SECTION 080314 - HISTORIC TREATMENT OF WOOD DOORS

Revise this Section by deleting and inserting text to meet Project-specific requirements.

Before revising this Section, review historic-restoration-work requirements in AWMAC/WI's "North American Architectural Woodwork Standards." This review helps to avoid repeating or conflicting with requirements of that standard if retained in "Quality Standard" paragraph in "Historic Treatment of Wood Doors Quality Standard" Article in this Section.

1. GENERAL
   * + 1. SUMMARY
          1. Section Includes:

Historic treatment of wood doors in the form of the following:

Repairing wood doors and trim.

Replacing wood door units and trim with custom-fabricated replicated units.

Reglazing.

Repairing, refinishing, and replacing hardware.

Repairing [**storm doors**] [**storm vestibules**] [**and**] [**screen doors**].

Replacing [**storm-door**] [**storm vestibules**] [**and**] [**screen-door**] units with custom-fabricated replicated units.

Providing new [**storm-door**] [**storm-vestibule**] [**and**] [**screen-door**] units.

* + - * 1. Related Requirements:

Retain subparagraphs below to cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections.

Section 013591 "Historic Treatment Procedures" for general historic treatment requirements.

Section 081433 "Stile and Rail Wood Doors" for replacement wood doors or new replacement leaves not included in this Section.

* + - 1. ALLOWANCES

Retain this article if products and work included in this Section are covered by lump-sum, unit-cost, quantity, or testing and inspection allowances. Delete this article if all historic treatment of wood doors is done by lump-sum price.

Quantity allowances require a Schedule of Quantity Allowances coordinated with a Unit-Price Schedule. See "Planning the Work" Article in the Evaluations for a discussion of the bidding method.

* + - * 1. See Section 012100 "Allowances" for description of allowances for historic treatment of wood doors.

If using quantity allowances, retain three subparagraphs below or include similar language in Section 012100 "Allowances" to clarify how work covered by quantity allowances is to be authorized.

Perform historic treatment of wood doors under quantity allowances and only as authorized. Authorized work includes [**work required by Drawings and the Specifications and**] [**only**] work as directed in writing by Director’s Representative.

Retain first subparagraph below to suit Project.

Notify Director’s Representative [**weekly**] <**Insert time interval**> of extent of work performed that is attributable to quantity allowances.

Perform work that exceeds quantity allowances only as authorized by Change Orders.

Remaining paragraphs are examples only; revise to suit Project. Insert additional allowances in accordance with retained types of work and allowances established. If there are multiple drawing designations for types of work, establish separate allowances for each drawing designation.

* + - * 1. Provide preconstruction testing as part of testing and inspecting allowance.
        2. Replace wood storm door in Door No. 1 as part of <**Insert name of allowance**>.
        3. Replace screen-door screening at two doors as part of <**Insert name of allowance**>.
        4. Repair <**Insert item description**> as part of <**Insert name of allowance**>.
        5. Furnish new door hardware as part of [**door hardware allowance**] <**Insert allowance**>.
      1. UNIT PRICES

Retain this article if products and Work specified in this Section are measured and paid for under the provisions of unit prices.

Retain this article with "Allowances" Article above for unit-price adjustments to quantity allowances.

Retain this article without "Allowances" Article if using a single Unit-Price Schedule with a column of estimated quantities on which bids are priced and evaluated.

* + - * 1. See Section 012200 "Cost Computations” for description of unit prices affecting Work of this Section.

Unit prices apply to authorized Work covered by [**quantity allowances**] [**estimated quantities**].

Unit prices apply to authorized additions to and deletions from Work as authorized by Change Orders.

* + - 1. DEFINITIONS

Retain terms that remain after this Section has been edited for a project.

* + - * 1. Door: Generally, this term includes door frame, leaves, hardware, side panels or lights, fan light, transom, storm and screen doors, and storm vestibule unless otherwise indicated by context.
        2. Glazing: Includes glass, glazing points, glazing tapes, glazing sealants, and glazing compounds.
        3. Storm Vestibule: Removable winter enclosure erected on a covered porch, which includes side panels or lights and door leaf and may include top panels.
        4. Wood Door Component Terminology: Wood door components for historic treatment work include the following classifications:

Revise list below to suit Project.

Frame Components: Head, jambs, stop, and threshold or sill.

Leaf Components: Stiles, rails, and muntins.

Exterior Trim: Exterior casing, brick mold, and cornice or drip cap.

Interior Trim: Casing.

In subparagraph below, insert other components that are related items, such as arches and panels.

<**Insert item**>.

* + - 1. PREINSTALLATION MEETINGS

Retain "Preinstallation Conference" paragraph below if Work of this Section is extensive or complex enough to justify a conference.

* + - * 1. Preinstallation Conference: Conduct conference at [**Project site**] <**Insert location**>.

Retain subparagraphs below if additional requirements are necessary; include information about conference.

Review minutes of Preliminary Historic Treatment Conference that pertain to historic treatment of wood doors.

Review methods and procedures related to historic treatment of wood doors including, but not limited to, the following:

Historic treatment specialist's personnel, equipment, and facilities needed to make progress and avoid delays.

Materials, material application, sequencing, tolerances, and required clearances.

Fire-protection plan.

Wood door historic treatment program.

Coordination with building occupants.

* + - 1. SEQUENCING AND SCHEDULING

Paragraph below is an example only; revise to suit Project. Insert other sequences for different areas of building or types of work if needed.

* + - * 1. Perform historic treatment of wood doors in the following sequence, which includes Work specified in this and other Sections:

Retain subparagraphs below and insert others if required; revise to suit Project. If adjacent materials are to be replaced, consider inserting them in sequence to ensure that restored and new materials are not damaged by the work.

Label each door frame with permanent opening-identification number in inconspicuous location.

Tag existing door leaves, storm doors, storm-vestibule panels, and screen doors with opening-identification numbers and remove for on-site or off-site repair. Indicate on tags the locations of each component, such as "left-hand door leaf," "right-hand reverse door leaf," "top dutch-door leaf," "bottom dutch-door leaf," "first left-side storm-vestibule panel," and "second left-side storm-vestibule panel."

Remove door, dismantle hardware, and tag hardware with door opening-identification numbers.

In the shop, label each leaf, storm door, storm-vestibule panel, and screen door with permanent opening-identification number in inconspicuous location and remove site-applied tags.

Install temporary protection and security at door openings.

Sort units by condition, separating those that need extensive repair.

Clean surfaces.

General Wood-Repair Sequence:

Remove paint to bare wood.

Rack frames slightly to inject adhesive into mortise and tenon joints; square frames to proper fit before adhesive sets.

If glass thicker than original is required, rout existing muntins to required rebate size.

Repair wood by consolidation, member replacement, partial member replacement, and patching.

Sand, prime, fill, sand again, and prime surfaces again for refinishing.

Repair, refinish, and replace hardware if required. Reinstall operating hardware.

Install glazing.

Remove temporary protection and security at door openings.

Reinstall units.

Apply finish coats.

Install remaining hardware and weather stripping.

* + - 1. SUBMITTALS

Action submittals are submittals requiring responsive action and return of reviewed documents to Contractor.

* + - * 1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
        2. Manufacturer’s installation instructions shall be provided along with product data.
        3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
        4. Product Data: For each type of product.

