

## SECTION 081416 - FLUSH WOOD DOORS

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Five-ply flush wood doors for opaque finish.
2. Five-ply flush wood veneer faced doors for transparent finish.
3. Factory priming flush wood doors.
4. Factory fitting flush wood doors to frames and factory machining for hardware.
5. Factory pre-finishing for transparent finished doors.

NOTE: Bid interior flush wood doors as veneer faced for transparent finish (6-2-2020 per Owner).

#### 1.2 ACTION SUBMITTALS

##### A. Product Data: For each type of product, including the following:

1. Door core materials and construction.
2. Door edge construction
3. Door face type and characteristics.
4. Finishing Details.

##### B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each type of door; construction details not covered in Product Data; and the following:

1. Door schedule indicating door location, type, size, and swing.
2. Door elevations, dimension and locations of hardware, lite and louver cutouts, and glazing thicknesses.
3. Details of frame for each frame type, including dimensions and profile.
4. Details of electrical raceway and preparation for electrified hardware, access control systems, and security systems.
5. Dimensions and locations of blocking for hardware attachment.
6. Clearances and undercuts.

### PART 2 - PRODUCTS

#### 2.1 FLUSH WOOD DOORS, GENERAL

##### A. Quality Standard: In addition to requirements specified, comply with "Architectural Woodwork Standards." ANSI/WDMA I.S. 1A.

1. Provide labels indicating that doors comply with requirements of grades specified.

## 2.2 ~~SOLID-CORE FIVE-PLY FLUSH WOOD DOORS FOR OPAQUE FINISH~~

### ~~A. Interior Solid-Core Doors:~~

- ~~1. Performance Grade: ANSI/WDMA I.S. 1A Heavy Duty unless otherwise indicated.~~
- ~~2. Performance Grade: ANSI/WDMA I.S. 1A Extra Heavy Duty at Multiple Stall Restrooms and where indicated on plans.~~
- ~~3. Architectural Woodwork Standards ANSI/WDMA I.S. 1A Grade: Premium.~~
- ~~4. Faces: MDO or Any closed-grain hardwood of mill option.~~
  - ~~a. Apply MDO to standard thickness, closed-grain, hardwood face veneers or directly to high-density hardboard crossbands.~~
- ~~5. Exposed Vertical and Top Edges: Any closed-grain hardwood.~~
- ~~6. Core for Non-Fire-Rated Doors:~~
  - ~~a. ANSI A208.1, Grade LD-1 or Grade LD-2 particleboard.~~
    - ~~1) Blocking: Provide wood blocking in particleboard core doors as needed to eliminate through-bolting hardware.~~
    - ~~2) Provide doors with glued wood stave or WDMA I.S. 10 structural composite lumber cores instead of particleboard cores for doors scheduled to receive exit devices.~~
  - ~~b. Either glued wood stave or WDMA I.S. 10 structural composite lumber.~~
- ~~7. Construction: Five plies, hot pressed bonded (vertical and horizontal edging is bonded to core), with entire unit abrasive planed before veneering.~~

## 2.3 SOLID-CORE FIVE-PLY FLUSH WOOD VENEER FACED DOORS FOR TRANSPARENT FINISH

### A. Interior Solid-Core Doors:

1. Performance Grade: ANSI/WDMA I.S. 1A Heavy Duty unless otherwise indicated.
2. Performance Grade: ANSI/WDMA I.S. 1A Extra Heavy Duty at Multiple Stall Restrooms and where indicated on plans.
3. Architectural Woodwork Standards ANSI/WDMA I.S. 1A Grade: Premium.
4. Faces: Single ply wood veneer not less than 1/50 inch thick.
  - a. Species: White Oak or Walnut. (intended appearance = walnut wood appearance)
5. Exposed Vertical and Top Edges: Match Veneer Species.
6. Core for Non-Fire-Rated Doors:
  - a. ANSI A208.1, Grade LD-1 or Grade LD-2 particleboard.

