SECTION 08210 - WOOD DOORS AND FRAMES – FLUSH STILE & RAIL

PART I - GENERAL

1.01 WORK INCLUDED:

a. The work required by this section shall include all labor and material necessary to fabricate (manufacture) and to install all wood doors as indicated on the drawing and/or specified herein.

b. All work shall be subject to the drawings and general provisions of the contract, including General, Supplementary and Special Conditions and Division/Specification Sections, as they apply to the work of this section.

1.02 RELATED WORK:

a. Section 08100 Hollow Metal Doors and Frames
b. Section 08700 Finish Hardware
c. Section 08800 Glazing
d. Section 09900 Painting

1.03 QUALITY ASSURANCE:

a. Wood doors for this project must comply with the minimum standards, established by ANSI/NWWDA I.S.1, "Industry Standard for Wood Flush Doors", published by the National Wood Window & Door Association.

1.04 REFERENCES:

a. Wood doors for this project shall meet the additional requirements of the following agencies:

1- NFPA 101 Life Safety Code
2- NFPA 80 Standard for Fire Doors
3- ANSI/NWWDA I.S.1 Industry Standard for Wood Flush Doors
4- ANSI/NWWDA I.S.1.7-87 Hardware Locations for Wood Flush Doors
5- Other Applicable Life Safety or Building Codes

1.05 SUBMITTALS:

a. Submit shop drawings indicating door identification, door location, door size, thickness, swing (hand) of each door.

b. Shop drawings shall include elevations of each kind of door, details of core and edge construction, trim details for openings and louvers, fire ratings, and mortising requirements for mortise locks and hinges. Indicate the species of veneer required for this project.

c. Provide six (6) copies of shop drawings for approval by the architect. Fabrication shall not begin until shop drawings have received final review and approval, by the architect.

d. If required by the architect, the contractor shall submit for approval, one 12" x 12" square corner sample of the labeled fire door and the regular solid particle board core door that he proposes to use for this project.

1.06 DELIVERY STORAGE AND HANDLING:

a. Protect wood doors during transit, storage and handling to prevent damage, soiling and deterioration.

Comply with the requirements of referenced ANSI/NWMA Industry Standard Pamphlet, "How to Store, Handle, Finish, Install and Maintain Wood Doors", as well as with manufacturers instructions.

b. Each door shall be wrapped with a transparent polyurethylene wrapping to protect the door in transit, and in storage.

c. Identify each door with individual door opening numbers which correlate with shop drawings and architectural designation system for doors, door frames and hardware.

1.07 WARRANTY:

a. Doors for this project shall carry a 5-year warranty which includes the agreement to repair or replace defective doors which have warped (bow, cup or twist) or which show telegraphing of core construction in face veneer.

b. The warranty shall include the replacement, refinishing and reinstallation of the defective door where defect was not apparent prior to hanging.

c. The contractor shall be responsible for replacement or refinishing of doors where contractors work contributed to rejection or to voiding of warranty.

PART 2 - PRODUCTS

2.01 INTERIOR STYLE AND RAIL DOORS/FRAMES

a. 1-3/4 inch thick Brosco/Morgan M100 prehung pine door or Brosco/Simpson F5130 Fir door.
b. Rails and styles solid wood with veneer faces.
c. Panels solid pine or fir (no veneer).
d. Finish: Shop finished with cherry stain coat and two clear finish coats.
e. Frames: Double rabbetted pine with 1x4 pine trim.

2.02 INTERIOR FLUSH WOOD DOORS/FRAMES

a. 1-3/4 inch Graham/Lambton/Mohawk premium grade, maple veneer, plain sliced, running match.
b. Particleboard core ANSI A208.1 grade LD-2.
c. Veneers to be 5-7 plies bonded to core.
d. Edge construction 1-3/8 inch hardwood minimum glued to core.
e. Frames: Hollow metal (see Section 08110). Provide mineral core construction for fire rated doors.

2.03 LIGHT FRAMES

a. Maple veneered over concealed metal glazing strip all fire rated and same profile.

