

SECTION 08210 - WOOD DOORS

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Interior Wood Doors.
- B. Related Sections:
 - 1. 06100 - Carpentry.
 - 2. 08110 - Metal Doors and Frames.
 - 3. 08710 - Finish Hardware.
 - 4. 09900 - Painting.

1.02 REFERENCE STANDARDS

- A. Architectural Woodwork Institute (AWI) Quality Standards, Guide Specifications, and Quality Certification Program, latest edition.
- B. NWMA: I.S.1 Industry Standards for face veneers, adhesives and bond.
- C. Department of Commerce Commercial Standards (CS).
- D. "Wood Flush Doors" of National Wood Window and Door Association (NWWDA).

1.03 SUBMITTALS

- A. Shop drawings and schedules for approval before fabrication requiring cutouts, drilling, or mortising.
- B. Manufacturer's literature and specifications showing compliance with requirements.
- C. Samples: Finished veneer sample, minimum size 12 inches by 12 inches for review and acceptance by the Resident.
- D. Certificates: Certificates of compliance with fabrication and UL label requirements, signed by authorized representative of door manufacturer.

1.04 QUALITY ASSURANCE

- A. Requirements of regulatory agencies:
 - 1. In addition to complying with other legal requirements, comply with:
 - a. National Wood Window and Door Association I.S.1-A-97 (NWWDA) standards.

- b. Architectural Woodwork Institute (AWI) 7th edition.
- c. UL fire door labels for required classification. Permanently attach label to door in accord with UL procedures.

B. Allowable tolerances for fabrication of doors:

- 1. Size: +1/32 in. overall dimensions.
- 2. Maximum warp: 1/4 inch.
- 3. Squareness: Length of diagonal measured on face of door from upper right corner to lower left corner between length of diagonal measured on upper left corner to lower right corner: Maximum difference of 1/4 in.
- 4. Prefitting and premachining for hardware: NWMA Standard Procedures and Recommendations for Factory Machining Architectural Wood and Plastic Faced Flush Doors for Hardware.
- 5. Show-through (Photographing): 1/100 in. deviation from true plane in any 3 in. span on door face.

1.05 PRODUCT HANDLING

A. Delivery:

- 1. Deliver doors to job site after finishes are dry and building has reached average prevailing relative humidity of locality.
- 2. Deliver doors in manufacturer's original unopened protective materials or container, clearly marked with manufacturer's name, brand name, size, thickness and identifying symbol on covering.

B. Storage:

- 1. Stack flat on 2 x 4 lumber, laid 12 in. from ends and across center. A minimum of 4 inches above cured concrete slab.
- 2. Under bottom door and over top of stack provide plywood or corrugated cardboard to protect door.
- 3. Store doors in area where there will be no great variations in heat, dryness and humidity.

C. Handling: Do not drag doors across one another.

1.06 WARRANTY

- A. Provide manufacturer's written guarantee covering defects in materials, quality of work, and warp exceeding 1/4".
- B. Guarantee shall be for the life of installation.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Flush Solid Core Wood Doors:
 - 1. Weyerhaeuser, Marshville, WI.
 - 2. Algoma Hardwoods, Algoma, WI.
 - 3. Eggers Industries, Two Rivers, WI.
 - 5. Buell Doors, Dallas, TX.

2.02 MATERIALS

- A. Conform to the requirements of NWMA ANSI/NWMA IS 1 and Section 1300 of the AWI Quality Standards.
- B. The use of particle board or chip board, of any grade, is not allowed.
- C. Construction:
 - 1. Type: 5 ply bonded core construction only.
 - 2. Thickness: 1-3/4".
 - 3. Rails: None, stranded core runs full length of door body.
 - 4. Stiles: 5/8" minimum, matching sides.
 - 5. Core: Structural composite lumber of low density hardwood material.
 - 6. Facing: Plain sawn premium grade veneer face to be selected by Resident, AWI Grade I, book matched and matched for color and grain for transparent finish (for stain). Color and veneer to be selected by Resident.
 - a. Medium Density Overlay (M.D.O.) (for paint) factory primer finish.
 - b. Adhesive: Type I waterproof glue.

2.03 FABRICATION

- A. Fabricate to sizes and design indicated on Drawings, prefitted for openings and properly beveled.
- B. Pre-fit Clearances:
 - 1. 1/8" top and sides and 1/2" above scheduled finished flooring material.
 - a. Refer to the Door Schedule for additional undercut as specified.
 - 2. Bevel angle 1/8" per 2 inches of door thickness.
 - 3. Cut-Outs:

- a. Make cutouts at factory for glass and louver openings to size and shape indicated on Drawings.
 - (1). Allow a minimum of 5 inches from cutout to edges of doors.
 - (2). Provide loose pre-mitered stops to match door face for field application.
- b. Metal Louvers: Steel construction, painted, of size, type, and profile shown.
- 4. Hardware Preparation: Pre-machine at factory for scheduled hardware using templates and directions furnished by Hardware Supplier.
 - a. Field installation is optional.
- 5. Maximum tolerances for doors are as follows:
 - a. Size: $\pm 1/16"$.
 - b. Warp: $1/4"$ along vertical edge of diagonal.
 - c. Squareness: $1/4"$ length of diagonals.

PART 3 EXECUTION

3.01 PREPARATION

- A. Condition doors to average prevailing humidity in installation area before hanging.

3.02 PROTECTION

- A. Seal top and bottom edges of the door, and wood surfaces exposed in making cutouts, with varnish or shellac to prevent moisture penetration.
- B. Protect doors during transit and storage by wrapping, and tag to designate opening as in the schedule and shop drawings.

3.03 INSTALLATION

- A. Check door frame to insure it is plumb, square, rigidly secured, and of the correct dimensions for the door. Make required corrections before starting to hang the door.
- B. Install doors plumb at face and edges. Space between door and frame not more than $1/8"$ and the width may not differ more than $1/16"$. Irregular edges will not be accepted.
- C. Install hardware securely and accurately for proper, problem-free operation and correct fit. Make corrections required.
- D. Do not remove protective material from the door until it is necessary. Doors damaged or defaced, or otherwise not in perfect condition, will not be accepted.

- E. Install according to manufacturer's written instructions.
- F. Job-Fit Doors:
 - 1. Align and fit doors in frames with uniform clearances and bevels as indicated.
 - 2. Do not trim stiles and rails more than limits set by manufacturer or allowed with fire-rated doors.
 - 3. Machine doors for hardware.
 - 4. Seal cut surfaces after fitting and machining
- G. Fitting Clearances:
 - 1. Non-Rated Doors:
 - a. 1/8" at jambs and heads.
 - b. 1/16" per leaf at meeting stiles for pairs of doors.
 - c. 1/8" from bottom of door to top of decorative floor finish or covering.
 - 2. Threshold: 1/4" clearance from bottom of door to top of threshold.
 - 3. Bevel non-rated doors 1/8" to 2 inches at lock and hinge edges.
- H. Refer to Section 09900 for finishing of job site finished doors.

3.04 ADJUSTING AND CLEANING

- A. Replace or rehang hinge bound doors not swinging or operating freely.
- B. Leave installation clean and free from finger marks, dirt, and other substances and ready for painting.

END OF SECTION