Include recommendations for product application and use. Include test data substantiating that products comply with requirements.

Generally, retain "Shop Drawings" paragraph below for large projects or revise it to suit Project. Alternatively, delete paragraph and rely on mockups alone to show how work fits together.

* + - * 1. Shop Drawings: For locations and extent of wood-door repair and replacement work.

Include plans, elevations, sections, and details of replacement parts indicating materials, profiles, joinery, reinforcing, method of splicing into or attaching to existing wood door, accessory items, and finishes.

Include field-verified dimensions and the following:

Full-size shapes and profiles with complete dimensions for replacement components and their jointing, showing relation of existing to new components.

Templates and directions for installing hardware and anchorages.

Identification of each new unit and its corresponding door locations in the building on annotated plans and elevations.

Provisions for [**sealant joints**] [**flashing**] [**and**] <**Insert item**> as required for location.

<**Insert requirements**>.

Retain "Samples for Initial Selection" or "Samples for Verification" paragraph below, or both.

* + - * 1. Samples for Initial Selection: For each type of exposed wood and finish.

Identify wood species, cut, and other features.

Include Samples of hardware and accessories involving color selection.

* + - * 1. Samples for Verification: Actual sample of finished products for the following, in manufacturer's standard sizes unless otherwise indicated:

Retain and revise subparagraphs below and insert others to suit Project.

Replacement Units: 12-inch- long, full-size [**frame**] [**leaf**] [**exterior trim**] [**interior trim**] sections with applied finish.

Replacement Members: 12 inches long for each replacement member, including parts of frame, leaf, exterior trim, and interior trim.

Additional Samples of replacement members that show fabrication techniques, materials, and finishes as requested by Director’s representative Architect.

Repaired Wood Door Members: Prepare Samples using existing wood door members removed from site, repaired, and prepared for refinishing.

Refinished Wood Door Members: Prepare Samples using existing wood door members removed from site, repaired, and refinished.

Hardware: Full-size units with each factory-applied or restored finish.

Weather Stripping: 12-inch- long sections.

Glass: [**Full-size**] <**Insert dimensions**> units of each type and appearance.

* + - * 1. Test and Evaluation Reports:

Retain "Preconstruction Test Reports" subparagraph below if specifying preconstruction testing in "Preconstruction Testing" Article as Contractor's responsibility.

Preconstruction Test Reports: For historic treatment of wood doors.

Consider "Qualification Statements" and "Wood Door Historic Treatment Program" paragraphs below as they relate to Project goals and importance. To require responsive action by Architect after submittal review, relocate one or both paragraphs to "Action Submittals" Article.

* + - * 1. Qualification Statements: For [**historic treatment specialist**] [**including workers**] [**and**] [**wood-repair-material manufacturer**].
        2. Wood Door Historic Treatment Program: Submit before work begins.

If required, insert "Maintenance Material Submittals" Article for extra materials or replacement components that match products applied or installed.

* + - 1. QUALITY ASSURANCE

In "Historic Treatment Specialist Qualifications" paragraph below, insert specific, additional requirements for demonstrating unique skills of firm and personnel to suit Project. See Section 013591 "Historic Treatment Procedures" for general qualifications of historic treatment specialist.

* + - * 1. Historic Treatment Specialist Qualifications: A qualified historic wood door specialist, experienced in repairing, refinishing, and replacing wood doors in whole and in part. Experience only in fabricating and installing new wood doors is insufficient experience for wood-door historic treatment work.

If retaining "Wood-Repair-Material Manufacturer Qualifications" paragraph below, verify that manufacturers of products listed in this Section comply with requirements.

* + - * 1. Wood-Repair-Material Manufacturer Qualifications: A firm regularly engaged in producing [**wood consolidant**] [**and**] [**wood-patching compound**] that have been used for similar historic wood-treatment applications with successful results, and with Company Service Advisor who are available for consultation and Project-site inspection and on-site assistance.
        2. Wood Door Historic Treatment Program: Prepare a written, detailed description of materials, methods, equipment, and sequence of operations to be used for historic treatment work, including protection of surrounding materials and Project site.

If materials and methods other than those indicated are proposed for any phase of historic treatment work, add a written description of such materials and methods, including evidence of successful use on comparable projects, and demonstrations to show their effectiveness for this Project.

* + - 1. BENCHMARKS

Retain required mockups in this article; insert others to suit Project. Test areas that were prepared or are required as part of a separate contract to evaluate and establish historic treatment materials and processes are not mockups.

* + - * 1. Prepare benchmarks of historic treatment repair processes to demonstrate aesthetic effects, to set quality standards for materials and execution, and to set quality standards for fabrication and installation. Prepare benchmarks so they are inconspicuous.

Locate benchmarks [**on existing wood materials where directed by** Director’s representative ] [**in locations that enable viewing under same conditions as the completed Work**] <**Insert requirement**>.

Mockup in "Wood Door Repair" subparagraph below is an example only; revise to suit Project or insert others if necessary, such as for storm doors, storm vestibules, or screen doors.

Wood Door Repair: Prepare one entire door unit to serve as benchmark to demonstrate Samples of each type of repair of wood door members including frame, leaves, trim, glazing, and hardware.

Approval of benchmarks does not constitute approval of deviations from the Contract Documents contained in benchmarks unless Director’s representative specifically approves such deviations by Change Order.

* + - 1. PRECONSTRUCTION TESTING

Retain this article for preconstruction testing. Revise article based on Architect's knowledge of the building's materials and experience with similar work. Consider deleting article if wood-door repair methods were prepared as part of a separate contract to evaluate and establish materials and processes to be used; revise to suit Project. Project-specific preconstruction testing can be expensive but may be the best means of proving that performance requirements are met.

* + - * 1. Preconstruction Testing Service: Engage a qualified historic treatment specialist to perform preconstruction testing on historic wood doors.

Retain first subparagraph below if size and configuration of test locations are not indicated on Drawings.

Provide test specimens representative of proposed materials and existing construction.

Test historic treatment products and methods for effectiveness and compliance with specified requirements.

* + - 1. DELIVERY, STORAGE, AND HANDLING
         1. Pack, deliver, and store products in suitable packs, heavy-duty cartons, or wooden crates; surround with sufficient packing material to ensure that products will not be deformed, broken, or otherwise damaged.
         2. Store products inside a well-ventilated area, protected from weather, moisture, soiling, abrasion, extreme temperatures, and humidity, and where environmental conditions comply with manufacturer's requirements.
      2. FIELD CONDITIONS

Usually, retain this article; revise to suit Project.

* + - * 1. Weather Limitations: Proceed with historic treatment of wood doors only when existing and forecasted weather conditions are within environmental limits set by each manufacturer's written instructions and specified requirements.

1. PRODUCTS

Manufacturers and products listed in this Section are neither recommended nor endorsed by the AIA or Deltek. Before selecting manufacturers and products, verify availability, suitability for intended applications, and compliance with minimum performance requirements.

Product options commonly available from manufacturers are included in square brackets throughout the Section Text. Not every manufacturer listed can provide every option offered; verify availability with manufacturers.

* + - 1. HISTORIC TREATMENT OF WOOD DOORS QUALITY STANDARD

Generally, retain "Quality Standard" paragraph below. The Section Text is based on AWMAC/WI's "North American Architectural Woodwork Standards." See "Architectural Woodwork Standard" Article in the Evaluations.

