

SECTION 08210
SOLID CORE WOOD DOORS

PART 1 GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 apply to work in this section.

1.2 REFERENCES:

- A. ASTM E2074 – Standard Methods of Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies.
- B. ASTM E413 - Classification for Determination of Sound Transmission Class.
- C. AWI - Quality Standards of the Architectural Woodwork Institute.
- D. HPMA HP - Hardwood and Decorative Plywood.
- E. NEMA (National Electric Manufacturers Association) LD3 - High Pressure Decorative Laminates.
- F. NFPA 80 - Fire Doors and Windows.
- G. NFPA 252 - Standard Method of Fire Tests for Door Assemblies.
- H. UL 10B - Fire Tests of Door Assemblies.
- I. Warnock Hersey - Certified Listings for Fire Doors.
- J. Florida Building Code.

1.3 SECTION INCLUDES:

- A. Solid core wood doors and transom panels; flush and flush glazed configurations; fire rated and non-fire rated.

1.4 SUBMITTALS:

- A. Shop Drawings: Submit fully detailed shop drawings of all doors included in this section, including a complete door schedule of all wood doors. Schedule shall include door openings, elevations, sizes, types, swings, undercuts required, special beveling, special blocking for hardware, factory machining criteria, factory finishing criteria and identification of louvers and glazing requirements. No manufacturing or fabrication of doors shall commence until the Architect approves the shop drawings.
- B. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.
- C. Samples: Submit sample of door veneer, 12" X 12" in size illustrating wood grain, stain color and sheen. The approved sample shall become the standard of quality for all solid core wood doors delivered to the project site. Any doors deemed by the Architect and the Owner that are not in conformance with the approved sample will be replaced at no cost to the Owner.

1.5 QUALITY ASSURANCE:

- A. Obtain flush wood doors through one source from a single manufacturer
- B. All wood doors shall be manufactured in accordance with AWI Quality Standard Section 1300 - Premium Grade Standards.

- C. Finish doors in accordance with AWI Quality Standard Section 1500 – Premium Grade Standards.
- D. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum five years documented experience.
- E. All fire rated wood doors shall comply with all the requirements of NFPA 80.

1.6 DELIVERY, STORAGE AND PROTECTION:

- A. Section 01600 – Material and Equipment: Transport, handle, store and protect products.
- B. Follow manufactures requirements for storage and handling of doors.
- C. Deliver all wood doors to the site after the HVAC system is operational and temperature and humidity levels are controlled.
- D. Doors shall be stored flat on a level surface in a dry well ventilated shelter. Protect doors with resilient packaging. Do not store in damp or wet areas, or in areas that may be subject to sunlight that might blanch the veneer. Cover to keep clean, but allow air circulation by breaking factory seals once on site. Doors stored for more than 7-days shall have ends primed.

1.7 PROJECT CONDITIONS

- A. Coordinate the work with door opening construction, door frame and door hardware installation.

1.8 WARRANTY

- A. Section 01700 - Contract Closeout.
- B. Provide warranty for interior doors to include the life of installation. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials and telegraphing core construction.

PART 2 PRODUCTS

2.1 WOOD DOOR MANUFACTURERS:

- A. Weldwood, U.S. Plywood, Weyerhaeuser, Algoma, Buell, Eggers, or pre-approved equal.

2.2 CONSTRUCTION:

- A. Face Veneer: Shall be plain-sliced, stain grade White Birch or equivalent as selected by the Architect, 1¾" thickness, medium density, thoroughly kiln dried, smoothly sanded and laid at right angles to grain of cross-band.
- B. Cross-bands: Thoroughly kiln dried hardwood, 1/16" thickness, laid with grain at right angles to length of door.
- C. Core: Stave core glued up of properly kiln dried wood blocks of low density species, butt jointed.
- D. Edge Bands: Thoroughly kiln dried hardwood at all edges matching face veneer species, ¾" thick, laminated to wood core.
- E. Top and Bottom Rails: Thoroughly kiln dried hardwood at all edges matching face veneer species, 1½" thick, laminated to wood core.
- F. Adhesives: Cross-band and face veneer adhesive shall conform to CS-35, Type I. Core and edge band adhesive shall conform to CS-35, Type II.
- G. Finish: Stained as selected by the Architect.

- H. Labels: Provide U.L. Label for doors where required.
- I. Factory finish doors in accordance with approved sample. If field finished, seal all edges, see Paint Section- 09900.

2.3 VISION LITES:

- A. Provide vision lites of shapes and sizes where shown on drawings.
- B. Manufacture and supply lites as a unit and meet the requirements of section 08800.

2.4 LOUVERS

- A. Material and Finish: Roll formed steel. Wipe coat of zinc.
- B. Louver Blade: Inverted blade, sight proof; fire rated with fusible link design conforming to UL or FM where required.
- C. Frame to have tamper proof fasteners.

PART 3 EXECUTION

3.1 FABRICATION:

- A. Refer to Door Schedule for types, sizes and details.
- B. Fabricate non-rated doors in accordance with AWI Quality Standards requirements.
- C. Fabricate fire rated doors in accordance with AWI Quality Standards and to UL requirements. Attach fire-rating label to door.
- D. Astragals for Fire Rated Double Doors: Steel, T shaped, overlapping and recessed at face edge specifically for double doors.
- E. Sound Rating for Single Door Leaf and Frame Assembly: ASTM E413, minimum STC 35.
- F. Provide lock blocks at lock edge and top of door for closer for hardware reinforcement.
- G. Vertical Exposed Edge of Stiles: Hardwood for transparent finish.
- H. Factory machine doors for finish hardware in accordance with hardware requirements and dimensions. Do not machine for surface hardware. Provide solid blocking for through bolted hardware.
- I. Factory fit doors for frame opening dimensions identified on shop drawings.
- J. Provide edge clearances in accordance with AWI 1600.

3.2 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install doors until conditions for temperature and relative humidity have been stabilized and will be maintained in storage and installation areas during the remainder of the construction period to comply with requirements of the referenced Quality Standards for the Project's geographical location.

3.3 INSTALLATION

- A. Cut all doors for specified hardware and hang. Protect as recommended by manufacturer. Fit doors to provide 1/16" to 1/8" clearance at jambs and heads. Bevel lock stile to 1/8" in 2". Seal all cut edges of doors. Maximum clearance at floor shall be 1/4", unless otherwise indicated.

3.4 ADJUSTING AND PROTECTING

- A. Operation: Re-hang or replace doors that do not swing or operate freely.
- B. Finished Doors: Refinish or replace doors damaged during installation.
- C. Protect doors as recommended by door manufacturer to ensure that wood doors are without damage or deterioration at the time of Substantial Completion.

3.5 WARRANTY

- A. General Warranty: Door manufacturer's warranty specified herein 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.
- B. 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 ¼ inch (6.35 mm) in a 36" X 84" section or that show telegraphing of core construction in face veneers exceeding 0.01" in a 3" span, or do not comply with tolerances in referenced quality standard.
 - a. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
 - b. Warranty shall be in effect during the following period of time after date of Substantial Completion: Solid-Core interior door – Life of Installation.

END OF SECTION