

SECTION 08210

WOOD DOORS

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide all wood doors as shown on the Drawings, in schedules, and as herein specified.
- B. Types of doors required include the following:
 - 1. Solid Core Flush Wood Doors with Veneer Faces.
 - 2. Solid Core Flush Wood Doors with Lites and/or Louvers.
- C. Factory-preparation for hardware (pre-machining) for wood doors is included under this Section.

1.02 RELATED WORK

- A. FINISH CARPENTRY AND MILLWORK: Section 06200.
- B. STEEL DOORS AND FRAMES: Section 08110.
- C. FINISH HARDWARE: Section 08710.
- D. GLASS AND GLAZING: Section 08800.
- E. PAINTING: Section 09900.

1.03 QUALITY ASSURANCE

- A. Source Limitations: Obtain flush wood doors through one source from a single manufacturer.
- B. Reference Standards: Comply with the applicable requirements of the following standards unless otherwise indicated or specified:
 - 1. Architectural Woodwork Institute (AWI).
 - a. Architectural Woodwork Quality Standards.
 - 2. National Fire Prevention Association (NFPA).
 - a. Referenced Standards.
 - 3. Underwriters' Laboratories (UL).

- C. Quality Standard: Comply with referenced AWI Standards. Provide AWI Quality Certification Labels or an AWI letter of licensing for Project indicating that doors comply with requirements of grades specified.
- D. Fire-Rated Wood Doors: Doors complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252. Test pressure pursuant to Code requirements.

1.04 SUBMITTALS

- A. Product Data: Submit door manufacturer's product data, specifications, and installation instructions for each type of wood door.
 - 1. Include details of core and edge construction, trim for lite openings and louvers, and similar components.
 - 2. Include certifications as may be required to show compliance with specifications.
- B. Shop Drawings:
 - 1. Submit shop drawings indicating location and size of each wood door, elevation of each type of wood door, details of construction, location and extent of hardware blocking, fire ratings (if required), and other pertinent data.
 - 2. A schedule of wood doors shall be provided using the same opening numbers referenced on the Drawings and the same schedule format.

1.05 DELIVERY, HANDLING AND STORAGE

- A. Comply with requirements of referenced standard and manufacturer's written instructions.
- B. Package doors individually in plastic bags or cardboard cartons.
- C. Mark each door on top and bottom rail with opening number used on shop drawings.

1.06 WARRANTY

- A. Special Warranty: Submit written agreement on door manufacturer's standard form signed by manufacturer, Installer, and Contractor, agreeing to repair or replace defective doors which have warped (bow, cup, or twist) or which show telegraphing of core construction below face veneers, or do not conform to AWI tolerance limitations.
- B. The warranty shall also include re-finishing and re-installation that may be required due to repair or replacement of defective doors.
- C. Warranty shall be in effect during the following period of time after date of Substantial Completion:
 - 1. Solid Core Flush Interior Doors with Veneer Faces: Life of installation.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Products: Provide products by one of the following manufacturers:

1. Algoma Hardwoods, Inc.
2. Eggers Hardwood Products Corp.
3. Southwood Door Co.
4. Marshfield Door Systems.

2.02 MATERIALS AND COMPONENTS, GENERAL

A. Provide flush wood doors complying with applicable requirements of referenced standards for type(s) of doors indicated and as specified.

2.03 INTERIOR FLUSH WOOD DOORS

A. Solid Core Doors shown on drawings as Painted Finish:

1. Species and Cut for Door Faces: Any closed-grain hardwood of mill option.
2. Grade: AWI Custom.
3. Core Construction: PC-5 (Particleboard Core).
4. Edge Construction: Provide manufacturer's standard laminated edge construction for improved screw-holding capability and split resistance as compared to edges composed of a single layer of treated lumber.
5. Paint all surfaces including top and bottom.