* + - * 1. Quality Standard: Comply with applicable requirements in Section 12, "Historic Restoration Work," and related requirements in AWMAC/WI's "North American Architectural Woodwork Standards" for construction, finishes, grades of wood doors, and other requirements unless otherwise indicated.

Exception: Industry practices cited in Section 12, Paragraph 6, "Industry Practices," under Article 12.1, "Basic Considerations," of AWMAC/WI's "North American Architectural Woodwork Standards" do not apply to the Work of this Section.

* + - 1. REPLACEMENT WOOD DOOR UNITS

Retain this article if custom-fabricated replacement wood door frames and leaves made to match existing doors are required for historic treatment of wood doors. If replacing wood doors with entirely new wood doors, replacements can be replicas of the existing doors and should be specified as new construction in another Section.

* + - * 1. Replacement Wood Door Units: Custom-fabricated, replicated wood door units and trim with operating and latching hardware.

Wood Door Components: Replace [**frames**] [**leaves**] [**and**] [**trim**].

Joint Construction: [**Joints matching existing**] [**Mortise and tenon joints**] [**Doweled joints**] <**Insert requirement**>.

Insert required species in "Wood Species" subparagraph below if historic wood species is known to be unavailable or if a species of similar appearance is required or permitted.

Wood Species: [**Match wood species of existing door components**] [**White oak**] <**Insert requirement**>.

Retain "Wood Cut" subparagraph below if cut is important to finished appearance. It is most important on natural- or stained-finish flat panels. Cut has less importance if wood is painted.

Wood Cut: [**Match cut of existing wood door components**] [**Plain sliced/plain sawn**] [**Quarter cut/quarter sawn**] <**Insert requirement**>.

Revise "Wood Member and Trim Profiles" subparagraph below to suit Project for special profiles and detailing.

Wood Member and Trim Profiles: Match profiles and detail of existing door members and trim.

Retain "Hardware" or "Hardware Set" subparagraph below; revise to suit Project. If more than one hardware set is required, indicate location of each on Drawings or by inserts.

Hardware: [**Reuse existing unless otherwise indicated**] [**Match design reference sample**] [**Match existing hardware**] [**As indicated on Drawings**] <**Insert requirement**>.

Hardware Set: Door Hardware Set No. <**Insert number**> in accordance with [**Section 087100 "Door Hardware."**]

Revise "Glazing Stops" subparagraph below if glazing stops are to match original stops.

Glazing Stops: Provide replacement glazing stops coordinated with glazing system indicated.

Weather Stripping: Full-perimeter weather stripping for each exterior door leaf.

Retain "Date Identification" subparagraph below for historic treatment projects where differentiation of new materials from original materials is required.

Date Identification: Emboss on a concealed surface of each replaced door frame and leaf, in easily read characters, "DOOR FRAME MADE <**Insert year**>" or "DOOR LEAF MADE <**Insert year**>." Manufacturer's name may also be embossed.

* + - 1. STORM DOORS

Retain this article if separate, fitted storm doors; combination storm and screen doors; or temporary storm vestibules are required for historic treatment of wood doors. It is probably inappropriate to add new storm doors or storm vestibules if their historical use on the building cannot be documented. New storm doors or storm vestibules can be specified as new construction in this Section or in a separate Section for new work, and details should be included on Drawings.

* + - * 1. General: Custom fabricated, tight fitting,[**replicating appearance of existing storm door,**] and with operating and latching hardware.

Make storm doors removable for cleaning and storage.

* + - * 1. Wood Storm Doors:

Retain "Interchangeable Storm and Screen Inserts" subparagraph below if combination storm and screen door is required.

Interchangeable Storm and Screen Inserts:

Retain one of first two subparagraphs below.

Match existing.

Equip storm-door leaf with [**full-height**] [**partial-height**] <**Insert requirement**> panels fitting into stile-and-rail construction of storm door and secured with [**six**] [**eight**] <**Insert number**> thumb-operable clips on the storm door to secure panels in door leaf. Storm insert to be fully glazed with [**subdivided lights**] [**single glass light**] and screen insert to be fully screened.

Joint Construction: [**Joints matching existing**] [**Mortise and tenon joints**] [**Doweled joints**] <**Insert requirement**>.

Insert required species in "Wood Species" subparagraph below if historic wood species is known to be unavailable, if a species of similar appearance is required or permitted, or if storm doors are not original to the building.

Wood Species: [**Match wood species of existing storm door**] [**Match wood species of primary door and frame parts**] [**Cedar**] <**Insert requirement**>.

Retain "Wood Cut" subparagraph below if cut is important to finished appearance. It is most important on natural- or stained-finish flat panels. Cut has less importance if wood is painted.

Wood Cut: [**Match cut of existing storm door**] [**Match cut of existing exterior wood door and frame parts**] [**Plain sliced/plain sawn**] [**Quarter cut/quarter sawn**] <**Insert requirement**>.

Wood Member Profiles: [**Match design reference sample**] [**Match wood profiles of existing storm door**] [**As indicated on Drawings**] <**Insert requirement**>.

Retain "Hardware" or "Hardware Set" subparagraph below; revise to suit Project. If more than one hardware set is required, indicate location of each on Drawings or by inserts.

Hardware: [**Reuse existing unless otherwise indicated**] [**Match design reference sample**] [**Match existing hardware**] [**Three butt hinges**] [**Three pintle-type, lift-off hinges**] [**Thumb latch with pull**] [**As indicated on Drawings**] [**As required to secure storm door to door frame**] <**Insert requirement**>.

Hardware Set: Door Hardware Set No. <**Insert number**> in accordance with [**Section 087100 "Door Hardware."**]

Glazing Material: [**Uncoated clear safety glass**] [**Plastic glazing**] <**Insert requirement**>.

Retain "Date Identification" subparagraph below for historic treatment projects where differentiation of new materials from original materials is required.

Date Identification: Emboss on a concealed surface of each storm door, in easily read characters, "STORM DOOR MADE <**Insert year**>." Manufacturer's name may also be embossed.

Revise "Wood Storm Vestibule" paragraph below to suit Project and include details on Drawings. Storm vestibules can have many arrangements.

* + - * 1. Wood Storm Vestibule: Custom-fabricated, removable, seasonal weather enclosures on covered porch, including a storm door and glazed side panels[**, replicating appearance of existing storm vestibule**].

If known, insert list of manufacturers to require products from manufacturers listed or a comparable product from other manufacturers.

Height: [**Match existing**] [**Full height to porch ceiling**] [**Partial height and including tongue-and-groove wood top panels finished to match side panels**] <**Insert requirement**>.

Joint Construction: [**Joints matching existing**] [**Mortise and tenon joints**] [**Doweled joints**] <**Insert requirement**>.

Insert required species in "Wood Species" subparagraph below if historic wood species is known to be unavailable, if a species of similar appearance is required or permitted, or if storm vestibules are not original to the building.

Wood Species: [**Match wood species of existing storm vestibule**] [**Match wood species of primary door and frame parts**] [**Cedar**] <**Insert requirement**>.

Retain "Wood Cut" subparagraph below if cut is important to finished appearance. It is most important on natural- or stained-finish flat panels. Cut has less importance if wood is painted.

