SECTION 08 14 00

INTERIOR WOOD DOORS

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section specifies interior flush doors with prefinish, prefit option.

B. Section includes fire rated doors,.

1.2 RELATED WORK

A. Metal door frames: Section 08 11 13, HOLLOW METAL DOORS AND FRAMES.

B. Door hardware including hardware location (height): Section 08 71 00, DOOR HARDWARE.

C. Installation of doors and hardware: Section 08 71 00, DOOR HARDWARE.

D. Glazing: Section 08 80 00, GLAZING.

E. Finish: Refer to Room Finish Schedule indicated on the Drawings.

1.3 SUBMITTALS

A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Samples:

1. Corner section of flush veneered door 300 mm (12 inches) square, showing details of construction, labeled to show grade and type number and conformance to specified standard.

2. Veneer sample 200 mm (8 inch) by 275 mm (11 inch) by 6 mm (1/4 inch) showing specified wood species sanded to receive a transparent finish. Factory finish veneer sample where the prefinished option is accepted.

C. Shop Drawings:

1. Show every door in project and schedule location in building.

2. Indicate type, grade, finish and size; include detail of glazing and pertinent details.

3. Provide information concerning specific requirements not included in the manufacturer's literature and data submittal.

D. Manufacturer's Literature and Data:

1. Sound rated doors, including test report indicating STC rating per ASTM E90 from test laboratory.

2. Labeled fire rated doors showing conformance with NFPA 80.

1.4 WARRANTY

A. Doors are subject to terms of Article titled "Warranty of Construction", FAR clause 52.246-21, except that warranty shall be as follows:

1. For interior doors, manufacturer’s warranty for lifetime of original installation.

2. Specified STC RATING for sound retardant rated door assembly in place.

1.5 DELIVERY AND STORAGE

A. Factory seal doors and accessories in minimum of 6 mill polyethylene bags or cardboard packages which shall remain unbroken during delivery and storage.

B. Store in accordance with WDMA I.S.1-A, J-1 Job Site Information.

C. Label package for door opening where used.

1.6 APPLICABLE PUBLICATIONS

A. Publications listed below form a part of this specification to extent referenced. Publications are referenced in text by basic designation only.

B. Window and Door Manufacturers Association (WDMA):

1. I.S.1-A-04 Architectural Wood Flush Doors

2. T.M.5-90 Split Resistance Test Method

3. T.M.6-08 Adhesive (Glue Bond) Durability Test Method

4. T.M.7-08 Cycle-Slam Test Method

5. T.M.8-08 Hinge Loading Test Method

6. T.M.10-08 Screwholding Test Method

C. National Fire Protection Association (NFPA):

1. 80-07 Protection of Buildings from Exterior Fire

2. 252-08 Fire Tests of Door Assemblies

D. ASTM International (ASTM):

1. E90-04 Laboratory Measurements of Airborne Sound Transmission Loss

PART 2 - PRODUCTS

2.1 FLUSH DOORS

A. General:

1. Meet requirements of WDMA I.S.1-A, Extra Heavy Duty.

2. Adhesive: Type II

3. Thickness: 45 mm (1-3/4 inches) unless otherwise shown or specified.

B. Face Veneer:

1. In accordance with WDMA I.S.1-A.
2. One species throughout the project unless scheduled or otherwise shown.
3. For transparent finishes: Match existing.
   a. A grade face veneer standard optional.
   b. AA grade face veneer
   c. Match face veneers for doors for uniform effect of color and grain at joints.
   d. Door edges shall be same species as door face veneer except maple may be used for stile face veneer on birch doors.
   e. On doors required to have transparent finish on one side and paint finish on other side; use veneers as required for transparent finish on both sides.
   f. In existing buildings, where doors are required to have transparent finish, use wood species and grade of face veneers to match adjacent existing doors.
4. For painted finishes: Custom Grade, mill option close grained hardwood, premium or medium density overlay. Do not use Lauan.
5. Factory sand doors for finishing.

C. Wood for stops, louvers, muntins and moldings of flush doors required to have transparent finish:
1. Solid Wood of same species as face veneer, except maple may be used on birch doors.
2. Glazing:
   a. On non-labeled doors use applied wood stops nailed tight on room side and attached on opposite side with flathead, countersunk wood screws, spaced approximately 125 mm (5 inches) on centers.

