

**SECTION 08550 - WOOD WINDOWS****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes the following wood-framed window product types:
  - 1. Single-hung windows.
  - 2. Transom windows.

**1.3 SUBMITTALS**

- A. Product Data: Include construction details, material descriptions, fabrication methods, dimensions of individual components and profiles, hardware, finishes, and operating instructions for each type of wood window indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, hardware, attachments to other Work, operational clearances, and the following:
  - 1. Mullion details, including reinforcement and stiffeners.
  - 2. Joinery details.
  - 3. Weather-stripping details.
  - 4. Glazing details.
- C. Samples for Initial Selection: For units with factory-applied color finishes.
- D. Samples for Verification: For wood window components required, prepared on Samples of size indicated below.
  - 1. Main Framing Member: 12-inch-long, full-size sections of extrusions with factory-applied color finish.
  - 2. Hardware: Full-size units with factory-applied finish.
  - 3. Architect reserves the right to require additional samples that show fabrication techniques, workmanship, and design of hardware and accessories.
- E. Qualification Data: For Installer and Fabricator.
- F. Maintenance Data: For operable window sash, weather stripping and finishes to include in maintenance manuals.

#### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An installer acceptable to wood window manufacturer for installation of units required for this Project.
- B. Source Limitations: Obtain wood windows through one source from a single manufacturer.
- C. Product Options: Information on Drawings and in Specifications establishes requirements for wood windows' aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.
- D. Product Options: Drawings indicate size, profiles, and dimensional requirements of wood windows and are based on the specific system indicated. Refer to Division 1 Section "Product Requirements."
  - 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- E. Glazing Publications: Comply with published recommendations of glass manufacturers and GANA's "Glazing Manual" unless more stringent requirements are indicated.

#### 1.5 PROJECT CONDITIONS

- A. Field Measurements: Verify wood window openings by field measurements before fabrication and indicate measurements on Shop Drawings.

#### 1.6 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. Failures include, but are not limited to, the following:
  - 1. Structural failures including excessive deflection.
  - 2. Faulty operation of movable sash and hardware.
- B. Warranty Period: Five years from date of Substantial Completion.
- C. Warranty Period for Glass: Five years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Wood windows are to be custom fabricated to match the historic reproduction windows in place at the project site.

## 2.2 MATERIALS, GENERAL

- A. Wood: Clear Cypress; 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 deep by 2 inches wide; water-repellent preservative treated.
- B. Wood Trim and Glazing Stops: Material and finish to match frame members.
- C. Fasteners: Aluminum, nonmagnetic stainless steel, epoxy adhesive, or other materials warranted by manufacturer to be noncorrosive and compatible with wood window members, cladding, trim, hardware, anchors, and other components. Cadmium-plated steel fasteners are not permitted.
  - 1. Exposed Fasteners: Unless unavoidable for applying hardware, do not use exposed fasteners. For application of hardware, use fasteners that match finish of member or hardware being fastened, as appropriate.
  - 2. Stiles and Rails: Full Mortise and Tenon joints secured with wood dowels.

## 2.3 GLAZING

- A. Glass and Glazing Materials: Match simulated historic glazing in place at the project site.

## 2.4 HARDWARE

- A. General: Provide hardware to match existing historic hardware in place at the project site.
- B. Counterbalancing Mechanism: Match existing Sheaves, provide new sash weights and ropes to match that existing at the project site.
- C. Transom Operators: Provide new Transom Operators to match the existing historic operators in place at the project site.

## 2.5 FABRICATION

- A. General: Fabricate wood windows to match the design, construction and detail of the historic reproduction windows at the project site.

## 2.6 WOOD FINISHES

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

**PART 3 - EXECUTION****3.1 EXAMINATION**

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances; rough opening dimensions; levelness of sill plate; coordination with wall flashings, vapor retarders, and other built-in components; and other conditions affecting performance of work.
  - 1. Masonry Surfaces: Visibly dry and free of excess mortar, sand, and other construction debris.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 INSTALLATION**

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

**3.3 ADJUSTING**

- A. Adjust operating sashes and transoms, hardware, and accessories for a tight fit at contact points and weather stripping for smooth operation and weathertight closure. Lubricate hardware and moving parts.

**3.4 PROTECTION AND CLEANING**

- A. Protect window surfaces from contact with contaminating substances resulting from construction operations. In addition, monitor window surfaces adjacent to and below exterior concrete and masonry surfaces during construction for presence of dirt, scum, alkaline deposits, stains, or other contaminants. If contaminating substances do contact window surfaces, remove contaminants immediately according to manufacturer's written recommendations.
- B. Clean exposed surfaces immediately after installing windows. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
- C. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

END OF SECTION 08550