Wood Cut: [**Match cut of existing storm vestibule**] [**Match cut of existing exterior wood door and frame parts**] [**Plain sliced/plain sawn**] [**Quarter cut/quarter sawn**] <**Insert requirement**>.

Wood Member Profiles: [**Match design reference sample**] [**Match wood profiles of existing storm vestibule**] [**As indicated on Drawings**] <**Insert requirement**>.

Vestibule Panel Hardware: Fasteners, clips, panel-alignment guides, and accessories indicated or required to easily assemble and disassemble storm vestibule. For removable screws, use round-headed type.

Retain "Storm Door Hardware" or "Storm Door Hardware Set" subparagraph below; revise to suit Project. If more than one hardware set is required, indicate location of each on Drawings or by inserts.

Storm Door Hardware: [**Reuse existing unless otherwise indicated**] [**Match design reference sample**] [**Match existing hardware**] [**Three butt hinges**] [**Three pintle-type, lift-off hinges**] [**Thumb latch with pull**] [**As indicated on Drawings**] [**As required to secure storm door to door frame**] <**Insert requirement**>.

Storm Door Hardware Set: Door Hardware Set No. <**Insert number**> in accordance with [**Section 087100 "Door Hardware."**]

Glazing Material: [**Uncoated clear safety glass**] [**Plastic glazing**] <**Insert requirement**>.

Retain "Date Identification" subparagraph below for historic treatment projects where differentiation of new materials from original materials is required.

Date Identification: Emboss on a concealed surface of each new storm-enclosure panel, in easily read characters, "PANEL MADE <**Insert year**>." Manufacturer's name may also be embossed.

* + - 1. SCREEN DOORS

Retain this article if separate, fitted screen doors are required for historic treatment of wood doors. It is probably inappropriate to add new screen doors if their historical use on the building cannot be documented. For combination storm and screen doors, use "Storm Doors" Article. New screen doors can be specified as new construction in this Section or in a separate Section for new work, and details should be included on Drawings.

* + - * 1. General: Custom fabricated, tight fitting,[**replicating appearance of existing screen door,**] and with operating and latching hardware.
        2. Joint Construction: [**Joints matching existing**] [**Mortise and tenon joints**] [**Doweled joints**] <**Insert requirement**>.

Insert required species in "Wood Species" paragraph below if historic wood species is known to be unavailable, if a species of similar appearance is required or permitted, or if screen doors are not original to the building.

* + - * 1. Wood Species: [**Match wood species of existing screen door**] [**Match wood species of primary door and frame parts**] [**Cedar**] <**Insert requirement**>.

Retain "Wood Cut" paragraph below if cut is important to finished appearance. It is most important on natural- or stained-finish flat panels. Cut has less importance if wood is painted.

* + - * 1. Wood Cut: [**Match cut of existing screen door**] [**Match cut of wood primary door and frame parts**] [**Plain sliced/plain sawn**] [**Quarter cut/quarter sawn**] <**Insert requirement**>.
        2. Wood Member Profiles: [**Match design reference sample**] [**Match wood profiles of existing screen door**] [**As indicated on Drawings**] <**Insert requirement**>.

Retain "Hardware" or "Hardware Set" paragraph below; revise to suit Project. If more than one hardware set is required, indicate location of each on Drawings or by inserts.

* + - * 1. Hardware: [**Reuse existing unless otherwise indicated**] [**Match design reference sample**] [**Match existing hardware**] [**Three butt hinges**] [**Three pintle-type, lift-off hinges**] [**Thumb latch with pull**] [**As indicated on Drawings**] [**As required to secure storm door to door frame**] <**Insert requirement**>.
        2. Hardware Set: Door Hardware Set No. <**Insert number**> in accordance with [**Section 087100 "Door Hardware."**]

Retain "Date Identification" paragraph below for historic treatment projects where differentiation of new materials from original materials is required.

* + - * 1. Date Identification: Emboss on a concealed surface of each screen door, in easily read characters, "SCREEN DOOR MADE <**Insert year**>." Manufacturer's name may also be embossed.
      1. WOOD-REPLACEMENT MATERIALS

Revise descriptions in this article if inconsistent with or unsuitable for replacement members of wood doors.

* + - * 1. Wood, General: Clear 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 deep by 2 inches wide.

Species: [**Ponderosa pine**] [**Match species of each existing type of wood component or assembly**] <**Insert species**> unless otherwise indicated.

Retain "Wood, General" paragraph above or one or more of five paragraphs below. Insert additional paragraphs to suit Project.

* + - * 1. Frame Heads and Jambs[**and Exterior Trim**]: [**Match existing species**] [**Ponderosa pine**] [**Ponderosa pine, eastern white pine, or Idaho white pine**] [**Redwood**] [**Douglas fir**] [**African mahogany**] [**Western red cedar**] <**Insert species**>.

Delete "Exterior Trim" paragraph below if retaining exterior trim option in "Frame Heads and Jambs( and Exterior Trim)" paragraph above.

* + - * 1. Exterior Trim: [**Match existing species**] [**All-heart vertical grain redwood**] [**African mahogany**] <**Insert species**>.
        2. Thresholds or Sills: [**Match existing species**] [**White oak**] [**All-heart vertical grain redwood**] [**African mahogany**] [**Western red cedar**] <**Insert species**>.
        3. Leaf Components: [**Match existing species**] [**Ponderosa pine**] [**Ponderosa pine, eastern white pine, or Idaho white pine**] [**African mahogany**] [**Douglas fir**] <**Insert species**>.
        4. Interior Trim: [**Match existing species**] [**Ponderosa pine**] [**Ponderosa pine, eastern white pine, or Idaho white pine**] [**African mahogany**] <**Insert species**>.
      1. WOOD-REPAIR MATERIALS
         1. Source Limitations: Obtain wood consolidant and wood-patching compound from single source from single manufacturer.

Manufacturers offer a variety of repair materials including epoxies, urethanes, and polyesters. Not all products listed in this article are equivalent. Review requirements with manufacturer and insert recommended products to suit Project.

* + - * 1. Wood Consolidant: Ready-to-use product designed to penetrate, consolidate, and strengthen soft fibers of wood materials that have deteriorated because of weathering and decay and designed specifically to enhance the bond of wood-patching compound to existing wood.
        2. Wood-Patching Compound: Two-part, epoxy-resin, wood-patching compound; knife-grade formulation as recommended in writing by manufacturer for type of wood repair indicated, tooling time required for the detail of work, and site conditions. Compound to be designed for filling voids in damaged wood materials that have deteriorated because of weathering and decay. Compound to be capable of filling deep holes and spreading to feather edge.
      1. GLAZING MATERIALS
         1. Glass:

Retain one of three subparagraphs below if required; revise to suit Project. Retain first subparagraph if requirements for glass in wood doors are specified entirely in Section 088000 "Glazing." Retain second if type of glass is specified in this Section by referencing glass types in Section 088000 "Glazing" and terms are coordinated. Retain third to specify glass and glazing materials entirely in this Section. If more than one type of glass is required, indicate location of each on Drawings or by inserts.

See Section 088000 "Glazing."

[**Uncoated, clear safety glass**] [**Glass Type GL-xx**] <**Insert description**> units in accordance with Section 088000 "Glazing."

