

SECTION 08211 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
1. Solid-core doors with wood-veneer faces.

1.2 SUBMITTALS

- A. Product Data: For each type of door. Include details of core and edge construction] and trim for openings. Include 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; and other pertinent data.
1. Indicate dimensions and locations of mortises and holes for hardware.
 2. Indicate dimensions and locations of cutouts.
 3. Indicate requirements for veneer matching.
 4. Indicate doors to be factory finished and finish requirements.
 5. Indicate fire ratings for fire doors.
- C. Samples for Initial Selection: Color charts consisting of actual materials in small sections for the following:
1. Faces of Factory-Finished Doors: Show the full range of colors available for stained and opaque finishes.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Match existing doors, frame and finish.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Package doors individually in cardboard cartons and wrap bundles of doors in plastic sheeting package and deliver as required.
- B. Mark each door on top and bottom rail with opening number used on Shop Drawings.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: 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 during the remainder of the construction period.
- B. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature between 16 and 32 deg C and relative humidity between 43 and 70 percent during the remainder of the construction period.

1.6 WARRANTY

- A. Special Warranty: Manufacturer's standard form, signed by manufacturer, Installer, and Contractor, in which manufacturer agrees to repair or replace doors that are defective in materials or workmanship, have warped (bow, cup, or twist) more than 6.4 mm in a 1067-by-2134-mm section, or show telegraphing of core construction in face veneers exceeding 0.25 mm in a 75-mm span.
 - 1. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
 - 2. Warranty shall be in effect during the following period of time from date of Substantial Completion:
 - a. Solid-Core Exterior Doors: Five years.
 - b. Solid-Core Interior Doors: Life of installation.
 - c. Hollow-Core Interior Doors: Two years.

PART 2 - PRODUCTS

2.1 DOOR CONSTRUCTION, GENERAL

- A. Doors for Transparent Finish:
 - 1. Grade: Custom (Grade A faces).
 - 2. Species and Cut: Quarter sawn mahogany, or match species in surrounding area or area served.
 - 3. Match between Veneer Leaves: Book match.
 - 4. Assembly of Veneer Leaves on Door Faces: Center balance match.
 - 5. Pair and Set Match: Provide for doors hung in same opening or separated only by mullions.
 - 6. Room Match: Match door faces within each separate room or area of building. Corridor door faces do not need to match where they are separated by 3 m or more.
 - 7. Room Match: Provide door faces of compatible color and grain within each separate room or area of building.

8. Blueprint Matching: Where indicated, provide doors with faces produced from same flitches as adjacent wood paneling and arranged to provide blueprint matching with wood paneling. Comply with requirements in Division 6 Section "Interior Architectural Woodwork."
9. Stiles: Applied wood-veneer edges of same species as faces and covering edges of faces.

2.2 SOLID-CORE DOORS

A. Particleboard Cores: Comply with the following requirements:

1. Particleboard: ANSI A208.1, Grade LD-2.
2. Blocking: Provide wood blocking in particleboard-core doors as needed to eliminate through-bolting hardware.
 - a. 125-mm top-rail blocking, in doors indicated to have closers.
 - b. 125-mm bottom-rail blocking, in exterior doors and doors indicated to have kick, mop, or armor plates.
 - c. 125-mm midrail blocking, in doors indicated to have exit devices.
3. Provide doors with either glued-block or structural composite lumber cores instead of particleboard cores at locations where exit devices are indicated.

B. Interior Veneer-Faced Doors:

1. Core: Either glued or nonglued block or structural composite lumber.
2. Construction: Five plies, either bonded or nonbonded construction.

2.3 FABRICATION

A. Fabricate doors in sizes indicated for project-site fitting.

B. Factory fit doors to suit frame-opening sizes indicated, with the following uniform clearances and bevels, unless otherwise indicated:

1. Comply with clearance requirements of referenced quality standard for fitting. Comply with requirements in NFPA 80 for fire-rated doors.

C. Factory machine doors for hardware. Match adjacent office hardware.

1. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before factory machining.

2.4 SHOP PRIMING

A. Doors for Transparent Finish: Shop seal faces and edge of doors, including cutouts, with stain (if required), other required pretreatments, and first coat of finish as specified in Division 9 Section "Painting."

2.5 GLAZING

- A. Tempered and laminated safety glass, 4 mm minimum, rated for impact and shatter resistance.
- B. Factory install in steel frame similar to existing doors.

2.6 FACTORY FINISHING

- A. General: Comply with AWI's "Architectural Woodwork Quality Standards Illustrated" for factory finishing.
- B. Finish doors at factory where indicated in schedules or on Drawings as factory finished.
- C. Transparent Finish:
 - 1. Grade: Premium .
 - 2. Finish: AWI System TR-6 catalyzed polyurethane.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine doors and installed door frames before hanging doors.
 - 1. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs.
 - 2. Reject doors with defects.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Hardware: Provide doors with 3 pair bearing type hinges, similar to existing Stanley hardware. Lock and door latch is provided by USG, installed be contractor.
- B. Manufacturer's Written Instructions: Install doors to comply with manufacturer's written instructions, referenced quality standard, and as indicated.
- C. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors. Machine doors for hardware. Seal cut surfaces after fitting and machining.
 - 1. Clearances: Provide 3.2 mm at heads, jambs, and between pairs of doors. Provide 3.2 mm from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 6.4 mm from bottom of door to top of threshold.

- a. Comply with NFPA 80 for fire-rated doors.
 - 2. Bevel non-fire-rated doors 3-1/2 degrees at lock and hinge edges.
 - D. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.
 - E. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.
 - F. Field-Finished Doors: Refer to the following for finishing requirements:
- 3.3 Doors that do not swing or operate freely.
- A. Finished Doors: Replace doors that are damaged or do not comply with requirements. Doors may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 08211