

## SECTION 08211 - DOORS

### PART 1 GENERAL

#### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.02 SUMMARY

- A. This Section includes the following:
  - 1. Solid-core doors with wood-veneer faces.
  - 2. Hollow-core doors with wood-veneer faces.
  - 3. Six-panel steel doors with wood frames.
- B. Related Sections include the following:
  - 1. Division 6 Section "Finish Carpentry" for wood door frames.

#### 1.03 SUBMITTALS

- A. Product Data: For each type of door. Include details of core and edge construction and trim for openings.
- 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.

#### 1.04 QUALITY ASSURANCE

- A. Source Limitations: Obtain flush wood doors through one source from a single manufacturer.
- B. Retain one standard below. NWWDA I.S.1-A is less restrictive than AWI or WIC; WIC applies only in California, Nevada, and Oregon. See Evaluations. Review standard selected and coordinate its requirements with options selected.
- C. Quality Standard: Comply with ANSI/NWWDA I.S.1, AWI Section 1300.
  - 1. Provide AWI Quality Certification Labels or an AWI letter of licensing for Project indicating that doors comply with requirements of grades specified.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Comply with requirements of referenced standard and manufacturer's written instructions.
- B. Mark each door on top and bottom rail with opening number used on Shop Drawings.

#### 1.06 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 60 and 90 deg F (16 and 32 deg C) and relative humidity between 43 and 70 percent during the remainder of the construction period.

#### 1.07 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 1/4 inch (6.4 mm) in a 42-by-84-inch (1067-by-2134-mm) section, or show telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch (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 Interior Doors: Life of installation.
    - b. Hollow-core Interior Doors: Life of installation.
    - b. Steel Exterior Doors: Life of installation.

## PART 2 PRODUCTS

### 2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by following or an approved equal:
  - 1. Interior Flush Wood Doors:
    - a. Jeld Wen Window & Door Company, "Pro Core" .SCWD or S.L.C with top rail, bottom rail and stiles of solid wood.
    - b. Masonite Solid Doors
  - 2. Exterior Six-Panel Metal Doors with Wood Frame:
    - a. Masonite Door Designer, Masonite HD 6 Panel Door with No Glass.
    - b. Jeld Wen Window & Door Company

### 2.02 DOOR CONSTRUCTION, GENERAL

- A. Doors for Opaque Finish:
  - 1. Grade: Economy.
  - 2. Faces for Exterior Doors: Six-panel HD wood edge, steel entry door.
  - 3. Faces for Interior Doors: Any closed-grain hardwood of mill option.

### 2.03 DOORS

- A. Exterior Doors:
  - 1. Core: Insulated core to be poured-in-place polyurethane foam forming a secure attachment to all door components.
  - 2. Construction: Using 6-piece construction that includes primed white 24 gauge steel facings, wood lock stile, wood hinge stile, wood top rail and rot resistant composite bottom rail. Door facings are to be interlocked to stiles and rails forming a mechanical bond.
  - 3. Veneers: Metal six-panel, 24 gauge primed veneers.
- B. Interior Veneer-Faced Doors:
  - 1. Core: Either glued or nonglued block or structural composite lumber with wood rails. No MDF will be accepted.
  - 2. Construction: Five or seven plies with stiles and rails bonded to core, then entire unit abrasive planed before veneering.

### 2.04 FABRICATION

- A. Fabricate doors in sizes indicated for Project-site fitting.
- B. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings, DHI

A115-W series standards, and hardware templates.

1. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before factory machining.
- C. Exterior Doors: Exterior doors shall be factory primed and painted with semi gloss exterior grade white paint.

### PART 3 EXECUTION

#### 3.01 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.

#### 3.02 INSTALLATION

- A. Hardware: For installation, see Division 8 Section "Door Hardware."
- 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 1/8 inch (3.2 mm) at heads, jambs, and between pairs of doors. Provide 1/8 inch (3.2 mm) from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4 inch (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 1/8 inch in 2 inches (3-1/2 degrees) at lock and hinge edges.
- D. Field-Finished Doors: Refer to the following for finishing requirements:
1. Division 9 Section "Painting."

#### 3.03 ADJUSTING

- A. Operation: Re-hang or replace doors that do not swing or operate freely.
- B. 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.
- C. Doors dragging carpet will not be accepted. The Contractor shall adjust all doors accordingly to avoid interference with the carpet or other adjacent finishes.

END OF SECTION 08211