

**SECTION 08520 ALUMINUM WINDOWS**

**Part 1 – General**

1.01 Summary

- A. Section includes:
  1. Aluminum Horizontally Sliding Windows
- B. Related Sections:

1.02 References

- A. American Architectural Manufacturers Association (AAMA)
- B. American Society for Testing and Materials (ASTM)
- C. Aluminum Association (AA)
- D. National Wood Window & Door Association (NWWDA)

1.03 Performance Requirements: Provide aluminum window systems that comply with ASTM E 1886 and ASTM E 1996 performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with test method indicated.

1.04 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: Mark I Heavy Commercial Sliding Windows, with a frame depth of 3 inches (76 mm) at the base, HC-40 grade. Windows shall be of block frame or nail-on fin type, and must be factory glazed.
- C. Performance Requirements: Each assembly shall be tested by a recognized testing laboratory or agency in accordance with specified test methods.
  1. Conformance to HC-40 specifications in ANSI/AAMA 101.
    - a. Air Infiltration: Accordance with ASTM E 283.
    - b. Water Resistance: Accordance with ASTM E 331.

1.05 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.

1.06 Warranty

- A. 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., 1850 E. Maule Ave., Las Vegas, NV. 702/944-4680, fax 702/944-4681.
- B. Acceptable Products:
  1. Mark I Horizontal Sliding Windows, 3" depth as designed by Century Manufacturing, Inc.

2.02 Materials

- A. All frame and sash extrusions shall be fabricated from aluminum extrusions of 6063-T6 alloy and temper with a minimum wall thickness of 0.062 inch. The aluminum shall be free of defects which impair strength and appearance.
- B. Vent (s) shall be inside track type easily removable from the interior when latch is released and vent is in the fully open position.
- C. Vent (s) shall operate freely on stainless steel rollers at least 7/8" in diameter which shall have pre-lubricated radial bearings.
- D. The entire perimeter frame shall be continuously weather-stripped with woven pile weather-strip, vertical stiles shall be weather-stripped with woven pile weather-strip using fin seal for high performance locations, cam action of weather-strip

will properly compress weather-strip at stiles to insure full weathering performance in a closed position.

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, AG2 Gold.)
  - (or) 1. An Architectural Class anodic II or 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.

2.04 Fabrication

- A. All joints of the frame shall be of rigid construction and assembled in a quality manner to provide permanent weather tight joints.
- B. Fabricate windows allowing for minimum clearances and spacing around perimeter to allow for adjustment to plumb, level, true to line installation.
- C. Window frames and sash frames are joined with concealed non-magnetic stainless steel thread cutting screws in integral screw races, butt joints are sealed on inside and back of frame. In no case shall joint sealant show on exterior or interior faces.
- D. The joint formed by the intersection of the frame jambs and frame sill shall be adequately sealed to insure against weepage into surrounding wall construction.

**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 window and its mechanical hardware.

**END OF SECTION**