D. Fire rated wood doors:
1. Fire Performance Rating:
   a. "B" label, 1-1/2 hours.
   b. "C" label, 3/4 hour.
2. Labels:
   a. Doors shall conform to the requirements of ASTM E2074, or NFPA 252, and, carry an identifying label from a qualified testing and inspection agency for class of door or opening shown designating fire performance rating.
   b. Metal labels with raised or incised markings.
3. Performance Criteria for Stiles of doors utilizing standard mortise leaf hinges:
   a. Hinge Loading: WDMA T.M.8. Average of 10 test samples for Extra Heavy Duty doors.
   b. Direct screw withdrawal: WDMA T.M.10 for Extra Heavy Duty doors. Average of 10 test samples using a steel, fully

threaded #12 wood screw.

c. Cycle Slam: 1,000,000 cycles with no loose hinge screws or other visible signs of failure when tested in accordance with WDMA T.M.7.

4. Additional Hardware Reinforcement:

a. Provide fire rated doors with hardware reinforcement blocking.

b. Size of lock blocks as required to secure hardware specified.

c. Top, bottom and intermediate rail blocks shall measure not less than 125 mm (five inches) minimum by full core width.

d. Reinforcement blocking in compliance with manufacturer's labeling requirements.

e. Mineral material similar to core is not acceptable.

5. Other Core Components: Manufacturer's standard as allowed by the labeling requirements.

6. Provide steel frame approved for use in labeled doors for vision panels.

7. Provide steel astragal on pair of doors.

E. Sound Rated Doors:

1. STC Rating of the door assembly in place when tested in accordance with ASTM E90 by an independent nationally recognized acoustical testing laboratory not less than 36 .

2.2 PREFINISH, PREFIT OPTION

A. Flush doors may be factory machined to receive hardware, bevels, undercuts, cutouts, accessories and fitting for frame.

B. Factory fitting to conform to specification for shop and field fitting, including factory application of sealer to edge and routings.

C. Flush doors to receive transparent finish (in addition to being prefit)[shall][may] be factory finished as follows:

1. WDMA I.S.1-A Section F-3 specification for System TR-4, Conversion Varnish or System TR-5, Catalyzed Vinyl.

2. Use stain when required to produce the finish specified in Room Finish Schedule indicated on the Drawings.

2.3 IDENTIFICATION MARK:

A. On top edge of door.

B. Either a stamp, brand or other indelible mark, giving manufacturer™s name, door™s trade name, construction of door, code date of manufacture and quality.

C. Accompanied by either of the following additional requirements:

1. An identification mark or a separate certification including name of inspection organization.

2. Identification of standards for door, including glue type.
3. Identification of veneer and quality certification.
4. Identification of preservative treatment for stile and rail doors.

2.4 SEALING:

A. Give top and bottom edge of doors two coats of catalyzed polyurethane or water resistant sealer before sealing in shipping containers.

PART 3 - EXECUTION

3.1 DOOR PREPARATION

A. Field, shop or factory preparation: Do not violate the qualified testing and inspection agency label requirements for fire rated doors.

B. Clearances between Doors and Frames and Floors:

1. Maximum 3 mm (1/8 inch) clearance at the jambs, heads, and meeting stiles, and a 19 mm (3/4 inch) clearance at bottom, except as otherwise specified.
2. Maximum clearance at bottom of sound rated doors, light-proofed doors, doors to operating rooms, and doors designated to be fitted with mechanical seal: 10 mm (3/8 inch).

C. Provide cutouts for special details required and specified.

D. Rout doors for hardware using templates and location heights specified in Section, 08 71 00 DOOR HARDWARE.

E. Fit doors to frame, bevel lock edge of doors 3 mm (1/8 inch) for each 50 mm (2 inches) of door thickness undercut where shown.

F. Immediately after fitting and cutting of doors for hardware, seal cut edges of doors with two coats of water resistant sealer.

G. Finish surfaces, including both faces, top and bottom and edges of the doors smooth to touch.

H. Apply a steel astragal on the opposite side of active door on pairs of fire rated doors.

I. Apply a steel astragal to meeting style of active leaf of pair of doors or double egress smoke doors.

3.2 INSTALLATION OF DOORS APPLICATION OF HARDWARE

A. Install doors and hardware as specified in this Section.

3.3 DOOR PROTECTION

A. As door installation is completed, place polyethylene bag or cardboard shipping container over door and tape in place.

B. Provide protective covering over knobs and handles in addition to covering door.

C. Maintain covering in good condition until removal is approved by Project Engineer.

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