

Product Standards and Guide Specifications

SECTION 08120 ALUMINUM DOORS AND FRAMES

Part 1 – General

1.01 Summary

- A. Section includes:
 1. Aluminum Doors and Frames
- 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 MS362 Series Medium Stile Entrance is a single source package of door, doorframe and hardware that is engineered for moderate to high traffic.
- C. Performance Requirements: Each assembly tested by a recognized testing laboratory or agency in accordance with specified test methods.
 1. Tested by the dual moment corner joint strength test.
 2. Air infiltration tested in accordance with ASTM E283 (offset pivot or butt hung entrances).
 3. Water penetration tested in accordance with ASTM E 331 (offset pivot or butt hung entrances).
 4. Structural uniform load tested in accordance with ASTM E 330.

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. Door 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., 3225 East Washington Blvd., Vernon, CA. Telephone 323/269-7300, Fax 323/269-7390.
- B. Acceptable Products:
 1. Arcadia, Inc., MS362 Series, Medium Stile Door 1-3/4".
 - a. Vertical Stiles: 3-1/2 inches.
 - b. Top Rail: 3-5/8 inches.
 - c. Bottom Rail: 10/12 inches.
 - d. Glazing Stops: (Square or Beveled) snap-in type for _____ (1/4 or 1 inch) infill.
 2. Major portions of the door stiles a nominal .125 inches and glass stops .050 inches thick.

2.02 Materials and Accessories

- A. Door members: Extruded 6063-T5 aluminum alloy (ASTM B221-Alloy G.S. 10a T5).
- B. Screws, fastening devices, and internal components: Aluminum, stainless steel, or zinc plated steel in accordance with ASTM A-164. Shall be aluminum or steel, providing the steel is properly isolated from aluminum.
- C. Glazing Gasket (compression-type design).

2.03 Hardware

- A. Hardware furnished and installed by the door manufacturer, and include the following standard hardware (as selected).
 1. Weatherstripping: Hard-backed poly pile in door and/or frame. Meeting stile of all pair of doors have a double line hard-backed poly-pile astragal.
 2. Threshold: Extruded Aluminum with ribbed surface.

3. Sill Sweeps: Brush strip (exposed, concealed).
4. Pivoting/Hinging: (Center, offset pivot; butt, continuous.)
5. Closers: (Overhead concealed, surface, floor.)
6. Latches/Strike: (Dead-latch combination, two-point.)
7. Latch Handle: (Lever, eurostyle/ w/return, paddle.)
8. Electric Release: (Offset strike, center hung strike.)
9. Locks/Strike: (Maximum security hooklock, deadbolt.)
10. Auxiliary Locks: (Two-point, three-point, flushbolts.)
11. Cylinders: (Mortise, rim, dummy, thumbturn.)
12. Panic Devices: (Cross, touch bar, flush mid panel.)
13. Push/Pulls: (Standard, offset radius, straight radius.)
14. Cylinder Guard: (Security ring/retainer ring.)
15. Exit Indicator: (Message panel.)
16. Transom Decal: (This door to remain . . .)
17. Door Stop/Holder:
18. Mail slot.

SPECIFIER NOTE: Refer to Arcadia Architectural Manual, Hardware Section for description of items 4-18.

2.04 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, AG2 Gold.)
 - (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) Valspar Corporation
 - (c) BASF

2.05 Door Fabrication

- A. Stiles and rails shall be tubular sections accurately joined, flush and hairline at corners with heavy concealed reinforcement brackets secured with machine bolts, with optional MIG weld. Exposed screws not permitted.
- B. Each door leaf equipped with an adjusting mechanism, located in the top rail near the lock stile.
- C. Prepare internal reinforcement for door hardware.
- D. Custom hardware templates and physical hardware must be submitted prior to any fabrication.

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. Make all necessary final adjustments to attain normal operation of each door and its mechanical hardware.

END OF SECTION