<**Insert requirements**>.

Retain "Plastic Glazing" paragraph below if plastic glazing is required.

* + - * 1. Plastic Glazing: [**Uncoated, monolithic acrylic**] [**Coated, monolithic acrylic**] [**Uncoated, monolithic polycarbonate**] [**Abrasion- and UV-resistant, monolithic polycarbonate**] [**UV-resistant, monolithic polycarbonate**] <**Insert description**> sheet in accordance with Section 088400 "Plastic Glazing."

Retain "Glazing Systems" paragraph below with "Glass" or "Plastic Glazing" paragraph above; revise to suit Project.

* + - * 1. Glazing Systems:

Retain "Traditional Glazing Products" subparagraph below for a historic method of securing glass in frames. Some manufacturers limit product use to exclude plastic glazing, stained glass (leaded), and panes measuring more than 48 inches.

Traditional Glazing Products: Glazing points and oil-based glazing putty or latex glazing compound. Tint to required color in accordance with manufacturer's written instructions.

Retain "Modern Glazing Products" subparagraph below for modern method of securing glass in frames; revise to suit Project.

Modern Glazing Products: Glazing points and single-component polyurethane glazing compound; ASTM C920, Type S, Grade NS, Class 25, Use G; struck uniformly to match taper of existing glazing putty (removed); colored as required to match painted sash.

Primers and Cleaners for Glazing: As recommended in writing by glazing material manufacturer.

* + - 1. HARDWARE
         1. Primary Door Hardware, General: Provide complete sets of door hardware consisting of hinges, pulls, locks, latches, and accessories indicated for each door or required for proper operation. Sets to include replacement hardware to complement repaired and refinished, existing hardware. Door hardware to smoothly operate, tightly close, and securely lock wood doors and be sized to accommodate frequency of use, glazing weight, and dimensions.
         2. Other Hardware, General: Provide complete sets of hardware for each type of [**storm door**] [**storm vestibule**] [**and**] [**screen door**] consisting of hinges, pulls, latches, fasteners, clips, and accessories indicated or required for proper operation. Hardware to smoothly operate, tightly close, and secure units appropriately for frequency of use, unit weight, and dimensions.
         3. Replacement Hardware: Replace existing damaged or missing hardware with new hardware manufactured by one of the following:
         4. Material and Design:

Revise "Material" and "Design" subparagraphs below to suit Project.

Material: [**Solid bronze of alloy indicated**] [**Nonmagnetic stainless steel**] <**Insert material**> unless otherwise indicated.

Retain one of two options in "Design" subparagraph below, or both. If retaining both, indicate location of each on Drawings or by inserts. First option is more restrictive and expensive.

Design: [**Custom hardware to replicate**] [**Match type and appearance of**] existing hardware.

Replacement Door Hardware: Regardless of mechanisms within, match existing, exposed door hardware of the following types:

Revise first five subparagraphs below to suit Project.

Door knobs, levers, and escutcheons.

Door latches.

Surface-mounted flush bolts.

Handles.

Projecting transom hinges and latch with pole ring.

<**Insert hardware type**>.

Retain "Date Identification" subparagraph below for historic treatment projects where differentiation of new materials from original materials is required.

Date Identification: Emboss on a concealed surface of the metal body of each new hardware item, in easily read characters, "MADE <**Insert year**>." Manufacturer's name may also be embossed.[**For cast iron or other brittle metals, add identification to the mold pattern before casting.**][**For malleable metals, stamp identification with an imprinting tool.**]

* + - * 1. Hardware Finishes: Comply with BHMA A156.18 for base material and finish requirements indicated by the following:

Retain one or more finish designations from subparagraphs below. If retaining more than one, indicate location of each on Drawings or by inserts.

BHMA 605: Bright brass, clear coated; brass base metal.

BHMA 606: Satin brass, clear coated; brass base metal.

BHMA 611: Bright bronze, clear coated; bronze base metal.

BHMA 612: Satin bronze, clear coated; bronze base metal.

BHMA 613: Dark-oxidized satin bronze, oil rubbed; bronze base metal.

BHMA 624: Dark-oxidized statuary bronze, clear coated; bronze base metal.

BHMA 628: Satin aluminum, clear anodized; aluminum base metal.

BHMA 630: Satin stainless steel; stainless steel base metal.

BHMA 689: Aluminum painted; over any base metal.

<**Insert finish or special custom finish**>.

* + - 1. WEATHER STRIPPING
         1. Compression-Type Weather Stripping: Compressible weather stripping designed for permanently resilient sealing under bumper or wiper action; completely concealed when door is closed.

Weather-Stripping Material: Match existing materials and profiles as much as possible unless otherwise indicated.

Cellular Elastomeric Gaskets: Preformed; complying with ASTM C509.

Dense Elastomeric Gaskets: Preformed; complying with ASTM C864.

Retain "Sliding-Type Weather Stripping" paragraph below if sliding-type weather stripping is required; revise to suit Project.

* + - * 1. Sliding-Type Weather Stripping: Woven-pile weather stripping of wool, polypropylene, or nylon pile and resin-impregnated backing fabric.

Retain "Weather Seals" subparagraph below for improved air-infiltration and water-penetration resistance.

Weather Seals: Provide weather stripping with integral barrier fin or fins of semirigid, polypropylene sheet or polypropylene-coated material.

Products described in "Metal Weather Stripping" paragraph below sometimes become bent or do not seal well against uneven old surfaces. Consider replacing them with sliding, compression, or bulb-type designs.

* + - * 1. Metal Weather Stripping: [**Bronze**] [**Zinc**] <**Insert metal**> weather stripping; designed either as one piece to seal door at head and jambs by door sliding against it or as two pieces that interlock; and completely concealed when door is closed.
      1. MISCELLANEOUS MATERIALS
         1. Insect Screening:

Generally, retain "Copper Wire Fabric," "Bronze Wire Fabric," or "Aluminum Wire Fabric" subparagraph below; revise or insert other screening material to suit Project.

Copper Wire Fabric: 16-by-16 count per sq. in. mesh of 0.011-inch- diameter copper wire.

Bronze Wire Fabric: 18-by-14 count per sq. in. mesh of [**0.009-inch-** ] [**0.011-inch-** ] diameter bronze wire with a clear varnish finish.

Aluminum Wire Fabric: 18-by-16 count per sq. in. mesh of 0.011-inch- diameter, coated aluminum wire; [**natural bright**] [**charcoal gray**] [**black**] finish.

Borate preservatives are generally used to pretreat decayed wood to prevent further decay before other wood repairs. See the Evaluations.

* + - * 1. Borate Preservative Treatment: Inorganic, borate-based solution, with disodium octaborate tetrahydrate as the primary ingredient; manufactured for preserving weathered and decayed wood from further damage by decay fungi and wood-boring insects; containing no boric acid.

Insert water-repellent wood preservative here and application requirements in Part 3 if required for Project.

* + - * 1. Cleaning Materials:

Detergent Solution: Solution prepared by mixing 2 cups of tetrasodium pyrophosphate, 1/2 cup of laundry detergent that contains no ammonia, 5 quarts of 5 percent sodium hypochlorite bleach, and 15 quarts of warm water for each 5 gal. of solution required.

