

**1995 CSI SECTION 08120 Aluminum Doors and Frames**  
**2004 CSI SECTION 08 11 16 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 WS512HDT Series Heavy Duty Thermal Wide Stile Entrance is a single source package of door, doorframe and hardware that is engineered for excessive traffic abuse.
- 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.

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., 2301 E Vernon, Vernon, CA. Telephone 323/269-7300, Fax 323/269-7390.
- B. Acceptable Products:
  1. Arcadia, Inc., WS512HDT Series, Heavy Duty Thermal Door 2".
    - a. Vertical Stiles: 5 inches.
    - b. Top Rail: 5-1/8 inches.
    - c. Bottom Rail: 10-1/4 inches
    - d. Glazing Stops: Square snap-in type for 1 inch infill.
  2. Major portions of the door stiles a nominal .188 inches and glass stops .050 inches thick.

2.02 Materials and Accessories

- A. Door members: 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 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, concealed 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.

2.01 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 Colorodic \_\_\_\_\_. (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 Colorodic \_\_\_\_\_ (#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

2.05 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**