

SECTION 08210
WOOD DOORS

PART 1 - GENERAL

1.01 PROVISIONS INCLUDED

- A. The general provisions of the Contract, including General and Supplementary General Conditions, and Division 1 General Requirements, apply to work specified in this Section.

1.02 SUMMARY:

- A. This Section specifies solid core flush wood doors with wood veneer faces.
- B. Other work included in this section:
 - 1. Factory-finishing.
 - 2. Factory fitting to frames and factory machining for hardware.
- C. Related Work Specified in Other Sections:
 - 1. Door Schedule: Section 08000.
 - 2. Metal door frames for flush wood doors: Section 08110
 - 3. Glazing of wood doors: Section 08800.

1.03 REFERENCED STANDARDS

- A. American National Standards Institute (ANSI): See joint ANSI/DHI and ANSI/HPVA references listed below.
- B. Architectural Woodwork Institute (AWI): "Architectural Woodwork Quality Standards"; Section 1300 "Architectural Flush Doors"
- C. Door and Hardware Institute (DHI):
 - 1. ANSI/DHI A115-W (1988): "Wood Door Preparation Standards."
 - 2. DHI WDHS-3 (1993): "Recommended Hardware Locations for Wood Flush Doors."
- D. Hardwood Plywood Veneer Association (HPVA): ANSI/HPVA HP-1-1994, Standard for Hardwood and Decorative Plywood.
- E. National Wood Window and Door Association (NWWDA): NWWDA I.S.1 "Industry Standard for Wood Flush Doors."

1.04 SUBMITTALS:

- A. Product Data: Manufacturer's technical data for each type of door, including details of core and edge construction, trim for openings and louvers, and factory-finishing specifications.
- B. Shop Drawings: Indicate location, size and hand of each door, elevation of each kind of door, construction details not covered in Product Data, location and extent of hardware blocking, fire ratings, dimensions and locations for mortises and holes for hardware, requirements for veneer matching, factory finishing and other pertinent data.

- C. Samples for Initial Selection: Color charts consisting of actual materials in small sections for faces of factory-finished doors with transparent finish. Show the full range of colors available for stained finishes.
- D. Samples for Verification:
 - 1. Corner sections of flush doors, approximately 12 inches square, with door faces and edges representing the typical range of color and grain for each species of veneer and solid lumber. Finish sample with same materials proposed for factory-finish.
 - a. Finish sample with same materials proposed for factory-finished doors.
 - 2. Frames for light openings, 6 inches long, for each material, type, and finish required.

1.05 QUALITY ASSURANCE

- A. Source Limitations: Obtain all doors of each type from a single manufacturer.
- B. Architectural Woodwork Institute (AWI): Comply with "Architectural Woodwork Institute Quality Standards," Section 1300 "Architectural Flush Doors."

1.06 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Protect doors during transit, storage and handling to prevent damage, soiling and deterioration. Comply with requirements of referenced standards and manufacturer's written instructions.
 - 1. Individually package doors in plastic bags or cardboard cartons.
- B. Mark each door with individual opening numbers used on Shop Drawings. Use removable tags or concealed markings.

1.07 PROJECT CONDITIONS

- A. Conditioning: Do not deliver or install doors until building is enclosed, wet work is complete, and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels, or at indoor relative humidity of at least 25% and not more than 55%, during the remainder of the construction period.

1.08 WARRANTY

- A. Door Manufacturer's Warranty: Submit written agreement on door manufacturer's standard form signed by manufacturer, Installer, and Contractor, agreeing to repair or replace defective doors that have warped (bow, cup, or twist) more than 1/4 inch in a 42-by-84-inch section or that show telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch span, or do not conform to tolerance limitations of referenced quality standards.
 - 1. Warranty shall be in effect during the Life of the Installation.
- B. Contractor's Responsibilities: Replace or refinish doors where Contractor's work contributed to rejection or to voiding of manufacturer's warranty.

- C. Door manufacturer's warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

PART 2 - PRODUCTS

2.01 MANUFACTURERS:

- A. Manufacturer: Subject to compliance with requirements, provide products of one of the following:
 1. Algoma Hardwoods, Inc.
 2. Eggers Industries, Architectural Door Division.
 3. Marshfield Door Systems, Inc..
 4. VT Industries, Inc.

2.02 INTERIOR WOOD DOORS

- A. General: Fabricate wood doors to comply with AWI Section 1300, and as specified in this article.
- B. Doors for Transparent Finish: AWI Premium Grade, 5-ply flush wood doors, as follows:
 1. Faces: Select White Maple, plain sliced; HPVA Grade A, face veneer at least 1/50 inch thick to preclude sandthrough. Center match and book match veneer slices.
 2. Construction: 5 plies, faces bonded to core by hot-press glue method.
 3. Core: 1-LD-2 particleboard core.
 4. Bonding: Stiles and rails bonded to core, then entire unit abrasive planed before veneering.
- C. Pairs of Doors: Furnish pairs of doors matched for appearance of color and grain and match grain across the pair on both sides of the door.
- D. Factory fit wood doors to fit frame opening sizes, with the clearances and bevels as specified in the referenced AWI standard.
- E. Factory machine doors for mortised hardware; perform fitting and machining for surface mounted hardware at the job site. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame shop drawings, DHI A115-W series standards and hardware templates.
 1. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before proceeding with factory machining.
- F. Vision Glass Openings: Trim openings with moldings of same wood species as face veneer. Ship stops loose for glazing in the field.

2.03 FACTORY FINISHING

- A. General: Comply with referenced AWI quality standard, including Section 1500 "Factory Finishing".
- B. Finish wood doors at factory. Finish both faces and vertical edges of door. Seal door top and bottom unless stiles are a material such as stranded lumber that doesn't require finishing to seal out moisture.
- C. Transparent Finish: AWI Catalyzed Polyurethane system, Premium Grade, stained, and finished with satin sheen.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine installed door frames prior to hanging door: Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with jambs plumb and heads level. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Inspect doors prior to hanging. Reject doors with defects.

3.02 INSTALLATION

- A. Hardware: For installation see Section 08710, "Finish Hardware."
- B. Manufacturer's Instructions: Install wood doors to comply with manufacturer's instructions, referenced AWI standards, and as indicated.
- C. Factory Fitted Doors: Align in frames for uniform clearance at each edge.
- D. Factory-Finished Doors: Restore finish before installation, if fitting or machining is required at the job site.

3.03 ADJUSTING AND PROTECTION

- A. Rehang or replace doors which do not swing or operate freely.
- B. Refinish or replace doors where finish was damaged during installation.
- C. Protect doors from damage until time of Substantial Completion.
- D. Just prior to the inspection at the time of Substantial Completion, check and readjust operating hardware. Remove and replace doors that are warped, bowed, or otherwise unacceptable. Rehang or replace doors which do not swing or operate freely.

END OF SECTION 08210