Mildewcide: Commercial, proprietary mildewcide or a solution prepared by mixing 1/3 cup of household detergent that contains no ammonia, 1 quart of 5 percent sodium hypochlorite bleach, and 3 quarts of warm water.

* + - * 1. Adhesives: Wood adhesives with minimum 15- to 45-minute cure at 70 deg F , in gunnable and liquid formulations as recommended in writing by adhesive manufacturer for each type of repair and exposure conditions.
        2. Fasteners: Use fastener metals that are noncorrosive and compatible with each material joined.

Match existing fasteners in material and type of fastener unless otherwise indicated.

Use concealed fasteners for interconnecting wood components.

Use concealed fasteners for attaching items to other work unless exposed fasteners are [**unavoidable**] [**or**] [**the existing fastening method**].

For fastening metals, use fasteners of same basic metal as fastened metal unless otherwise indicated.

Revise first subparagraph below if another type of head is required.

For exposed fasteners, use Phillips-type machine screws of head profile flush with metal surface unless otherwise indicated.

Finish exposed fasteners to match finish of metal fastened unless otherwise indicated.

* + - * 1. Anchors, Clips, and Accessories: Fabricate anchors, clips, and door accessories of aluminum, nonmagnetic stainless steel, or hot-dip zinc-coated steel complying with requirements in ASTM B633 for SC 3 (Severe) service condition.
      1. WOOD DOOR FINISHES

Retain one or more finishes in this article; revise to suit Project. If retaining more than one, indicate location of each on Drawings or by inserts.

* + - * 1. Unfinished Replacement Units: Provide exposed [**exterior**] [**and**] [**interior**] wood surfaces of replacement units unfinished; smooth, filled, and suitably prepared for on-site priming and finishing.

Retain "Factory-Primed Replacement Units" paragraph below if prime-coated replacement door frames, leaves, or trim are required.

* + - * 1. Factory-Primed Replacement Units: [**Manufacturer's standard**] <**Insert requirement**> factory-prime coat on exposed [**exterior**] [**and**] [**interior**] wood surfaces; compatible with indicated finish coating.

Retain "Factory-Finished Units" paragraph below if factory-finished replacement door frames, leaves, or trim are required. Copy paragraph and revise for multiple finishes on a same project; indicate locations of each on Drawings or by inserts.

* + - * 1. Factory-Finished Units: [**Alkyd**] [**Latex**] <**Insert system type**> finish system consisting of [**primer and two finish coats**] <**Insert requirement**> on exposed [**exterior**] [**and**] [**interior**] wood surfaces.

Retain second option in "Finish Coats" Subparagraph below if factory-finished doors are near site-finished doors and identical coating materials are required as a means to ensure similar weathering characteristics.

Finish Coats: [**Manufacturer's standard.**] [**Match intermediate coat and topcoat products used for nearby, repaired wood doors, as specified in Section 090391 "Historic Treatment of Plain Painting."**] <**Insert requirement.**>

Munsell Color and Plochere Color System numbers in "Color and Gloss" subparagraph below are examples only. Munsell Color and Plochere Color Systems are discussed in the Evaluations in Section 090391 "Historic Treatment of Plain Painting."

Color and Gloss: Match [**Munsell Color 10 G 8/2**] [**Plochere Color System #8da399**] [**colors indicated on Historic Structure Report**] [**colors indicated on Drawings**] <**Insert color(s) or requirement**>.

1. EXECUTION
   * + 1. HISTORIC TREATMENT SPECIALIST

Retain this article if list of preapproved firms is used as quality-control procedure.

If retaining second option in "Historic Treatment Specialist Firms" paragraph below, include procedure for approving other firms in Document 002213 "Supplementary Instructions to Bidders.

* + - * 1. Historic Treatment Specialist Firms: Subject to compliance with requirements, [**provide historic treatment of wood doors by one of the following**] [**firms that may provide historic treatment of wood doors include, but are not limited to, the following**]:

<**Insert, in separate subparagraphs, names of historic treatment specialist firms**>.

* + - 1. PREPARATION
         1. Protect adjacent materials from damage by historic treatment of wood doors.
         2. Clean wood doors and trim of mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildewed areas with mildewcide. After cleaning, rinse thoroughly with fresh water. Allow to dry before repairing or painting.
         3. Condition replacement wood members and replacement units to prevailing conditions at installation areas before installing.
      2. HISTORIC TREATMENT OF WOOD DOORS, GENERAL

Retain "Historic Treatment Appearance Standard" paragraph below to control overall appearance from a distance.

* + - * 1. Historic Treatment Appearance Standard: Completed work is to have a uniform appearance as viewed by Director’s representative from the door interior at [**5 ft.** ] [**10 ft.** ] <**Insert distance**> away and from the door exterior at [**20 ft.** ] [**50 ft.** <**Insert distance**> away.
        2. General: In treating historic items, disturb them as minimally as possible and as follows:

Stabilize and repair wood doors to reestablish structural integrity and weather resistance while maintaining the existing form of each item.

Remove coatings and apply borate preservative treatment before repair. Remove coatings in accordance with Section 090391 "Historic Treatment of Plain Painting" unless otherwise indicated.

Repair items in place where possible.

Install temporary protective measures to protect wood door work that is indicated to be completed later.

Refinish historic wood doors in accordance with Section 090391 "Historic Treatment of Plain Painting" unless otherwise indicated.

* + - * 1. Mechanical Abrasion: Where mechanical abrasion is needed for the Work, use only the gentlest mechanical methods, such as scraping and natural-fiber bristle brushing, that will not abrade wood substrate, reducing clarity of detail. Do not use abrasive methods such as sanding, wire brushing, or power tools except as indicated as part of the historic treatment program and as approved by Director’s representative .

Retain "Repair and Refinish Existing Hardware" paragraph below if required; revise to suit Project.

* + - * 1. Repair and Refinish Existing Hardware: Dismantle door hardware; strip paint, repair, and refinish it to match finish Samples; and lubricate moving parts just enough to function smoothly.
        2. Repair Wood Doors: Match existing materials and features, retaining as much original material as possible to perform repairs.

Unless otherwise indicated, repair wood doors by consolidating, patching, splicing, or otherwise reinforcing wood with new wood matching existing wood or with salvaged, sound, original wood.

Where indicated, repair wood doors by limited replacement matching existing material.

* + - * 1. Replace Wood Units: Where indicated, duplicate, and replace units with units made from salvaged, sound, original wood or with new wood matching existing wood. Use surviving prototypes to create patterns for duplicate replacements.

Retain one of two subparagraphs below. Indicate on Drawings or in the Historic Wood Door Schedule where substitute materials may or may not be used. If retaining second subparagraph, insert requirements for substitute materials in Part 2.

Do not use substitute materials unless otherwise indicated.

Compatible substitute materials may be used.

* + - * 1. Protection of Openings: Where doors are indicated for removal, cover resultant openings with temporary enclosures so that openings are weathertight during repair period.
        2. Identify removed doors, frames, leaves, trim, and members with numbering system corresponding to door locations to ensure reinstallation in same location. Key doors, frames, leaves, trim, and members to Drawings showing location of each removed unit. Permanently label units in a location that will be concealed after reinstallation.
      1. WOOD DOOR PATCH-TYPE REPAIR

Indicate on Drawings where wood doors are to be patched; otherwise, the historic treatment specialist will generally decide.

