multi-point locking system with handles. Optional keyed cylinders are available. Handle set in either clear anodized or white and black painted finish.

- G. Fixed and/or sliding sash members shall be constructed to allow for either factory or field glazing. Sash glazing shall be accomplished using EPDM side load, wedge gaskets and appropriate aluminum glass stops. Standard stops accommodate 1" or 1 1/8" IG glass. Optional stops for up to 1 13/16" IG glass.
- H. All assembly and installation screws shall be 316 stainless steel.
- I. Screens made of extruded aluminum frame and screened with 18 x 16 fiberglass mesh.

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 Fabrication

- A. Standard frame is 5 7/8" depth.
- B. Frame sections with integral screen track are available.
- C. Jamb's extend to the top of the head and the bottom of the sill and must be caulked to ensure a weather resistant seal.
- D. Frame corner joint shall be secured with two stainless steel screws which heads must be caulked.
- E. Profile of the fixed jamb and the latching jamb shall include two EPDM gaskets to receive the fixed and latching stiles.
- F. Fixed and sliding sash shall have a nominal 2 9/16" depth and mitered shall have overlapped joints of the mortise type to provide extra strength and interlocking mechanically fastened hairline joints.
- G. The joinery between the horizontal & vertical sash profiles must fit perfectly and be aligned for both sides, internal & external. Corner joint will be assembled using extruded or die cast heavy duty corner-cleats. These corner cleats are pinned in place at each corner joint and then corner joint filled with a 2-part epoxy to ensure no movement and permanent set. The joinery between horizontal & vertical profiles must be carefully sealed before final assembly.
- H. Interlockers are PVC and attached to the fixed and sliding sash.

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. Contractor's responsibility to make all necessary final adjustments to attain normal operation of each doors its mechanical hardware.

END OF SECTION