

SECTION 085113 - ALUMINUM WINDOWS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes fixed aluminum-framed windows.

1.2 SUBMITTALS

- A. Submit following items:
 - 1. Product Data
 - 2. Shop Drawings: Include window schedule, window elevations, sections and details, and multiple window assembly details.
 - 3. Samples:
 - a. Color samples for each exposed finish.
 - b. Glass, showing specified tint color.
 - 4. Quality Assurance/Control Submittals:
 - a. Qualifications: Proof of manufacturer's qualifications.
 - b. U-Factor and structural rating charts required for AAMA and NFRC labeling requirements.
 - c. Installation Instructions – AAMA 2400.
- B. Closeout Submittals: submit following items:
 - 1. Temporary window labels marked to identify windows that labels were applied to.
 - 2. Maintenance instructions.
 - 3. Special Warranties.

1.3 QUALITY ASSURANCE

- C. Overall Standards: Comply with ANSI/AAMA/NWDA 101/I.S.2, except as otherwise noted herein.
- D. Qualifications:
 - 1. Manufacturer Qualifications:
 - a. Minimum five years experience in producing aluminum windows of the type(s) specified.
 - b. Member AAMA, NFRC.
- E. Certifications for insulated glass windows:
 - 1. AAMA: Windows shall be Gold label certified with label attached to frame per AAMA requirements.
 - 2. NFRC: Windows shall be NFRC certified with temporary U-factor label applied to glass and an NFRC tab added to permanent AAMA frame label.

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1.4 Delivery, Storage, and Handling

- F. Provide cardboard corner boots and full stretch wrap shipping protection.
- G. Follow manufacturer's instructions on label applied to windows.

1.5 WARRANTY

- A. Commercial Special Warranty:
 - 1. 10-year Commercial Warranty.
 - 2. Guarantees windows against defects in manufacturing and workmanship including costs for parts and labor.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Milgard Manufacturing, Inc.
- B. Mercer Windows.
- C. Fleetwood Windows & Doors.
- D. Boyd Aluminum Manufacturing.
- E. Or Architect approved equivalent.

2.2 MATERIALS

- B. Aluminum: Comply with requirements of AAMA/WDMA/CSA 101/I.S.2/A440-05, 6063-T5 temper for strength, corrosion resistance and application of required finish.
- C. Extruded frame members are to be a minimum of .060" in thickness for structural walls.

2.3 GENERAL PERFORMANCE REQUIREMENTS

- D. Thermal Performance: Comply with NFRC 100.
- E. Air Leakage, Water Resistance, Structural Test: Comply with ANSI/AAMA 101/I.S.2
- F. Forced-Entry Resistance: Comply with ASTM E 588.

2.4 WINDOW TYPE

- A. Fixed:
 - 1. Frame: Minimum 2-1/4 inch deep, aluminum extrusion.
 - 2. Sightlines: Equal to operating windows.
 - 3. Structural Class: F-HC45.

2.5 GLAZING

- A. Insulated Glass Units: ASTM E 774, Class A, 1 inch (25 mm) thick overall except 1120/1520 series, which are 3/4 inch (19mm) thick.
 - 1. Glazing Type: Clear/SunCoat™ Low-E.
 - 2. Spacer Bar: Aluminum box spacer

2.6 SIMULATED DIVIDED LITE GRIDS:

- A. Grid Types:
 - 1. Sculptured Internal Grid: 1-1/16 inch (27 mm) wide sculptured aluminum bar internal grid.

2.7 FABRICATION

- G. Fabricate frames and sash with mechanically joined corners. Corners are fastened with corrosion resistant screws and sealed with an acrylic sealant.
- H. All fixed glass is exterior glazed and all sashes are marine glazed with flexible PVC glazing. The fixed glazing shall be removed without disassembly of a sash. The vents will need to be disassembled to replace the glazing.

2.8 ALUMINUM FINISHES

- I. Frame and Sash Color: Dark Bronze Anodized Exterior Finish: Provide AA-C22-A32 Class II Bronze, minimum 0.4 mils thick, electrolytically deposited color anodized finish.

2.9 SOURCE QUALITY CONTROL

- J. Windows inspected in accordance with manufacturer's Quality Control Program as required by AAMA Gold Label certification.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine openings in which windows will be installed.
 - 1. Verify that framing complies with AAMA 2400.
 - 2. Verify that fasteners in framed walls are fully driven and will not interfere with window installation.
- B. Coordinate with responsible entity to correct unsatisfactory conditions.
- C. Commencement of work by installer is acceptance of substrate conditions.

3.2 INSTALLATION

- A. Comply with Drawings, Shop Drawings, and manufacturer's written instructions for installing windows, hardware, accessories, and other components.

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- B. Install windows in framed walls in accordance with AAMA 2400.
 - 1. Provide continuous shim support along full length of sill.

- C. Do not remove temporary labels.

3.3 CLEANING

- A. Remove temporary labels and retain for Closeout Submittals.
- B. Clean soiled surfaces and glass using a mild detergent and warm water solution with soft, clean cloths.
- C. Finish Coat Touch-Up: Immediately after erection, clean areas of finish coat, and apply touch-up of compatible air-drying paint.

WINDOW SCHEDULE

<u>NO.</u>	<u>SIZE</u>	<u>MATERIAL.</u>	<u>STYLE</u>	<u>LITE</u>	<u>COLOR</u>
A.	6' X 5'	ALUMINUM.	FIXED	2X2	DARK BRONZE ANODIZED
B.	8' X 4'	ALUMINUM.	FIXED	2X2	DARK BRONZE ANODIZED

END OF SECTION