* + - * 1. General: Patch wood members that exhibit depressions, holes, or similar voids and that have limited amounts of rotted or decayed wood.

Revise first subparagraph below to suit Project.

Remove [**leaves**] [**storm doors**] [**and**] [**screen doors**] from door frames before performing patch-type repairs at meeting or sliding surfaces unless otherwise indicated. Reglaze units prior to reinstallation.

Verify that surfaces are sufficiently clean and free of paint residue before patching.

Retain one of two subparagraphs below; revise to suit Project and amount of decay. First subparagraph is preferred method to retain maximum amount of historic fabric.

Treat wood members with wood consolidant before applying patching compound. Coat wood surfaces by brushing, applying multiple coats until wood is saturated and unable to absorb more. Allow treatment to harden before filling void with patching compound.

Remove rotted or decayed wood down to sound wood.

* + - * 1. Apply borate preservative treatment to accessible surfaces either before applying wood consolidant or after removing rotted or decayed wood. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom. Allow treatment to dry.
        2. Apply wood-patching compound to fill depressions, nicks, cracks, and other voids created by removed or missing wood.

Prime patch area with application of wood consolidant or manufacturer's recommended primer.

Mix only as much patching compound as can be applied in accordance with manufacturer's written instructions.

Apply patching compound in layers as recommended in writing by manufacturer until the void is completely filled.

Sand patch surface smooth and flush with adjacent wood, without voids in patch material, and matching contour of wood member.

Clean spilled compound from adjacent materials immediately.

* + - 1. WOOD DOOR MEMBER-REPLACEMENT REPAIR

Indicate on Drawings or in the Historic Wood Door Schedule where wood doors are to have parts or entire wood door members replaced; otherwise, the historic treatment specialist will generally decide.

* + - * 1. General: Replace parts of or entire wood door members at locations [**indicated on Drawings**] [**indicated in the Historic Wood Door Schedule**] [**and**] [**where damage is too extensive to patch**] <**Insert requirement**>.

Revise subparagraphs below to suit Project.

Remove [**leaves**] [**storm doors**] [**and**] [**screen doors**] from door frames before performing member-replacement repairs unless otherwise indicated.

Verify that surfaces are sufficiently clean and free of paint residue before repair.

Remove broken, rotted, and decayed wood down to sound wood.

Custom fabricate new wood to replace missing wood; either replace entire wood member or splice new wood part into existing member.

Secure new wood using finger joints, multiple dowels, or splines with adhesive and nailing to ensure maximum structural integrity at each splice. Use only concealed fasteners. Fill nail holes and patch surface to match surrounding sound wood.

* + - * 1. Apply borate preservative treatment to accessible surfaces after replacements are made. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom.
        2. Repair remaining depressions, holes, or similar voids with patch-type repairs.
        3. Clean spilled materials from adjacent surfaces immediately.
        4. Glazing: Reglaze units before reinstallation.

Retain first subparagraph below if glass thickness does not match existing glass thickness.

Mill new and rout existing glazed members to accommodate new glass thickness.

Revise subparagraphs below to suit Project.

Provide replacement glazing stops coordinated with glazing system indicated.

Provide glazing stops to match contour of door frames.

* + - * 1. Reinstall units removed for repair into original openings.
        2. Weather Stripping: Replace nonfunctioning and install missing weather stripping to ensure full-perimeter weather stripping for each exterior leaf.
      1. GLAZING
         1. Comply with combined written instructions of glass, glazing system, and glazing material manufacturers, unless more stringent requirements are indicated.

Retain one of first three paragraphs below; revise to suit Project. Retain first paragraph if some door lites will not be reglazed and Contractor will make the evaluation. Retain second if some door lites will not be reglazed and replacements are indicated on Drawings or scheduled. Retain third if all doors are to be reglazed with new glass. Determine if historic glass, whether sound or cracked, is to be removed and disposed of.

* + - * 1. Remove cracked and damaged glass and glazing materials from openings and prepare surfaces for reglazing.
        2. Remove existing glass and glazing where indicated [**on Drawings**] [**in the Historic Wood Door Schedule**], and prepare surfaces for reglazing.
        3. Remove glass and glazing from openings and prepare surfaces for reglazing.
        4. Size glass as required by Project conditions to provide necessary bite on glass, minimum edge and face clearances, with reasonable tolerances.
        5. Apply primers to joint surfaces where required for adhesion of glazing system, as determined by preconstruction testing.
        6. Install setting bead, side beads, and back bead against stop in glazing rabbets before setting glass.

Retain first paragraph below; revise to suit Project. Insert additional paragraphs if required for special glass types such as irregular blown glass or stained glass and for unusual installation conditions.

* + - * 1. Install glass with proper orientation so that coatings, if any, face exterior or interior as required.
        2. Install glazing points.
        3. Disposal of Removed Glass: [**Remove from Director’s representative** **'s property and legally dispose of**] [**Protect unbroken lites and deliver as salvage to** Director’s representative  **for storage where directed**] <**Insert requirement**> unless otherwise indicated.
      1. WOOD DOOR UNIT REPLACEMENT

Retain this article if door frames, leaves, trim, storm doors, storm vestibules, or screen doors are to be replaced with new custom-fabricated replicated units.

* + - * 1. General: Replace existing wood [**door-frame**] [**leaf**] [**trim**] [**storm-door**] [**storm-vestibule**] [**and**] [**screen-door**] units with new custom-fabricated replicated units at locations [**indicated on Drawings**] [**indicated in the Historic Wood Door Schedule**] [**and**] [**where damage is too extensive to repair**] <**Insert requirement**>.
        2. Apply borate preservative treatment to accessible surfaces before finishing. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom.
        3. Mill glazed members to accommodate glass thickness. Glaze units before installation.
        4. Install units, hardware, weather stripping, accessories, and other components[**as indicated on Drawings**].
        5. Install units level, plumb, square, true to line, without distortion or impeding movement, anchored securely in place to structural support, and in proper relation to wall flashing, trim, and other adjacent construction.
        6. Set threshold or sill members in bed of sealant for weathertight construction unless otherwise indicated.
        7. Install door units with new anchors into existing openings.
        8. Install full-perimeter weather stripping for each operable exterior leaf.
        9. Metal Protection: Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.
        10. Disposal of Removed Units: [**Remove from Director’s representative** **'s property and legally dispose of them**] [**Deliver as salvage to Director’s representative for storage where directed**] <**Insert requirement**>.
      1. INSTALLATION OF STORM DOORS

Retain this article for storm doors; revise to suit Project.

* + - * 1. Fit wood storm doors at each door jamb[**indicated**]. Verify that storm door and door frames are correctly tagged with opening-identification numbers.

Retain option in first paragraph below if required for seasonally installed and removed units; revise to suit Project.

* + - * 1. Adjust hardware, clips, and removable fasteners for a tight fit with uniform joints.[**Uninstall and reinstall door at least once to ensure proper fit.**]
        2. Install and leave storm doors in place[**when directed by** Director’s representative  **to suit the season**].
        3. Install units by mounting to door frames in accordance with manufacturer's written instructions.
      1. INSTALLATION OF STORM VESTIBULES

Retain this article for storm vestibules; revise to suit Project. Indicate on Drawings where each storm vestibule is required.