2.04 MATERIALS:

a. Top and bottom rails shall be sealed at the door manufacturer’s factory before shipment to jobsite.

b. Label Fire Doors: Type of construction shall be the standard of the manufacturer except as noted herein:

Provide balanced construction by furnishing stile edge screw holding reinforcement to both vertical stiles on all 45, 60, and 90 minute rated doors.

Stile edge screw withdrawals when tested in accordance with ASTM D-1037-72A shall exceed 700 lbs.

Provide all mineral core doors with full length untreated solid lumber outer stiles to match face veneers.

All fire rated wood doors, including 20 minute rated doors, shall be mortised for all mortise hardware under label service, in accordance with the requirements of the finish hardware specifications.

Where fire resistance classifications are shown or scheduled for wood door assemblies, doors shall be installed in compliance with the requirements of "NFPA-80 Standard for Fire Doors and Windows". Fire rated doors shall bear the label of an independent testing agency having approval of the local building authorities.

c. Doors swinging in pairs, when located within a means of egress, shall not be equipped with overlapping astragals that inhibit the free use of either leaf. Metal edge cap shall be supplied for both leaves of doors, swinging in pairs, within a means of egress.

Pairs of doors that require overlapping astragals shall have at least one attached in place so as to overlap the clearance between both leaves by approximately 3/4 inches. (19.1 mm).

Metal edge caps and astragals shall be cut to receive lock fronts, strikes, mortise flush bolts and any other piece of hardware mortised in the edge of the doors at the meeting stiles as required by the finish hardware specification.

d. All wood doors for this project shall be pre-fit and pre-machined for hinges, mortise locks mortise flush bolts, and any other mortising that may be required by the finish hardware specification.

Hinge and lock stile, for 1 3/4" doors, shall be beveled 1/8" in 2". Door undercut shall be 3/4" or more as required for each respective opening. Beveling and clearances for all doors shall meet the requirements of NFPA 80 Standard for Fire Doors and ANSI/NWWDA I.S.1.7-87 Standard.

All 1 3/4" wood doors shall be mortised for 4 1/2" x 4 1/2" square corner hinges. Mortising for mortise locks shall also include holes in door face to accommodate cylinder, spindle and thumb turn, where required.

e. Wood doors shall be pre-machined for hardware. Coordinate locations with steel door frame hardware locations for hinges, lockstrike, flush bolts, and any other hardware required to be installed on wood doors.

f. Doors shall be FACTORY PRE-FINISHED with a three-coat, sprayed on varnish finish, conforming to the specifications of AWI Section 1500, System 3, Custom Grade. Color to be selected from the manufacturers standard finishing tones.

PART 3 - EXECUTION

3.01 INSPECTION:

a. It shall be the contractor's responsibility to inspect all door frame openings to determine that the frames have been correctly installed, plumb, square, true, and capable of accepting the correct installation and swing of the wood doors, If errors in hardware preparations, hardware locations, or frame installation are discovered, they are to be corrected by the parties responsible before installation of the wood doors.

3.02 INSTALLATION:

a. It shall be the responsibility of the general contractor or the door and hardware installer to properly install the doors and the door hardware in each opening.

b. Hinges shall be shimmed at each door to provide equal clearance at each jamb.

c. All locks, exit devices, door closers and other hardware shall be installed in accordance with the manufacturer's instructions. Pilot holes of recommended size, for wood screws required to fasten the hardware, shall be drilled by the installing contractor before screws are fastened to the wood doors. In particular, wood fire rated doors; require pre-drilling for all screw holes, to prevent splitting the door edges.

d. All prefinished doors shall be protected during installation to assure that scratches do not occur. If, however, scratches do occur they may be touched up, in the field, only after approval of the architect, and at the expense of the general contractor. The touching up of these doors must be as recommended by the manufacturer. If rejected, the general contractor shall, at his own expense, replace the door (s) with a new door (s) as specified herein.

END OF SECTION 08210