- 1) Blocking: Provide wood blocking in particleboard-core doors as needed to eliminate through-bolting hardware.
  - 2) Provide doors with glued-wood-stave or WDMA I.S. 10 structural-composite-lumber cores instead of particleboard cores for doors scheduled to receive exit devices.
- b. Either glued wood stave or WDMA I.S. 10 structural composite lumber.
7. Construction: Five plies, hot-pressed bonded (vertical and horizontal edging is bonded to core), with entire unit abrasive planed before veneering.

## 2.4 LIGHT FRAMES AND LOUVERS

- A. Wood Beads for Light Openings in Wood Doors: Provide manufacturer's standard wood beads unless otherwise indicated.
  1. Wood Species: Same species as door faces or Species compatible with door faces.
  2. Profile: Manufacturer's standard shape.
- B. Wood Louvers: Door manufacturer's standard solid-wood louvers unless otherwise noted where indicated on plans.
  1. Wood Species: Match door species.
  2. Profile: Flat.

## 2.5 FABRICATION

- A. Factory fit doors to suit frame-opening sizes indicated.
  1. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.
- B. Factory machine doors for hardware that is not surface applied.
  1. Locate hardware to comply with DHI-WDHS-3.
  2. Comply with final hardware schedules, door frame Shop Drawings, ANSI/BHMA-156.115-W, and hardware templates.
  3. Coordinate with hardware mortises in metal frames, to verify dimensions and alignment before factory machining.
  4. For doors scheduled to receive electrified locksets, provide factory-installed raceway and wiring to accommodate specified hardware.
- C. Openings: Factory cut and trim openings through doors.
  1. Light Openings: Trim openings with moldings of material and profile indicated.
  2. Glazing: Factory install glazing in doors indicated to be factory finished. Comply with applicable requirements in Section 088000 "Glazing."
  3. Louvers: Factory install louvers in prepared openings.

## 2.6 ~~FACTORY PRIMING~~

- ~~A. Doors for Opaque Finish: Factory prime faces, all four edges, edges of cutouts, and mortises with one coat of wood primer specified in Section 099123 "Interior Painting."~~

## 2.7 TRANSPARENT FINISH

- A. Doors for Transparent Finish:
1. Comply with referenced quality standard for factory finishing.
  2. Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied before finishing.
  3. Finish faces, all four edges, edges of cutouts, and mortises.
  4. Apply Owner selected stain if White Oak Veneer is chosen (to have Walnut Appearance after staining).
  5. Omit stain if Walnut Veneer is chosen per Owner approval (already has Walnut Appearance).
  6. Finish with transparent finish per Architectural Wood Standards Grade Premium.
  7. Transparent Finish Sheen: Satin.
  8. End result of finish process = Veneer faced door with Walnut wood appearance with Satin sheen per referenced quality standard.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Hardware: For installation, see Section 087100 "Door Hardware."
- B. Install doors and frames to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
- C. Install frames level, plumb, true, and straight.
1. Shim as required with concealed shims. Install level and plumb to a tolerance of 1/8 inch in 96 inches.
  2. Anchor frames directly attached to substrates.
    - a. Secure with countersunk, concealed fasteners and blind nailing.
- D. Job-Fitted Doors:
1. Align and fit doors in frames with uniform clearances and bevels as indicated below.
    - a. Do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors.
  2. Machine doors for hardware.
  3. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
  4. Clearances:

- a. Provide 1/8 inch at heads, jambs, and between pairs of doors.
  - b. Provide 1/8 inch from bottom of door to top of decorative floor finish or covering unless otherwise indicated on Drawings.
  - c. Where threshold is shown or scheduled, provide 1/4 inch from bottom of door to top of threshold unless otherwise indicated.
- E. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.

### 3.2 ADJUSTING

- A. Operation: Rehang or replace doors that do not swing or operate freely.
- B. Finished Doors: Replace doors that are damaged or that 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 081416