* + - * 1. Fit wood storm vestibule on porch. Verify that storm vestibule panels are correctly and sequentially tagged for disassembly and reassembly with meeting surfaces at joints bearing the same identification numbers.
        2. Adjust hardware, clips, and removable fasteners for vestibule panels for a tight fit, secured against abutting surfaces, and with uniform joints. Disassemble and reassemble entire vestibule at least once to ensure proper fit.
        3. Install and leave storm vestibule in place[**when directed by Director’s representative/ Architect to suit the season**].
        4. Install units by mounting with removable fasteners and screws to porch and wall surfaces in accordance with Shop Drawings and manufacturer's written instructions.
      1. INSTALLATION OF SCREEN DOORS

Retain this article for screen doors; revise to suit Project. Indicate on Drawings where screen doors are required.

* + - * 1. Fit wood screen doors at each door jamb[**indicated**]. Verify that screen door and door frames are correctly tagged with opening-identification numbers.

Retain option in first paragraph below if required for seasonally installed and removed units; revise to suit Project.

* + - * 1. Adjust hardware, clips, and removable fasteners for a tight fit with uniform joints.[**Uninstall and reinstall door at least once to ensure proper fit.**]
        2. Install and leave screen doors in place[**when directed by Director’s representative** **to suit the season**].
        3. Install units by mounting to door frames in accordance with manufacturer's written instructions.

Retain first paragraph below if required; revise to suit Project.

* + - * 1. Replace existing insect screening[**where indicated**]; remove from Director’s representative 's property.
        2. Install insect screening to be smooth, flat, and uniformly taut.
      1. INSTALLATION OF WEATHER STRIPPING

Retain this article if applicable; revise to suit Project. Indicate on Drawings where weather stripping is required.

* + - * 1. Install weather stripping for tight seal of joints as determined by preconstruction testing and demonstrated in benchmark.
      1. ADJUSTING
         1. Adjust existing and replacement operating leaves, screens, hardware, weather stripping, and accessories for a tight fit at contact points and weather stripping for smooth operation and weathertight closure. Lubricate hardware and moving parts.
      2. CLEANING AND PROTECTION
         1. Protect door surfaces from contact with contaminating substances resulting from construction operations. Monitor door surfaces adjacent to and below exterior concrete and masonry during construction for presence of dirt, scum, alkaline deposits, stains, or other contaminants. If contaminating substances contact door surfaces, remove contaminants immediately.
         2. Clean exposed surfaces immediately after historic treatment of wood doors. Avoid damage to coatings and finishes. Remove excess sealants, glazing and patching materials, dirt, and other substances.
         3. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.
      3. HISTORIC WOOD DOOR SCHEDULE

This schedule demonstrates a method to indicate historic treatment requirements for wood doors. A schedule helps to prevent confusion where Project includes several items of varying sizes, characteristics, and complexities; where extensive drawing notations would otherwise be needed; and where direction by a historic treatment specialist is considered insufficient. The design professional must decide what to include in a schedule and what should be indicated on Drawings. This schedule is an example only; revise to suit Project. See the Evaluations for another form of schedule and discussion of photographic details annotated with the required historic treatments.

Insert drawing designation for each door and item to be treated and indicate the methods of treatment that apply to the item. Include door number in each drawing designation. Use these designations on Drawings to identify locations of each door.

"Historic Wood Door( HWD-1)" paragraph below is for a variety of wood door repairs; revise to suit Project. Copy this paragraph and re-edit for different doors and types of repairs at each door.

* + - * 1. Historic Wood Door[**HWD-1**] <**Insert drawing designation**>: [**Single-leaf**] [**Double-leaf**] [**Dutch**] <**Insert description**> door.

Retain one or more of eight subparagraphs below if required; revise to suit Project.

General: Repair existing wood doors using indicated treatments. Repair leaves, storm doors, and screen doors [**on-site**] [**or**] [**off-site**] <**Insert requirement**>.

Removal of Existing Paint and Refinishing: See Section 090391 "Historic Treatment of Plain Painting" for paint removal, surface preparation for refinishing, and refinishing historic wood doors.

"Door Frame Repair" subparagraph below is for repairing door frame treated as a unit. Revise if door frame repair is by treatment of individual parts.

Door Frame Repair: [**Wood consolidant**] [**patch-type repairs**] [**whole or partial member-replacement repairs**] [**and**] [**re-anchor frame as indicated on Drawings**] <**Insert repair description**>.

"Door Frame Member Repair" subparagraph below is for repairing wood frame parts treated individually; copy and revise as needed for each part. Delete if door frame members are repaired as units.

Door Frame Member Repair: Repair [**head**] [**jambs**] [**threshold**] with [**wood consolidant**] [**patch-type repairs**] [**and**] [**whole or partial member-replacement repairs**]. [**Re-anchor**] [**and**] [**realign**] the [**head**] [**jambs**] [**threshold**] <**Insert repair description**>.

First subparagraph below is for repairing door leaf or other item treated as a unit. Delete if door leaf or item repair is by treatment of individual parts.

Door [**Leaf**] <**Insert item**> Repair: [**Wood consolidant**] [**patch-type repairs with leaf removed from opening**] [**patch-type repairs in place**] [**and**] [**whole or partial member-replacement repairs**] <**Insert repair description**>.

First subparagraph below is for repairing door leaf or other items' parts treated individually; copy and revise as needed for each part. Delete if door leaves or other items are repaired as whole units.

Door [**Leaf**] <**Insert item**> Member Repair: Repair [**stile**] [**rails**] [**stop**] [**and**] [**muntins**] <**Insert component**> with [**wood consolidant**] [**patch-type repairs**] [**and**] [**whole or partial member-replacement repairs**]. Realign [**stiles**] [**rails**] [**and**] [**stops**] <**Insert component**>.

First subparagraph below is for replacing door leaf or other item; revise if only one of two or more leaves or items is to be replaced. Delete if all door leaves or items are repaired.

Door [**Leaf**] <**Insert item**> Replacement: Remove existing units for replacement with custom-fabricated replicated units.

Hardware: [**Three butt hinges**] [**three pintle-type, lift-off hinges**] [**mortise lock**] [**thumb latch with pull**] [**and**] [**pull**] <**Insert hardware type**>.

"Historic Wood Door (HWD-2)" paragraph below is for wood doors to be removed and replaced with new doors; revise to suit Project. Copy this paragraph and re-edit for different doors and types of repairs at each door location.

* + - * 1. Historic Wood Door[**HWD-2**] <**Insert drawing designation**>: [**Single-leaf**] [**Double-leaf**] [**Dutch**] <**Insert door description**>.

Retain one or more of five subparagraphs below if required; revise to suit Project.

General: Remove wood door completely, including door frame, and replace with custom-fabricated, new replacement door.

New Replacement Door: See Section <**Insert Section number**> "<**Insert Section title**>."

Finishing: See [**Section 090391 "Historic Treatment of Plain Painting."**] <**Insert Section number and title.**>

"Wood Storm Door" subparagraph below is for new or replacement wood storm doors; revise to suit Project.

Wood Storm Door: Custom-fabricated, [**new**] [**replicated**] units specified in this Section.

Hardware: <**Insert hardware set description or set number**>.

END OF SECTION 080314