B. Solid Core Doors shown on drawings as Stained Finish

1. Wood Veneer (5-Ply): WDMA I.S.1A Premium Grade Sliced Red Oak or as required, see 2.07 below.
2. Factory finish doors in accordance with WDMA G-17 Finish System Description or AWI Division 1500-S-4 – Finish System Standards. Factory finish to be water-based stain and ultraviolet (UV) cured polyurethane to comply with EPA Title 5 guidelines for Volatile Organic Compound (VOC) emissions limitations. Finish must meet or exceed performance standards of TR-6 catalyzed polyurethane. **Finish all surfaces including top and bottom.**
3. Paint interior Wood Doors PT-1/Benjamin Moore 2124-70 'Distant Grey'.

2.04 FIRE-RATED SOLID CORE WOOD DOORS

- A. Faces, Edges, and AWI Grade: Provide faces, edges, and grade to match non-rated doors in same area of building, unless otherwise indicated.
- B. Construction: Manufacturer's standard core construction to provide fire-resistance rating indicated.

2.05 LOUVERS AND LIGHT FRAMES

- A. Metal Louvers (Where Indicated): Vision-proof design. Galvanized steel, 0.0396 inch thick, hot-dip zinc coated, and factory primed for paint finish.
- B. Fire Door Louvers: Metal louvers with fusible link and closing device, listed and labeled for use in doors with fire rating of one and one-half hours and less. Galvanized steel, 0.0396 inch thick, hot-dip zinc coated and factory primed for paint finish.
- C. Wood Beads for Light Openings in Wood Doors: Same wood species as door faces. Flush rectangular bead profile.
- D. Wood-Veneered Beads for Light Openings in Fire Doors: Manufacturer's standard wood-veneered noncombustible beads matching veneer species of door faces and approved for use in doors of fire rating indicated. Include concealed metal glazing clips where required for opening size and fire rating indicated.

2.06 PREFITTING AND PREPARATION FOR HARDWARE

- A. Prefit and premachine wood doors at factory.
- B. Comply with tolerance requirements of AWI for prefitting. Machine doors for hardware requiring cutting of doors. Comply with final hardware schedules and door frame shop drawings and with hardware templates and other essential information required to ensure proper fit of doors and hardware.
- C. Take accurate field measurements of hardware mortises in metal frames to verify dimensions and alignment before proceeding with machining in factory.
- D. Openings: Cut and trim openings through doors to comply with applicable requirements of referenced standards for kinds of doors required.
 - 1. Light Openings: Trim openings with moldings of material and profile indicated.
 - 2. Louvers: Factory install louvers in prepared openings.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Installer shall examine door frames and verify that frames are correct type and have been installed as required for proper hanging of corresponding doors.

3.02 INSTALLATION

- A. Condition wood doors to average prevailing humidity in installation area prior to hanging.

- B. Refer to Section 08710 - FINISH HARDWARE for installation of hardware.
 - C. Install wood doors in accordance with manufacturer's published instructions and as indicated on Drawings.
 - D. Install fire-rated doors in corresponding fire-rated frames in accordance with requirements of NFPA 80.
 - E. Pre-fit doors: fit to frames and machine for hardware to whatever extent not previously worked at factory as required for proper fit and uniform clearance at each edge.
- 3.03 Miscellaneous
- A. Provide an astragal at all double doors (paired doors).
 - B. Clearances:
 - 1. For non-rated doors, provide clearances of 1/8-inch at jambs and heads; 1/8-inch at meeting styles for pairs of doors; and 3/4-inch from bottom of door to top of decorative floor finish or covering. Where threshold is shown and/or scheduled, provide 1/4-inch clearance from bottom of door to top of threshold, unless specific undercuts are indicated on Door Schedule.
 - 2. For fire-rated doors, provide clearances complying with NFPA 80.
 - G. Bevel non-rated doors 1/8-inch in 2-inches at lock and hinge edges.
 - H. Bevel fire-rated doors 1/8-inch in 2-inches in lock edge; trim stiles and rails only to extent permitted by labeling agency.
- 3.03 ADJUST AND CLEAN
- A. Operation: Re-hang or replace doors that do not swing or operate freely as directed by Architect.
 - B. Finished Doors: Re-finish or replace doors damaged during installation, as directed by Architect.

END OF SECTION 08210