

SECTION 08210

WOOD DOORS
09/99

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

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| ASTM E 90 | (1997) Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements |
| ASTM E 152 | (1981; Rev. A) Fire Tests of Door Assemblies |
| ASTM E 283 | (1991) Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen |

ARCHITECTURAL WOODWORK INSTITUTE (AWI)

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| AWI Qual Stds | (1997) Architectural Woodwork Quality Standards and Quality Certification Program |
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NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

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| NEMA LD 3 | (1995) High-Pressure Decorative Laminates |
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NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

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| NFPA 80 | (1995) Fire Doors and Fire Windows |
| NFPA 252 | (1995) Fire Tests of Door Assemblies |

WINDOW AND DOOR MANUFACTURERS ASSOCIATION (WDMA)

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| WDMA I.S. 1-A | (1993) Architectural Wood Flush Doors |
| WDMA I.S. 4 | (1994) Water-Repellent Preservative Non-Pressure Treatment for Millwork |
| WDMA I.S. 6 | (1991) Wood Stile and Rail Doors |
| WDMA TM-5 | (1990) Split Resistance Test |
| WDMA TM-7 | (1990) Cycle - Slam Test |
| WDMA TM-8 | (1990) Hinge Loading Resistance Test |

UNDERWRITERS LABORATORIES (UL)

UL 10B

(1997) Fire Tests of Door Assemblies

1.2 SUBMITTALS

Submit the following in accordance with Section 01330, "Submittal Procedures."

SD-02 Shop Drawings

Doors; G

Submit drawings or catalog data showing each type of door unit; descriptive data of head and jamb weatherstripping with installation instructions shall be included. Drawings and data shall indicate door type and construction, sizes, thickness, methods of assembly, glazing.

SD-03 Product Data

Doors; G

Accessories

Water-resistant sealer

Sample warranty

SD-04 Samples

Doors

Prior to the delivery of wood doors, submit a sample section of each type of door which shows the stile, rail, veneer, finish, and core construction.

Door finish colors; G

Submit a minimum of three color selection samples for selection by the Contracting Officer.

SD-06 Test Reports

Split resistance

Cycle-slam

Hinge loading resistance

Submit split resistance test report for doors tested in accordance with WDMA TM-5, cycle-slam test report for doors tested in accordance with WDMA TM-7, and hinge loading resistance test report for doors tested in accordance with WDMA TM-8.

1.3 DELIVERY, STORAGE, AND HANDLING

Deliver doors to the site in an undamaged condition and protect against damage and dampness. Stack doors flat under cover. Support on blocking, a

minimum of 4 inches thick, located at each end and at the midpoint of the door. Store doors in a well-ventilated building so that they will not be exposed to excessive moisture, heat, dryness, direct sunlight, or extreme changes of temperature and humidity. Do not store in a building under construction until concrete, masonry work, and plaster are dry. Replace defective or damaged doors with new ones.

1.4 WARRANTY

Warranty shall warrant doors free of defects as set forth in the door manufacturer's standard door warranty.

PART 2 PRODUCTS

2.1 DOORS

Provide door of the type, size, and design indicated.

2.1.1 Interior Flush Door

Provide hollow core, Type II flush doors conforming to WDMA I.S. 1-A with faces of good grade white oak.

2.2 FABRICATION

2.2.1 Marking

Each door shall bear a stamp, brand, or other identifying mark indicating quality and construction of the door.

2.2.2 Quality and Construction

Wood door shall conform to AWI 1400 Premium Grade Standards.

2.2.3 Adhesives and Bonds

WDMA I.S. 1-A. Use Type II bond for interior door. Adhesive for door to receive a natural finish shall be nonstaining.

2.2.4 Prefitting

At the Contractor's option, doors may be provided factory pre-fit. Doors shall be sized and machined at the factory by the door manufacturer in accordance with the standards under which they are produced. The work shall include sizing, bevelling edges, mortising, and drilling for hardware and providing necessary beaded openings for glass and louvers. Provide the door manufacturer with the necessary hardware samples, and frame and hardware schedules as required to coordinate the work.

2.2.5 Finishes

2.2.5.1 Field Painting

Factory prime or seal doors, and field paint as specified in Section 09900, "Paints and Coatings."

2.2.5.2 Color

Provide door finish colors as selected by the Contracting Officer from the

color selection samples.

2.2.6 Water-Resistant Sealer

Provide a water-resistant sealer compatible with the specified finish[es] as approved and as recommended by the door manufacturer.

2.3 SOURCE QUALITY CONTROL

Stiles of "B" and "C" label fire doors utilizing standard mortise leaf hinges shall meet the following performance criteria:

- a. Split resistance: Average of ten test samples shall be not less than 500 pounds load when tested in accordance with WDMA TM-5.
- b. Cycle-slam: 200,000 cycles with no loose hinge screws or other visible signs of failure when tested in accordance with the requirements of WDMA TM-7.
- c. Hinge loading resistance: Average of ten test samples shall be not less than 700 pounds load when tested for direct screw withdrawal in accordance with WDMA TM-8 using a No. 12, 1 1/4 inch long, steel, fully threaded wood screw. Drill 5/32 inch pilot hole, use 1 1/2 inch opening around screw for bearing surface, and engage screw full, except for last 1/8 inch. Do not use a steel plate to reinforce screw area.

PART 3 EXECUTION

3.1 INSTALLATION

Before installation, seal top and bottom edges of doors with the approved water-resistant sealer. Seal cuts made on the job immediately after cutting using approved water-resistant sealer. Fit, trim, and hang doors with a 1/16 inch minimum, 1/8 inch maximum clearance at sides and top, and a 3/16 inch minimum, 1/4 inch maximum clearance over thresholds. Provide 3/8 inch minimum, 7/16 inch maximum clearance at bottom where no threshold occurs. Bevel edges of doors at the rate of 1/8 inch in 2 inches. Door warp shall not exceed 1/4 inch when measured in accordance with WDMA I.S. 1-A.

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