

SECTION 08500

WINDOWS

PART 1 GENERAL

1.01 WINDOWS

MATERIALS: Windows for this project shall consist of aluminum clad, tilt turn, hopper windows complete with hardware, glazing, Low-E coating, weather stripping, insect screen, jamb extension, and standard or specified anchors, trim, attachments, and accessories as manufactured by “Marvin Windows and Doors”, or approved equal and shall comply with the following:

FINISH: Exterior color by Owner. Interior finish by Owner.

SCREEN: shall consist of fiberglass screen cloth set in aluminum frame, supplied complete with all necessary hardware.

PERFORMANCE: U-factor to be 0.27 or less.

1.02 FINISH

All exposed framing members shall be free of scratches and other serious surface blemishes. All aluminum shall be given a caustic etch and anodic oxide treatment to conform to Alumilite 204A1R1 standards (AA-M21C22A31).

1.03 SYSTEM DESCRIPTION

A. Design and Performance Requirements:

1. Window units shall be designed to comply with ANSI/WDMA I.S. 2-93, DP 40, except where more stringent requirements are specified.
2. Air leakage should not exceed the following when tested at 1.57 psf according to ASTM E 283-91: 0.15 cfm per square foot of frame.
3. No water penetration shall occur when units are tested at the following pressure according to ASTM E 547-93: 6.0 psf.

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4. Window assembly shall withstand the following positive or negative uniform static air pressure difference without damage when tested according to ASTM E 330-90: 60 psf.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver in original packaging and protect from weather.
- B. Identify each carton with material name, date of manufacture and lot number.
- C. Store window units in an upright position in a clean and dry storage area above ground and protect from weather.

1.05 WARRANTY

Windows shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of ten (10) years from purchase date.

1.06 ERECTION

All items under this heading shall be set in their correct locations as shown in the details and shall be level, square, plumb, and alignment with other work.

All joints between interior metal and between interior glass framing and mullion members shall be tightly caulked in order to secure a watertight job. All materials shall be screwed in place using backing, masonry, plugs, or anchor straps as required.

Where moldings are joined, they shall be accurately cut and fitted to result in a tightly closed joint.

After erection, the General Contractor shall adequately protect exposed portions of the grid framing from damage by grinding and polishing machines, plaster, lime, acid, cement, or other harmful compounds.

1.07 CLEANING:

The General Contractor shall be responsible for removal of protective materials and cleaning of all finished wood surfaces. The General Contractor shall be held responsible for damages resulting from the use of other cleaning materials.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Description: Factory assembled Clad Magnum Hopper as manufactured by Marvin Windows and Doors, Warroad, Minnesota, or approved equal.

2.02 ALUMINUM CLAD WOOD MAGNUM HOPPER MATERIALS

- A. Frame: Clean pine, kiln dried to a moisture content no greater than twelve (12) percent at a time of fabrication. Water repellent preservative treated in accordance with ANSI/WDMA I.S.4-94. Frame thickness: 2-13/32 inches (63mm). Composite frame thickness: 3-1/16 inches(78 mm) at head jamb and side jambs, 1-11/16 inches (43 mm) at sill. Exterior extruded aluminum clad 0.05 inch (1.3 mm) thick.
- B. Sash: Finger jointed exterior with clear pine interior, kiln dried to a moisture content no greater than twelve (12) percent at the time of fabrication. Water repellent preservative treated in accordance with ANSI/WDMA I.S.4-94. Composite sash thickness: 2-1/4 inches(57 mm). Exterior extruded aluminum clad 0.050 inch (1.3 mm) thick. Removable interior glazing stops.
- C. Glazing: Select quality complying with ASTM C 1036-91. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E 774-92.
- D. Finish:
1. Exterior: Fluoropolymer modified acrylic topcoat applied over primer. Meets or exceeds AAMA 605.2-92 requirements. Color per engineer approval.
- E. Weather strip: Weather-stripped with resilient thermo-polyester gasket, welded at corners.
- F. Insect Screen: Factory installed screen. Screen mesh, 18 by 16: Charcoal fiberglass. Aluminum frame 3/8 inch by 15/16 inch (10mm by 12 mm).
- G. Jamb Extension: Factory installed jamb extension for wall thickness indicated or required. Finish: Match interior frame finish.

2.03 ACCESSORIES AND TRIM

- A. Installation Accessories:
1. Factory installed vinyl nailing fin/drip cap.

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2. Installation brackets
3. Masonry brackets

B. Aluminum Extrusions

1. Profile: Brick mould casing.
2. Finish: Fluoropolymer modified acrylic topcoat applied over primer. Meets or exceeds AAMA 605.2-92 requirements. Standard color per engineer approval

END OF SECTION