

SECTION 08550 - WOOD WINDOWS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes aluminum-clad wood-framed windows.

1.2 PERFORMANCE REQUIREMENTS

- A. Windows shall be certified to a rating of C50 specifications in accordance with WDMA 101/I.S.2.
- B. Window Unit Air Leakage, ASTM E 283, 1.57 psf (25 mph): 0.05 cfm per square foot of frame or less.
- C. Window Unit Water Penetration: No water penetration through window unit when tested in accordance with ASTM E 547 under static pressure of 6.0 psf (52 mph) after 4 cycles of 5 minutes each, with water being applied at a rate of 5 gallons per hour per square foot.

1.3 SUBMITTALS

- A. Product Data: For each type of wood window indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, hardware, attachments to other work, operational clearances, and installation details.
- C. Samples: For each exposed finish.

1.4 QUALITY ASSURANCE

- A. Installer: A qualified installer, approved by manufacturer to install manufacturer's products.
- B. Manufacturer Qualifications: A qualified manufacturer who is certified for chain of custody by an FSC-accredited certification body.

1.5 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace wood windows that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Failure to meet performance requirements.
 - b. Structural failures including excessive deflection, water leakage, air infiltration, or condensation.
 - c. Faulty operation of movable sash and hardware.
 - d. Deterioration of wood, metals, vinyl, other materials, and finishes beyond normal weathering.
 - e. Failure of insulating glass.
 - 2. Warranty Period:
 - a. Window: 10 years from date of Substantial Completion.

- b. Glazing: 20 years from date of Substantial Completion.
- c. Metal Finish: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
- C. Basis-of-Design Product: Subject to compliance with requirements, provide large awning windows as scheduled on drawings, manufactured by Pella Corporation, Designer series. Alternate manufacturers are listed below.
 - 1. Aluminum-Clad Wood Windows:
 - a. EAGLE Window & Door, Inc.; an American Architectural Products Corporation Company.
 - b. Hurd Millwork Company.
 - c. Kolbe & Kolbe Millwork Co., Inc.
 - d. Norco Premium Collection; JELD-WEN, Inc.
 - e. Peachtree Doors and Windows; TPC Acquisition, Inc.
 - f. Weather Shield Mfg., Inc.

2.2 MATERIALS

- A. Wood: Clear ponderosa pine or another suitable fine-grained lumber; kiln dried to a moisture content of 6 to 12 percent at time of fabrication; free of visible finger joints, blue stain, knots, pitch pockets, and surface checks larger than 1/32 inch (0.8 mm) deep by 2 inches (51 mm) wide; water-repellent preservative treated.
- B. Aluminum Extrusions and Rolled Aluminum for Cladding, High-Performance Organic Finish: Two-coat thermocured system with fluoropolymer coats containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with AAMA 2604.
 - 1. Color: As selected by Architect from manufacturer's full range.

2.3 WINDOW

- A. Window Type: Large Awning
- B. Weather Stripping:
 - 1. Dual weather stripping.
 - 2. Continuous, flexible, PVC material in dual-durometer design.
 - 3. Units shall have welded corners, compressed between frame and sash for positive seal on all 4 sides.
 - 4. Secondary PVC leaf –type weather strip between sash and frame for positive seals on all 4 sides.

2.4 GLAZING

A. Glazing:

1. Float Glass: ASTM C 1036, Quality 1
2. Type: Silicone-glazed 11/16" multi-layer Low-E coated, insulated glass with argon. .

2.5 INSECT SCREENS

- A. General: Design windows and hardware to accommodate screens in a tight-fitting, removable arrangement, with a minimum of exposed fasteners and latches. Fabricate insect screens to fully integrate with window frame. Locate screens on inside of window and provide for each operable exterior sash or ventilator.
- B. Aluminum Insect Screen Frames: Manufacturer's standard aluminum alloy complying with SMA 1004. Fabricate frames with mitered or coped joints or corner extrusions, concealed fasteners,
- C. Aluminum Tubular Framing Sections and Cross Braces: Roll formed from aluminum sheet with minimum wall thickness as required for class indicated.
1. Finish: Baked-on organic coating in color selected by Architect from manufacturer's full range.
 2. Finish: Manufacturer's standard.
- D. Glass-Fiber Mesh Fabric: mesh of PVC-coated, glass-fiber threads; woven and fused to form a fabric mesh resistant to corrosion, shrinkage, stretch, impact damage, and weather deterioration; in the following color. Comply with ASTM D 3656.
1. Mesh Color: Charcoal gray.

2.6 FABRICATION

- A. Fabricate wood windows that are reglazable without dismantling sash or ventilator framing.
- B. Weather Stripping: Provide full-perimeter weather stripping for each operable sash and ventilator.
- C. Factory machine windows for openings and for hardware that is not surface applied.

2.7 WOOD FINISHES

- A. Factory-Primed Windows: Provide manufacturer's standard factory-prime coat on exposed interior wood surfaces.

PART 3 - EXECUTION

3.1 INSTALLATION

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

- B. Install windows level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction.
- C. Set sill members in bed of sealant or with gaskets, as indicated, for weathertight construction.
- D. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.
- E. Adjust operating sashes and ventilators, screens, hardware, and accessories for a tight fit at contact points and weather stripping for smooth operation and weathertight closure. Lubricate hardware and moving parts.
- F. Clean exposed surfaces immediately after installing windows. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
- G. Clean factory-glazed glass immediately after installing windows. Comply with manufacturer's written recommendations for final cleaning and maintenance. Remove nonpermanent labels, and clean surfaces.
- H. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

END OF SECTION 08550