

**SECTION 08 1416**  
**FLUSH WOOD DOORS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Work of this Section consists of flush wood doors, and includes but is not limited to the following:
  - 1. Solid core doors for transparent finish.
  - 2. Factory fitted (pre-hung) wood doors in wood frames
- B. Related Documents and Sections: Examine Contract Documents for requirements that directly affect or are affected by Work of this Section. Other Documents and Sections that directly relate to work of this Section include, but are not limited to:
  - 1. General provisions of the Contract, including General and Supplementary Conditions, and Division 01 General Requirements Specification Sections.
  - 2. Section 08 7100 - DOOR HARDWARE.
  - 3. Section 09 9100 - PAINTING.

**1.2 SUBMITTALS**

- A. Product Data: Submit manufacturer's product data, specifications, installation instructions, use limitations and recommendations for each door type used. Provide certifications stating that doors comply with requirements.
- B. Shop Drawings: Provide large scale shop drawings for fabrication and installation of all doors. Provide schedules, sizes, elevations, and details of construction, hardware blocking, information on prefitting and premachining work, and accessory items.
- C. Samples: Submit representative samples of each door and finish that is to be exposed in the finished work, showing the full range of color and finish variations expected. Provide samples having minimum area of 144 square inches.

**1.3 QUALITY ASSURANCE**

- A. Qualifications
  - 1. Manufacturer Qualifications: A firm experienced a minimum five (5) years in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.
  - 2. Installer Qualifications: Perform installation with skilled, experienced and trained workmen supervised by trained personnel who shall have at least three (3) years successful experience in installations of similar size and scope.
  - 3. Hardware Consultant Qualifications: AHC or CDC certified.
- B. Quality Standard:
  - 1. WDMA I.S.1-A certified
  - 2. ANSI A115. W Series
- C. Source Limitations: Obtain flush wood doors through one source from a single manufacturer.

#### 1.4 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials and products in unopened factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage, moisture and direct sunlight. Sequence deliveries to avoid delays, but minimize on-site storage.
  - 1. Manufacturers, fabricators, suppliers and shippers shall provide least amount of packaging that adequately and properly protects, supports and contains the items shipped, and is reusable, returnable or recyclable.
  - 2. Mark products with Shop Drawing location reference, unless already properly marked.
  - 3. Sequence deliveries to avoid delays, but minimize on-site storage.
  - 4. Store and protect doors in accordance with ANSI/WDMA guidelines.

#### 1.5 WARRANTY

- A. Provide written warranty signed by manufacturer agreeing to repair or replace work which exhibits defects in materials or workmanship for the following periods from date of Substantial Completion. "Defects" is defined to include, but is not limited to, warping, bowing, cupping, twisting, telegraphing of core construction, exceeding tolerance limitations of WDMA I.S.1-A, abnormal aging or deterioration, and failure to perform as required.
  - 1. Interior Doors: Life of Installation
- B. Include requirement for refinishing and reinstalling doors repaired or replaced under warranty. Manufacturer or fabricator shall not defer action on any claim; claims shall be satisfied immediately.

### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Adhesives and Bonds: WDMA I.S. 1-A and as specified.
  - 1. Use Type II bond for interior doors.
  - 2. Provide doors made with adhesives that do not contain urea-formaldehyde resins.
  - 3. Provide interior doors made with composite wood products that have urea-formaldehyde emission levels below the published maximums in the ANSI A208.1, Particleboard standard.
- B. Preservative Treatment: Per WDMA I.S. 4.
  - 1. Factory treat doors scheduled for restrooms, janitor closets and other possible wet locations, with a water-repellent preservative treatment.

#### 2.2 DOORS

- A. Interior Solid Core Doors For Transparent Finish
  - 1. Grade: Custom.
  - 2. Faces: Wood Veneer:
    - a. White Oak veneer; Rift cut
    - b. Color: Match Architect's sample,
    - c. Finish: Matte conversion varnish
  - 3. Exposed Vertical and Top Edges: Closed-grain hardwood matching faces.
  - 4. Core: Glued wood stave.
  - 5. Construction: Five or seven plies Stiles and rails are bonded to core, then entire unit abrasive planed before veneering. Faces are bonded to core using a hot press.

6. WDMA I.S.1-A Performance Grade: Heavy Duty.

## 2.3 FABRICATION

### A. General:

1. Factory fit doors to suit frame-opening sizes indicated. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.
2. 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.
3. As applicable, mill doors to accommodate hollow metal frames specified in Section 08 1113 - HOLLOW METAL DOORS AND FRAMES.
4. Prepare doors carefully for finish hardware. Predrill for hinge screws at factory.
5. Completely sand face of doors before final finish.

- ### B. Fabrication Tolerances:
- Fabricate to fit properly; uniform clearance at each edge. Unless more stringent requirements prevail, conform to NWWDA.

## 2.4 FACTORY FINISHING

- ### A. General:
- Comply with referenced quality standard for factory finishing. Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied, before finishing.

1. Finish faces, all four edges, edges of cutouts, and mortises. Stains and fillers may be omitted on top and bottom edges, edges of cutouts, and mortises.
2. Finish doors at factory that are indicated to receive transparent finish.

### B. Transparent Finish:

1. Grade: Custom.
2. Finish: AWI conversion varnish system, matte.
3. Staining: As selected by the Architect.
4. Effect: Open-grain finish.

## PART 3 EXECUTION

### 3.1 INSPECTION

- ### A.
- The Installer shall examine frames and conditions under which this work is to be installed and notify Contractor, in writing, of conditions detrimental to the proper completion of the work. Do not proceed with work until unsatisfactory conditions are corrected. Beginning work means Installer accepts substrates and conditions.

### 3.2 PREPARATION

- ### A.
- Strictly comply with manufacturers' instructions and recommendations, except where more restrictive requirements are specified in this section.
- ### B.
- Condition doors to prevailing conditions before installing.

### 3.3 INSTALLATION

- ### A.
- Strictly comply with manufacturer's instructions and recommendations, except where more restrictive requirements are specified in this section.

- B. Prefit and premachine doors to the extent not done at factory. Restore factory finishes before installing.
- C. Provide 1/8 inch clearances at head, jambs and meeting stiles (of pairs of doors). Provide 1/2 inches clearance at bottom and as required to clear flooring, except at thresholds provide 1/4 inch clearance.

3.4 ADJUSTING, CLEANING, PROTECTION

- A. Adjust doors to work easily, smoothly, and correctly.
- B. Touch-up damaged coatings and finishes to eliminate evidence of repair.
- C. Repair minor damage to eliminate all evidence of repair. Remove and replace work which cannot be satisfactorily repaired.
- D. Clean exposed surfaces using materials and methods recommended by manufacturer of material or product being cleaned. Remove and replace work that cannot be successfully cleaned.

**END OF SECTION**